

DRAFTING ROOM  
(NOT CORRECTED)

MPL

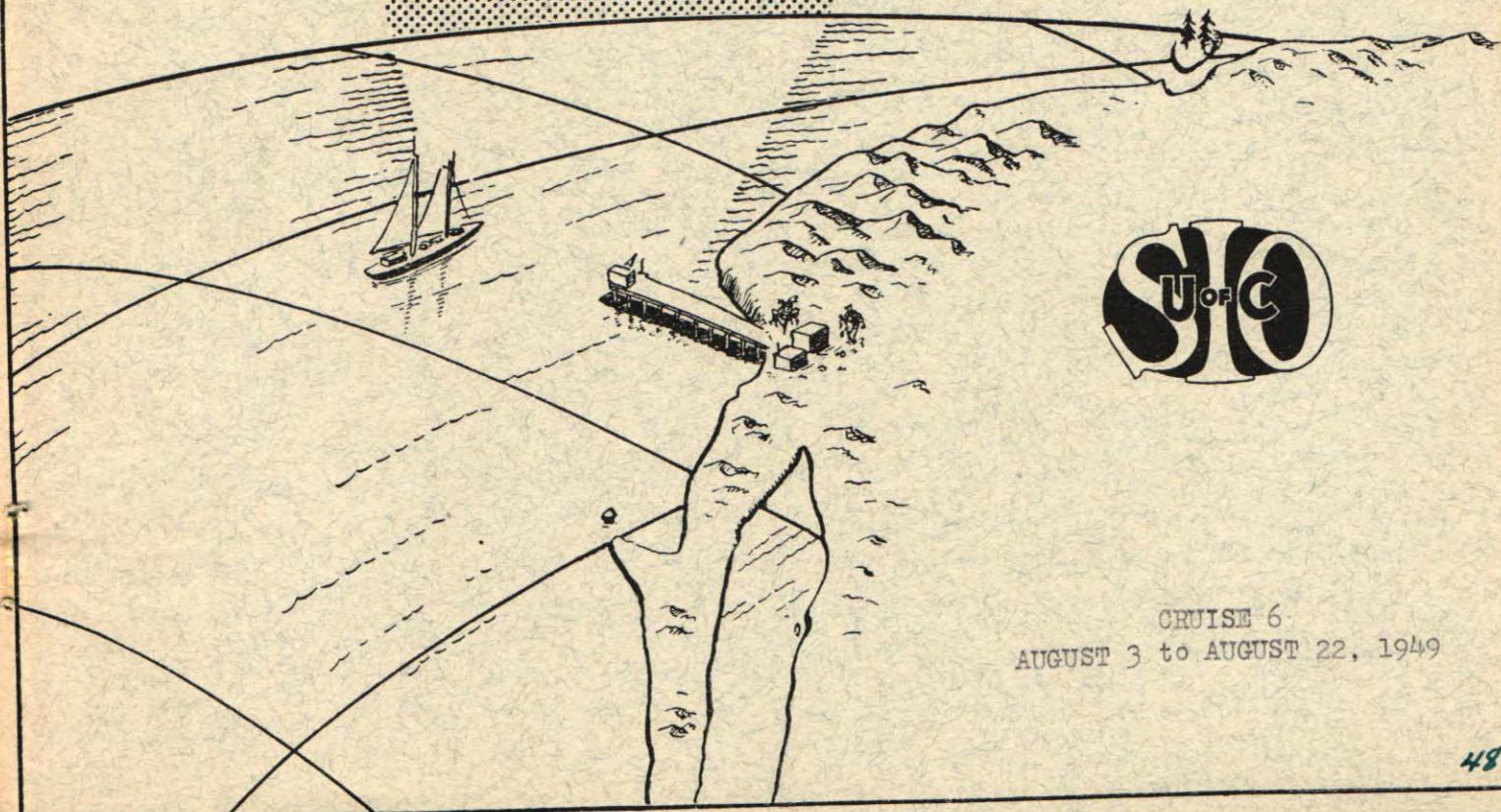
MAR 14 1950

Director's Office

UNIVERSITY OF CALIFORNIA  
SCRIPPS INSTITUTION OF OCEANOGRAPHY

PHYSICAL AND CHEMICAL DATA

MARINE LIFE RESEARCH PROGRAM  
DIVISION III, PHYSICAL OCEANOGRAPHY  
DIVISION OF CHEMICAL OCEANOGRAPHY



CRUISE 6  
AUGUST 3 to AUGUST 22, 1949

UNIVERSITY OF CALIFORNIA

SCRIPPS INSTITUTION OF OCEANOGRAPHY

List of Figures

Introduction

Physical and Chemical Data

Tabulated CRUISE 6 - August 3 to August 22, 1949

Distribution of MARINE LIFE RESEARCH PROGRAM

FIGURES

1. MLR Cruise 6, Station Positions
2. Horizontal Distribution of Dynamic Height Anomaly (0 over 1000 meter)  
Corrected for Tidal Effect
3. Horizontal Distribution of Temperature at the Surface
4. Horizontal Distribution of Salinity at the Surface

Report prepared March 6, 1950

Physical and Chemical Data Report No. 6

## CONTENTS

	Page
List of Figures . . . . .	i
Introduction . . . . .	ii
Personnel . . . . .	III
Tabulated Data . . . . .	
Distribution List . . . . .	

## FIGURES

1. MLR Cruise 6, Station Positions
2. Horizontal Distribution of Dynamic Height Anomaly (0 over 1000 d-bar)  
Corrected for Tidal Effect
3. Horizontal Distribution of Temperature at the Surface
4. Horizontal Distribution of Salinity at the Surface

## INTRODUCTION

The data presented in this report were collected on the sixth full-scale cruise conducted in the Marine Life Research Program. The three ships participating were the MV HORIZON and the MV CREST, of the Scripps Institution of Oceanography, and the MV BLACK DOUGLAS, of the U. S. Fish and Wildlife Service.

Data are presented in the form of tabulated values at standard depths and of charts of horizontal distributions at the surface. A study of the effect of internal oscillations of tidal period upon the horizontal distributions of dynamic height anomaly and other quantities indicated it may be desirable to eliminate tidal effects from such charts. Because of the large amount of work required to do this, only the corrected horizontal distribution of dynamic height anomaly and the uncorrected charts of temperature and salinity at the surface are presented in this report. Although the corrected horizontal distribution of dynamic height anomaly is an improvement over charts of currents presented in previous reports of this series, it still indicates only the geostrophic flow and, thus, does not include all the direct effect of the local wind.

In the tabulated data extrapolated values are indicated by parentheses. The time given is the time when the messenger was released. When more than one cast was made on a station, each messenger time and each wire angle is given. The time and the wire angle given first are for the shallow cast. Horizontal lines signify the depth to which each cast reached.

On the charts of horizontal distribution a circle is drawn around the station dot if the quantity represented is missing for that station; an 'X' is drawn through the station dot if the value observed does not conform to the field and was not used in drawing the contours.

Because of Nansen bottle pretripping on Stations 101 through 410, inclusive, and loss of the 600-meter bottle prior to occupying Stations 101 through 210, it was desirable to process these stations on Cruise 6 and Cruise 7 simultaneous in order to ascertain determinations of observations and depths of observations on Cruise 6.

The original data and the data as modified during various steps in processing are on file with Division III of Physical Oceanography and with the Division of Chemical Oceanography. Copies may be made available. The data are processed on the six standard forms of these divisions.

The presentation of data in these Physical and Chemical Data Reports does not constitute publication, and this information may be subject to modification as the program continues. Results of various phases of the investigations will be published in scientific journals for general distribution.

PERSONNEL

Carl Eckart, Director of the Scripps Institution of Oceanography  
Roger Revelle, Associate Director

MARINE LIFE RESEARCH PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA  
AND IN THE PREPARATION OF THIS REPORT

Oceanographers

Leipper, Dale F., Assistant Oceanographer  
Reid, Robert O., Assistant Oceanographer  
Wooster, Warren S., Associate in Oceanography  
Horrer, Paul L., Associate in Oceanography

Marine Superintendents

Faughn, James L., Engineering  
Mann, Herbert J., Technical  
Stose, Clemens W., Hull

Ships' Captains

Austin, Milton L., MV CREST  
Olsen, Edward B. MV HORIZON

Technicians

Huffer, Robert P., Senior Marine Technician  
Marquardt, Robert L., " " "  
Mead, Richard V., " " "  
Sampson, Robert K., " " "  
Beckwith, Warren W., Marine Technician  
Carlson, Deano R., " " "  
Clark, Peter S., " " "  
Drummond, Kenneth H., " " "  
Gossett, David A., " " "  
Johnson, Norman W., " " "  
Moberg, Erik W., " " "  
Preish, Robert P., " " "  
Worrall, Charles G., " " "  
Bieri, Robert, Marine Technician, Chemical  
Fitch, Robert M., " " "  
Malm, Paul W., " " "  
Wangorsky, Peter J., " " "

Office Personnel, Chemical Oceanography

Dinkel, Charles C., Senior Laboratory Technician  
Freeman, Claire R., Laboratory Technician  
Lodge, Mary Ann, Laboratory Technician  
Spix, William L., Assistant in Marine Chemistry  
Sullivan, Jean E., Laboratory Technician

### Office Personnel, Physical Oceanography

Godfrey, Mary Lynne, Engineering Aide  
Howard, Francis J., Research Assistant  
Klein, Hans T., Senior Engineering Aide  
Mao, Han-Lee, Research Assistant  
McLatchie, Faye, Meteorologist  
Reid, Joseph L., Research Assistant  
Stoneback, Mary E., Engineering Aide  
Watters, Ardis H., Typist Clerk  
Wilburn, Virginia A., Statistician

PERSONNEL ASSISTING THE MLR PROGRAM IN THE COLLECTION  
OF DATA FOR THIS REPORT

#### Scientific Personnel

## **Ships' Captains**

Hathaway, Paul, MY BLACK DOUGLAS

MLR CRUISE 6

AUGUST 3 - AUGUST 22, 1949

STATION POSITIONS

BLACK DOUGLAS

AUGUST 3, 1949

TO

AUGUST 12, 1949

HORIZON

AUGUST 10, 1949

TO

AUGUST 22, 1949

CREST  
AUGUST 5, 1949

TO

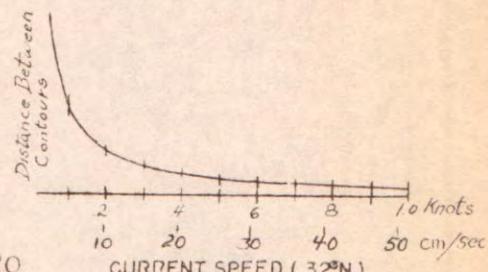
AUGUST 17, 1949

MLR CRUISE 6

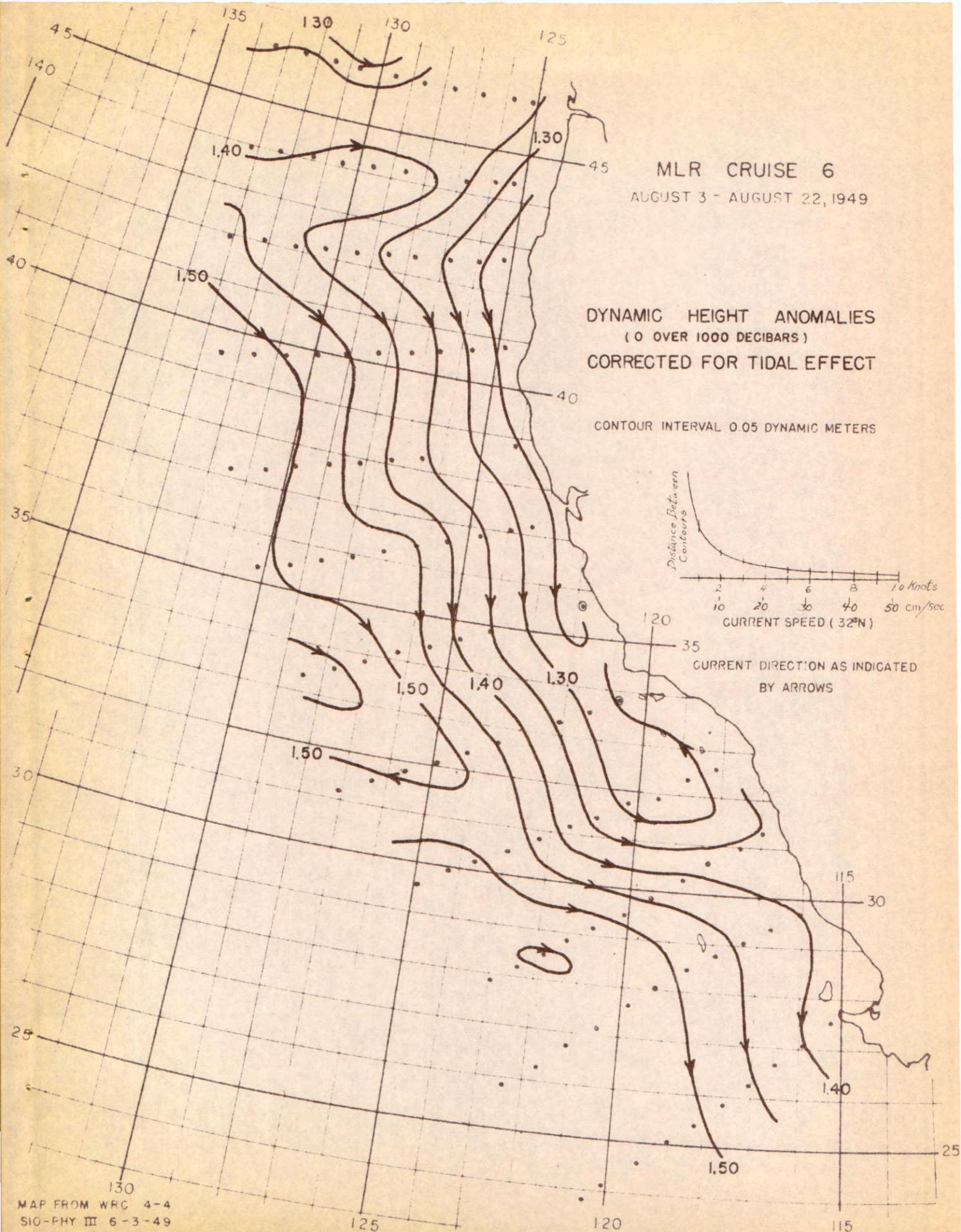
AUGUST 3 - AUGUST 22, 1949

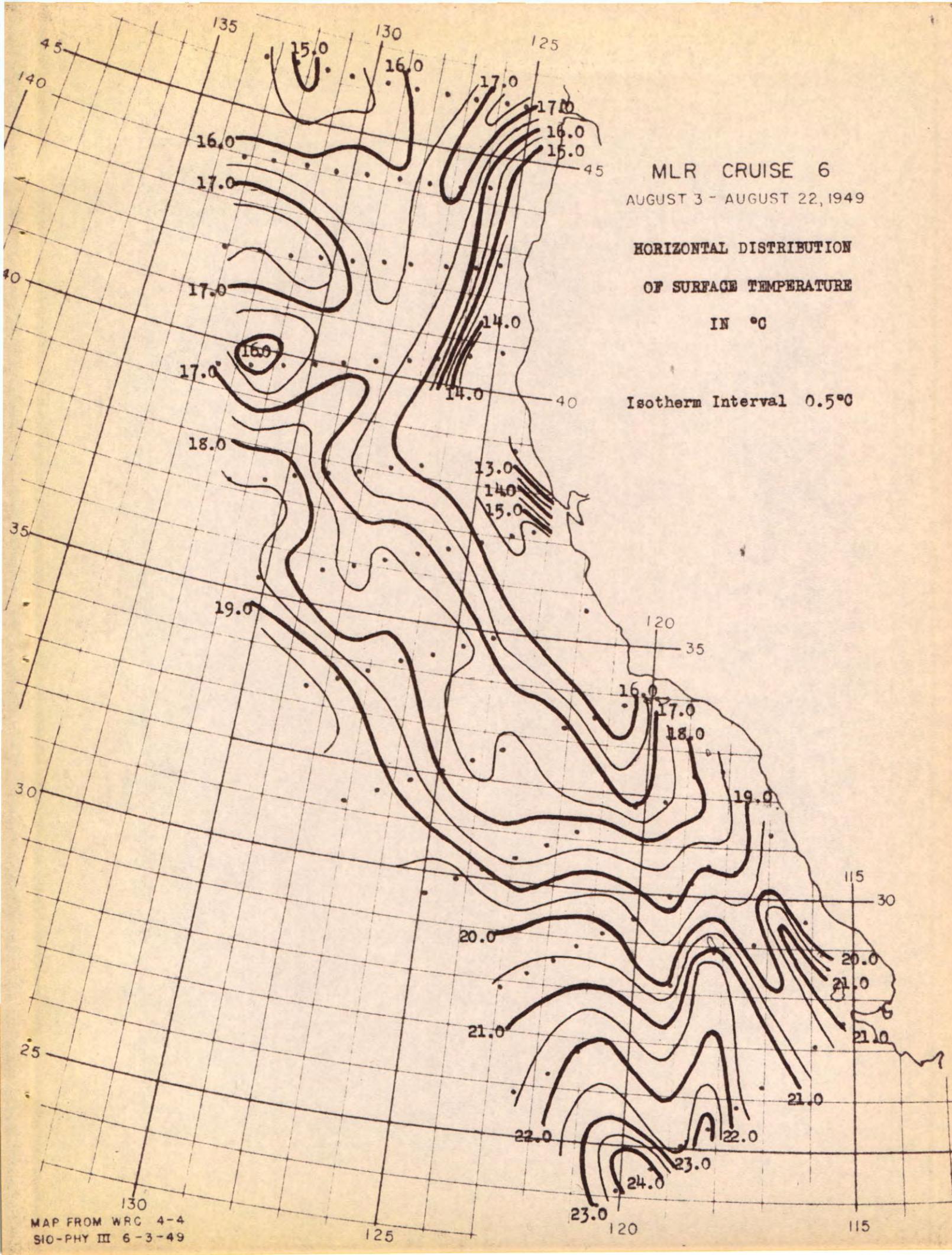
DYNAMIC HEIGHT ANOMALIES  
(0 OVER 1000 DECIBARS)  
CORRECTED FOR TIDAL EFFECT

CONTOUR INTERVAL 0.05 DYNAMIC METERS



CURRENT DIRECTION AS INDICATED  
BY ARROWS

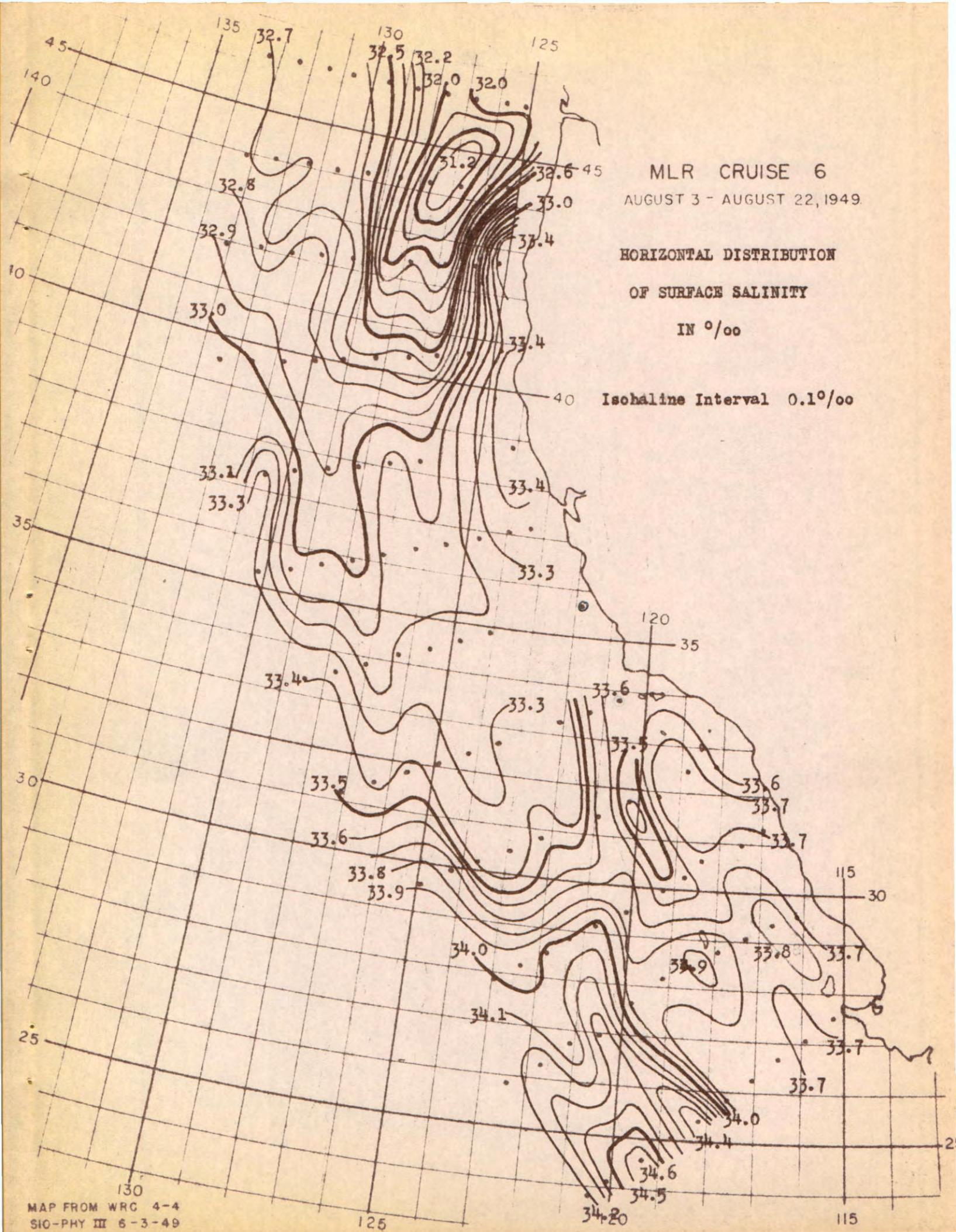




MLR CRUISE 6  
AUGUST 3 - AUGUST 22, 1949

HORIZONTAL DISTRIBUTION  
OF SURFACE SALINITY  
IN  $\sigma/oo$

Isosaline Interval  $0.1\sigma/oo$



## STATION 101 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $46^{\circ}15'N$   $125^{\circ}10'W$  August 16, 1949 0632 GCT Wire angle:  $0^{\circ}$   
 Sounding: missing Depth of observation: 1,335 m. Weather: rain Sea:  
 moderate Wind:  $250^{\circ}$ , force 2.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm³)	$10^5 \delta$	$\Delta D$ (dyn.m.)	$C_2$ (ml/L)	$P_{O_4-P}$ (µg at/L)
0	17.15	32.05	23.24	464.8	.0000	5.78	0.62
10	16.95	32.01	23.26	463.1	.0466	5.84	0.53
20	15.70	32.15	23.65	426.5	.0912	6.86	0.62
30	11.73	32.32	24.57	337.0	.1296	6.95	0.79
50	7.83	32.54	25.39	261.1	.1897	6.55	1.18
75	6.98	32.71	25.64	237.0	.2523	6.30	1.48
100	7.65	33.17	25.91	211.9	.3088	4.65	1.99
150	7.75	33.81	26.40	166.4	.404	2.78	2.45
200	7.41	33.94	26.55	152.7	.484	2.15	2.60
250	6.99	34.00	26.65	143.7	.559	1.80	2.72
300	6.55	34.04	26.75	135.3	.629	1.56	2.84
400	5.89	34.04	26.83	128.0	.762	1.31	3.01
500	5.35	34.09	26.94	118.8	.886	0.96	3.15
600	4.89	34.20	27.08	106.3	1.000	0.49	3.29
700	4.52	34.26	27.17	98.0	1.103	0.45	3.32
800	4.18	34.31	27.24	91.5	1.199	0.46	3.33
1000	3.60	34.38	27.36	81.3	1.373	0.54	3.35

## STATION 102 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $46^{\circ}15'N$   $125^{\circ}47'W$  August 16, 1949 0200 GCT Wire angle:  $0^{\circ}$   
 Sounding: missing Depth of observation: 1,148 m. Weather: cloudy  
 Sea: moderate Wind:  $250^{\circ}$ , force 2.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm³)	$10^5 \delta$	$\Delta D$ (dyn.m.)	$C_2$ (ml/L)	$P_{O_4-P}$ (µg at/L)
0	17.53	32.14	23.21	466.5	.0000	5.81	0.40
10	16.95	32.10	23.32	456.6	.0463	5.75	0.57
20	15.87	32.19	23.63	427.0	.0907	5.82	0.64
30	13.90	32.32	24.16	377.6	.1311	6.02	0.74
50	9.15	32.54	25.18	279.4	.1971	6.61	1.21
75	6.88	32.71	25.65	235.7	.2619	6.36	1.49
100	7.42	33.20	25.97	206.5	.3175	4.70	1.96
150	7.59	33.77	26.39	167.2	.412	3.10	2.37
200	6.92	33.90	26.59	149.1	.491	3.02	2.39
250	6.59	33.95	26.67	141.7	.564	2.50	2.55
300	6.30	33.99	26.74	135.7	.634	1.93	2.80
400	5.60	34.05	26.87	123.8	.765	1.35	3.04
500	5.00	34.11	26.99	113.1	.885	0.93	3.19
600	4.55	34.19	27.11	102.8	.994	0.60	3.33
700	4.20	34.27	27.21	93.8	1.093	0.48	3.38
800	3.95	34.34	27.29	86.7	1.184	0.45	3.40
1000	3.62	34.40	27.37	80.1	1.353	0.42	3.42

## STATION 103 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $46^{\circ}15'N$   $126^{\circ}44'W$  August 15, 1949 1958 GCT Wire angle: missing Sounding: missing Depth of observation: 1,201 m. Weather: cloudy Sea: moderate Wind:  $270^{\circ}$ , force 2.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm³)	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ (ug at/L)
0	16.90	32.14	23.36	452.5	.0000	5.85	0.52
10	16.58	32.16	23.45	444.4	.0450	5.84	0.53
20	16.02	32.25	23.66	425.8	.0387	6.10	0.54
30	14.40	32.36	24.09	384.6	.1294	6.41	0.56
50	9.87	32.50	25.04	293.2	.1975	6.67	1.09
75	7.20	32.73	25.63	238.2	.2643	6.27	1.50
100	7.72	33.32	26.02	201.7	.3196	4.25	2.00
150	7.77	33.78	26.37	169.1	.413	2.62	2.46
200	7.38	33.86	26.49	158.2	.495	2.19	2.50
250	6.90	33.90	26.59	149.7	.573	2.18	2.60
300	6.45	33.94	26.68	141.2	.646	2.14	2.73
400	5.71	34.06	26.87	124.5	.780	1.23	2.96
500	5.15	34.17	27.02	110.3	.898	0.78	3.08
600	4.70	34.23	27.12	101.6	1.005	0.69	3.14
700	4.34	34.28	27.20	94.7	1.104	0.61	3.19
800	4.05	34.31	27.26	89.9	1.198	0.57	3.23
1000	3.56	34.35	27.34	83.0	1.372	0.50	3.27

## STATION 104 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $46^{\circ}15'N$   $127^{\circ}41'W$  August 15, 1949 1405 GCT Wire angle:  $25^{\circ}$  Sounding: missing Depth of observation: 1,209 m. Weather: overcast Sea: slight Wind:  $290^{\circ}$ , force 2-3.

0	16.30	31.96	23.37	452.4	.0000	5.81	0.62
10	16.35	31.91	23.32	457.6	.0457	5.80	0.59
20	16.30	31.96	23.37	453.0	.0914	5.87	0.58
30	15.25	32.07	23.69	423.1	.1354	6.11	0.58
50	8.90	32.75	25.39	258.7	.2039	6.62	1.25
75	8.55	33.30	25.88	214.6	.2634	4.98	1.95
100	8.40	33.55	26.10	194.3	.3148	3.92	2.23
150	8.23	33.80	26.32	174.2	.408	2.56	2.42
200	7.93	33.95	26.48	159.3	.492	2.17	2.52
250	7.58	33.99	26.56	152.3	.570	2.02	2.62
300	7.16	34.00	26.63	146.3	.645	1.85	2.75
400	6.16	34.01	26.77	133.7	.786	1.27	2.98
500	5.51	34.03	26.91	121.6	.915	0.85	3.14
600	5.00	34.16	27.03	110.5	1.032	0.59	3.27
700	4.58	34.22	27.13	101.9	1.139	0.54	3.33
800	4.22	34.27	27.20	95.0	1.239	0.51	3.38
1000	3.60	34.35	27.33	83.6	1.420	0.49	3.46

## STATION 105 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $46^{\circ}15'N$   $128^{\circ}38'W$  August 15, 1949 0812 GCT Wire angle:  
 $5^{\circ}$  Sounding: missing Depth of observation: 1,289 m. Weather:  
 intermittent slight drizzle Sea: rough Wind:  $250^{\circ}$ , force 3.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm³)	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ μg at/L)
0	16.28	32.20	23.55	434.8	.0000	5.82	0.71
10	16.20	32.22	23.59	431.7	.0435	5.81	0.71
20	15.97	32.27	23.68	423.3	.0964	5.89	0.73
30	15.53	32.40	23.87	404.6	.1280	6.22	0.77
50	10.23	32.60	25.06	291.7	.1980	6.78	1.23
75	7.53	32.63	25.51	250.1	.2661	6.70	1.40
100	6.85	32.74	25.68	233.2	.3269	6.30	1.54
150	7.02	33.50	26.26	179.7	.431	4.23	2.14
200	6.68	33.87	26.60	148.1	.513	3.36	2.39
250	6.23	33.93	26.70	138.6	.585	2.63	2.59
300	5.85	33.95	26.77	132.9	.654	2.08	2.81
400	5.14	34.01	26.90	121.1	.782	1.32	3.14
500	4.79	34.08	26.99	112.8	.900	0.68	3.31
600	4.53	34.16	27.09	104.9	1.010	0.44	3.41
700	4.27	34.26	27.19	95.4	1.111	0.43	3.42
800	4.02	34.34	27.28	87.4	1.203	0.44	3.42
1000	3.54	34.42	27.39	77.7	1.370	0.47	3.42

## STATION 106 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $46^{\circ}15'N$   $129^{\circ}35'W$  August 15, 1949 0215 GCT Wire angle:  
 $5^{\circ}$  Sounding: missing Depth of observation: 962 m. Weather: overcast  
 Sea: rough Wind:  $240^{\circ}$ , force 3.

0	15.83	32.50	23.88	402.7	.0000	6.01	0.92
10	15.31	32.52	24.02	390.8	.0398	6.01	0.89
20	14.80	32.57	24.16	377.0	.0784	6.10	0.92
30	13.15	32.60	24.52	342.4	.1145	6.45	1.20
50	8.11	32.62	25.41	258.4	.1749	6.90	1.46
75	7.09	32.61	25.55	245.7	.2382	6.75	1.51
100	6.50	32.71	25.70	231.1	.2982	6.66	1.72
150	6.53	33.44	26.23	177.6	.401	4.80	1.76
200	6.41	33.75	26.54	153.6	.485	3.84	2.55
250	6.08	33.87	26.67	141.2	.559	3.06	2.88
300	5.56	33.92	26.78	131.7	.627	2.42	3.11
400	4.78	33.96	26.90	120.5	.755	1.58	3.38
500	4.48	34.07	27.02	109.9	.871	0.86	3.57
600	4.23	(34.16)	(27.12)	(101.6)	(.977)	-	-
700	3.99	(34.24)	(27.21)	(93.7)	(1.076)	-	-
800	3.75	(34.30)	(27.28)	(87.3)	(1.167)	-	-
1000	(3.30)	(34.41)	(27.41)	(75.6)	(1.332)	-	-

## STATION 107 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $46^{\circ}15'N$   $130^{\circ}44'W$  August 14, 1949 1825 GCT Wire angle:  
 $7^{\circ}$  Sounding: missing Depth of observation: 1,208 m. Weather: overcast  
 Sea: very rough Wind:  $250^{\circ}$ , force 4.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ Ag at/L)
0	15.20	32.63	24.13	380.3	.0000	5.97	1.08
10	14.94	32.61	24.16	376.6	.0380	6.01	1.03
20	14.91	32.62	24.18	375.6	.0758	6.03	1.03
30	14.71	32.63	24.23	371.0	.1132	6.08	1.03
50	9.04	32.61	25.26	272.6	.1779	6.83	1.01
75	7.19	32.65	25.57	244.2	.2429	6.63	1.54
100	6.65	32.73	25.70	231.5	.3027	6.32	1.75
150	6.62	33.51	26.32	173.6	.405	4.31	2.44
200	6.08	33.76	26.59	148.6	.486	4.10	2.50
250	5.71	33.84	26.69	139.1	.558	3.36	2.70
300	5.40	33.83	26.76	132.8	.627	2.59	2.99
400	4.78	33.96	26.90	120.5	.754	1.63	3.35
500	4.36	34.06	27.02	109.3	.870	0.67	3.66
600	4.05	34.16	27.14	99.3	.976	0.51	3.72
700	3.81	34.25	27.23	90.9	1.072	0.45	3.76
800	3.61	34.32	27.31	84.4	1.160	0.43	3.80
1000	3.29	34.42	27.42	74.7	1.321	0.38	3.85

## STATION 108 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $46^{\circ}15'N$   $131^{\circ}30'W$  August 14, 1949 1322 GCT Wire angle:  
 missing Sounding: missing Depth of observation: 950 m. Weather: overcast  
 Sea: very rough Wind:  $250^{\circ}$ , force 3.

0	15.22	32.65	24.14	378.3	.0000	6.01	1.30
10	14.69	32.63	24.23	370.1	.0376	6.01	1.09
20	14.71	32.63	24.23	370.7	.0748	6.00	1.04
30	14.69	32.63	24.23	370.6	.1120	6.05	1.03
50	9.68	32.63	25.18	281.0	.1775	6.77	1.46
75	7.75	32.63	25.47	253.0	.2446	6.83	1.60
100	6.78	32.63	25.61	240.4	.3066	6.61	1.72
150	6.44	33.15	26.06	198.0	.417	5.31	2.20
200	6.64	33.76	26.51	155.8	.506	3.05	2.86
250	5.98	33.83	26.65	142.9	.581	3.15	2.86
300	5.65	33.90	26.75	134.4	.651	3.12	2.93
400	5.16	34.06	26.93	117.5	.778	1.62	3.60
500	4.66	34.15	27.06	106.1	.891	0.71	3.76
600	4.30	34.19	27.13	100.1	.995	0.51	3.81
700	4.00	34.23	27.20	94.4	1.093	0.40	3.84
800	3.75	34.27	27.25	89.6	1.186	0.36	3.88
1000	(3.32)	(34.34)	(27.35)	(81.1)	(1.359)	-	-

## STATION 109 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $46^{\circ}15'N$   $132^{\circ}27'W$  August 14, 1949 0700 GCT Wire angle: missing Sounding: missing Depth of observation: 1,250 m. Weather: overcast Sea: rough Wind:  $200^{\circ}$ , force 4.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm³)	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2 - P}$ kg at/L)
0	14.99	32.66	24.19	373.6	.0000	5.99	1.10
10	14.85	32.85	24.36	357.2	.0367	5.99	0.99
20	14.86	32.66	24.22	371.6	.0733	6.01	0.99
30	14.77	32.62	24.21	373.0	.1107	6.06	1.02
50	10.50	32.61	25.02	295.5	.1778	6.65	1.32
75	7.47	32.64	25.51	248.6	.2462	6.65	1.56
100	6.84	32.72	25.67	234.7	.3070	6.48	1.68
150	6.88	33.53	26.30	175.5	.410	4.91	2.22
200	7.03	33.82	26.51	156.6	.494	3.21	2.72
250	6.53	33.85	26.60	148.4	.571	2.99	2.86
300	6.10	33.89	26.69	140.5	.643	2.69	3.01
400	5.34	33.99	26.86	125.0	.777	2.04	3.30
500	4.69	34.03	26.97	115.2	.898	1.49	3.46
600	4.25	34.07	27.04	108.4	1.011	1.10	3.56
700	3.95	34.13	27.12	101.3	1.117	0.85	3.63
800	3.70	34.20	27.20	94.2	1.216	0.72	3.69
1000	3.30	34.34	27.35	80.8	1.393	0.59	3.79

## STATION 110 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $46^{\circ}15'N$   $133^{\circ}24'W$  August 13, 1949 1923 GCT Wire angle:  $5^{\circ}$  Sounding: missing Depth of observation: 1,296 m. Weather: overcast Sea: very rough Wind:  $320^{\circ}$ , force 4.

0	15.70	32.70	24.07	385.9	.0000	5.88	0.90
10	15.24	32.66	24.14	379.2	.0384	5.90	0.84
20	15.23	32.66	24.14	373.8	.0765	5.93	0.84
30	15.16	32.65	24.15	378.3	.1145	6.00	0.87
50	12.10	32.59	24.71	324.4	.1751	6.67	1.07
75	8.80	32.53	25.28	271.9	.2501	6.62	1.41
100	7.37	32.77	25.64	237.8	.3142	6.92	1.65
150	7.08	33.60	26.33	172.9	.418	4.09	2.27
200	6.67	33.90	26.62	145.7	.498	3.41	2.54
250	6.25	33.96	26.72	136.6	.567	2.77	2.74
300	5.84	33.98	26.79	130.6	.636	2.17	2.97
400	4.95	33.99	26.90	120.3	.763	1.62	3.22
500	4.50	34.06	27.01	110.9	.879	1.07	3.45
600	4.18	34.16	27.12	101.0	.986	0.59	3.63
700	3.90	34.22	27.20	94.1	1.085	0.56	3.65
800	3.65	34.26	27.25	89.3	1.177	0.55	3.67
1000	3.25	34.34	27.36	80.3	1.349	0.54	3.69

## STATION 201 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $44^{\circ}23'N$   $125^{\circ}15'W$  August 10, 1949 1325 GCT Wire angle:  
 $10^{\circ}$  Sounding: missing Depth of observation: 1,250 m. Weather: cloudy  
 Sea: slight Wind:  $340^{\circ}$ , force 1.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}$ /oo)	$\sigma_t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ ( $\mu$ g at/L)
0	15.00	32.21	23.85	406.3	.0000	6.48	0.63
10	14.64	32.23	23.94	398.5	.0404	6.50	0.60
20	12.35	32.30	24.44	349.6	.0780	6.41	0.93
30	10.68	32.50	24.91	306.0	.1109	6.10	1.24
50	8.52	32.92	25.59	341.9	.1660	5.39	1.76
75	8.12	33.26	25.91	211.4	.2229	4.57	2.07
100	7.96	33.62	26.22	182.8	.2725	3.48	2.33
150	7.40	33.87	26.50	157.1	.358	2.71	2.57
200	6.82	33.95	26.64	144.2	.434	2.43	2.60
250	6.56	34.02	26.73	136.0	.505	1.92	2.79
300	6.32	34.07	26.80	130.0	.572	1.38	3.05
400	5.66	34.11	26.91	120.1	.698	1.00	3.20
500	5.25	34.16	27.00	112.4	.815	0.69	3.30
600	4.88	34.23	27.10	103.9	.924	0.43	3.36
700	4.56	34.30	27.19	95.6	1.025	0.42	3.41
800	4.25	34.35	27.27	89.2	1.118	0.43	3.44
1000	3.69	34.43	27.39	78.6	1.288	0.49	3.49

## STATION 202 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $44^{\circ}20'N$   $125^{\circ}50'W$  August 10, 1949 1802 GCT Wire angle:  
 $5^{\circ}$  Sounding: missing Depth of observation: 1,245 m. Weather: overcast  
 Sea: moderate Wind:  $280^{\circ}$ , force 1.

0	15.72	31.98	23.51	438.6	.0000	6.11	0.62
10	15.50	31.94	23.52	437.3	.0440	6.15	0.56
20	13.10	32.27	24.29	365.6	.0843	6.50	0.91
30	11.19	32.46	24.78	317.7	.1186	6.50	1.22
50	7.85	32.74	25.54	245.9	.1752	5.41	1.89
75	7.80	33.24	25.94	208.4	.2323	4.13	2.29
100	7.95	33.59	26.20	184.9	.2818	3.34	2.45
150	7.30	33.90	26.54	153.3	.364	2.74	2.66
200	6.74	33.95	26.65	142.9	.442	2.53	2.75
250	6.25	33.98	26.74	135.0	.512	2.18	2.87
300	5.83	34.00	26.81	128.9	.578	1.82	3.00
400	5.25	34.01	26.88	122.4	.705	1.22	3.28
500	5.04	34.09	26.97	115.0	.824	0.72	3.49
600	4.77	34.21	27.10	104.0	.935	0.46	3.56
700	4.45	34.31	27.21	93.6	1.035	0.45	3.56
800	4.13	34.38	27.30	85.7	1.125	0.46	3.57
1000	3.60	34.43	27.40	77.6	1.290	0.47	3.58

## STATION 203 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $44^{\circ}17.5'N$   $126^{\circ}46'W$  August 11, 1949 0035 GCT Wire angle: missing Sounding: missing Depth of observation: 1,105 m. Weather: overcast Sea: very rough Wind:  $270^{\circ}$ , force 2.

Depth (m)	T (°C)	S (°/oo)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \gamma$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ (ug at/L)
0	17.10	31.38	22.74	512.4	.0000	5.82	-
10	16.52	31.39	22.88	499.1	.0508	5.87	-
20	15.00	32.20	23.84	408.0	.0963	6.50	-
30	13.78	32.50	24.32	362.1	.1350	6.63	-
50	11.22	32.65	24.93	304.5	.2020	6.68	-
75	8.75	32.76	25.43	257.7	.2726	6.27	-
100	7.77	32.99	25.75	226.7	.3336	5.50	-
150	7.28	33.59	26.29	176.3	.435	4.16	-
200	6.83	33.83	26.54	153.2	.518	3.88	-
250	6.17	33.85	26.65	143.7	.593	3.38	-
300	5.75	33.89	26.73	136.2	.663	2.72	-
400	5.38	34.00	26.86	124.7	.795	-	-
500	4.95	34.09	26.98	113.9	.915	-	-
600	4.55	34.17	27.09	104.4	1.025	-	-
700	4.20	34.25	27.19	95.3	1.126	-	-
800	3.90	34.32	27.28	87.5	1.218	-	-
1000	3.44	34.42	27.40	76.4	1.384	-	-

## STATION 204 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $44^{\circ}14'N$   $127^{\circ}42'W$  August 11, 1949 0722 GCT Wire angle:  $7^{\circ}$  Sounding: missing Depth of observation: 1,121 m. Weather: intermittent slight drizzle Sea:  $200^{\circ}$ , force 4.

0	16.92	31.20	22.65	521.6	.0000	5.75	0.56
10	16.76	31.22	22.70	516.8	.0521	5.81	0.41
20	16.20	31.81	23.27	461.8	.1013	6.22	0.46
30	14.20	32.17	23.99	394.4	.1442	6.49	0.63
50	10.10	32.58	25.07	291.2	.2131	6.58	1.09
75	8.07	32.66	25.45	255.3	.2818	6.56	1.21
100	6.90	32.69	25.63	237.6	.3438	6.41	1.39
150	6.95	33.59	26.34	171.9	.447	4.29	2.01
200	6.95	33.87	26.56	151.8	.528	3.23	2.26
250	6.55	33.94	26.67	141.9	.602	2.67	2.49
300	6.16	34.00	26.77	133.1	.672	2.00	2.70
400	5.52	34.12	26.94	117.6	.798	0.82	3.03
500	5.00	34.17	27.04	108.5	.912	0.57	3.20
600	4.60	34.21	27.12	102.0	1.018	0.56	3.32
700	4.26	34.25	27.18	95.9	1.118	0.55	3.39
800	3.96	34.31	27.26	88.9	1.212	0.54	3.45
1000	3.48	34.39	27.38	79.1	1.381	0.52	3.55

## STATION 205 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $44^{\circ}13'N$   $128^{\circ}37'W$  August 11, 1949 1505 GCT Wire angle:  $10^{\circ}$  Sounding: missing Depth of observation: 1,170 m. Weather: overcast Sea: rough Wind:  $320^{\circ}$ , force 2-3.

Depth (m)	T (°C)	S (‰)	$\sigma-t$ (mg/cm³)	$10^5 \delta$	AD (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ kg at/L)
0	16.10	32.09	23.51	438.9	.0000	5.69	0.60
10	16.31	32.09	23.46	443.6	.0443	5.75	0.60
20	16.16	32.52	23.84	409.1	.0871	5.67	0.61
30	15.55	32.55	23.98	394.3	.1274	6.10	0.67
50	10.85	32.62	24.97	300.7	.1973	6.86	1.07
75	8.42	32.70	25.43	257.1	.2674	6.70	1.30
100	7.75	32.68	25.51	249.7	.3312	6.61	1.47
150	7.27	33.21	26.00	204.4	.445	5.33	1.88
200	7.13	33.76	26.45	162.3	.538	4.08	2.27
250	6.75	33.85	26.57	151.3	.617	3.57	2.49
300	6.22	33.92	26.70	139.8	.690	2.81	2.70
400	5.53	34.01	26.85	125.8	.824	1.31	3.29
500	5.13	34.10	26.97	115.3	.946	0.80	3.40
600	4.75	34.20	27.09	104.5	1.056	0.54	3.48
700	4.38	34.30	27.21	93.5	1.156	0.50	3.53
800	4.05	34.36	27.30	86.2	1.247	0.49	3.57
1000	3.50	34.43	27.41	76.4	1.412	0.47	3.64

## STATION 206 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $44^{\circ}09'N$   $129^{\circ}33'W$  August 11, 1949 2115 GCT Wire angle:  $10^{\circ}$  Sounding: missing Depth of observation: 1,189 m. Weather: cloudy Sea: rough Wind:  $290^{\circ}$ , force 2.

0	16.35	32.58	23.83	408.4	.0000	5.86	0.71
10	16.23	32.52	23.81	410.4	.0411	5.79	0.71
20	16.00	32.58	23.91	401.3	.0818	5.83	0.68
30	15.67	32.64	24.03	390.3	.1216	5.93	0.69
50	13.81	32.68	24.46	349.8	.1960	6.49	0.87
75	9.48	32.72	25.28	271.5	.2741	6.77	1.17
100	8.05	32.66	25.45	255.4	.3404	6.29	1.43
150	7.46	33.44	26.15	190.0	.452	4.88	2.05
200	7.02	33.78	26.48	159.4	.540	4.14	2.33
250	6.56	33.86	26.60	147.9	.618	3.62	2.57
300	6.10	33.91	26.70	139.0	.690	3.00	2.83
400	5.16	33.97	26.86	124.3	.823	1.75	3.34
500	4.64	34.03	26.97	114.8	.943	1.09	3.63
600	4.30	34.09	27.05	107.5	1.056	0.70	3.74
700	4.05	34.17	27.14	99.4	1.160	0.61	3.78
800	3.85	34.24	27.22	92.9	1.257	0.59	3.82
1000	3.48	34.34	27.34	82.8	1.435	0.56	3.87

## STATION 207 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $44^{\circ}06'N$   $130^{\circ}29'W$  August 12, 1949 0415 GCT Wire angle:  $5^{\circ}$   
 Sounding: missing Depth of observation: 1,266 m. Weather: overcast Sea:  
 very rough Wind:  $290^{\circ}$ , force 2.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_4-P}$ (µg at/L)
0	16.25	32.66	23.91	400.4	.0000	5.94	0.80
10	15.91	32.66	23.99	393.2	.0398	5.94	0.78
20	15.85	32.66	24.00	392.4	.0793	5.92	0.71
30	15.75	32.66	24.03	390.5	.1186	5.95	0.70
50	9.70	32.68	25.21	277.6	.1857	6.90	1.24
75	8.42	32.72	25.45	255.8	.2528	6.72	1.35
100	7.56	32.72	25.57	244.1	.3157	6.70	1.40
150	7.02	33.04	25.90	213.9	.431	5.86	1.68
200	6.87	33.67	26.41	165.6	.527	4.93	1.88
250	6.45	33.81	26.58	150.3	.606	4.00	2.20
300	5.93	33.90	26.72	137.6	.679	3.07	2.51
400	5.25	33.99	26.87	123.9	.810	1.64	3.03
500	4.82	34.08	26.99	113.2	.930	0.86	3.27
600	4.47	34.18	27.11	102.6	1.039	0.56	3.33
700	4.20	34.23	27.18	96.4	1.139	0.55	3.33
800	3.95	34.28	27.24	91.1	1.234	0.55	3.33
1000	3.44	34.36	27.36	80.8	1.408	0.56	3.32

## STATION 208 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $44^{\circ}04'N$   $131^{\circ}20'W$  August 12, 1949 1030 GCT Wire angle:  
 $10^{\circ}$  Sounding: missing Depth of observation: 1,223 m. Weather: overcast  
 Sea: moderate Wind:  $290^{\circ}$ , force 2.

0	16.06	32.70	23.99	393.2	.0000	5.91	0.80
10	15.87	32.63	23.97	394.6	.0396	5.91	0.75
20	15.75	32.62	24.00	393.1	.0791	5.92	0.77
30	15.63	32.63	24.03	390.1	.1184	5.99	0.85
50	11.40	32.69	24.92	304.6	.1882	6.82	1.18
75	8.90	32.77	25.41	259.1	.259	6.58	1.39
100	8.20	32.74	25.49	251.5	.323	6.41	1.48
150	7.05	33.15	25.98	206.0	.439	5.77	1.88
200	7.03	33.68	26.40	167.0	.532	4.96	2.02
250	6.49	33.82	26.58	150.0	.612	3.56	2.52
300	5.94	33.90	26.72	137.7	.685	2.18	3.07
400	5.14	34.02	26.91	120.3	.815	1.21	3.41
500	4.57	34.10	27.03	108.7	.930	0.82	3.55
600	4.18	34.17	27.13	100.1	1.036	0.73	3.61
700	3.88	34.23	27.21	93.1	1.133	0.69	3.65
800	3.63	34.29	27.28	86.8	1.224	0.66	3.66
1000	3.23	34.39	27.40	76.3	1.389	0.59	3.69

## STATION 209 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $44^{\circ}01'N$   $132^{\circ}20'W$  August 12, 1949 1722 GCT Wire angle:  
 $10^{\circ}$  Sounding: missing Depth of observation: 1,222 m. Weather: overcast  
 Sea: moderate Wind:  $340^{\circ}$ , force 1.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm³)	$10^5 \gamma$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2 - P}$ (μg at/L)
0	16.20	32.63	23.90	401.5	.0000	5.90	0.84
10	15.98	32.61	23.93	398.6	.0402	5.88	0.79
20	15.99	32.60	23.92	399.6	.0802	5.82	0.81
30	15.93	32.59	23.92	399.3	.1203	5.83	0.86
50	11.25	32.63	24.91	306.5	.1913	6.67	1.28
75	9.07	32.66	25.30	269.9	.2637	6.67	1.37
100	8.33	32.75	25.48	252.7	.3295	6.37	1.43
150	7.05	33.25	26.06	198.6	.443	5.71	1.75
200	6.93	33.77	26.48	159.0	.533	4.59	2.01
250	6.57	33.87	26.61	147.3	.610	3.97	2.22
300	6.03	33.91	26.71	138.2	.682	3.30	2.46
400	4.92	33.95	26.88	123.0	.814	1.92	2.94
500	4.35	34.00	26.98	113.6	.933	1.20	3.22
600	4.00	34.09	27.08	104.1	1.043	0.85	3.35
700	3.71	34.18	27.18	95.1	1.143	0.71	3.37
800	3.49	34.25	27.26	88.0	1.236	0.61	3.38
1000	3.13	34.37	27.39	76.6	1.402	0.50	3.39

## STATION 210 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $43^{\circ}58'N$   $133^{\circ}15'W$  August 13, 1949 0000 GCT Wire angle:  
 missing Sounding: missing Depth of observation: 1,123 m. Weather: over-  
 cast Sea: slight Wind:  $290^{\circ}$ , force 1.

0	16.15	32.70	23.97	395.1	.0000	5.90	1.19
10	15.69	32.68	24.06	387.3	.0393	5.88	1.04
20	15.67	32.61	24.01	392.2	.0784	5.85	1.04
30	15.60	32.59	24.00	392.3	.1178	5.89	1.09
50	10.46	32.77	25.16	283.0	.1857	6.69	1.24
75	8.76	32.72	25.39	260.7	.2540	6.79	1.48
100	7.65	32.75	25.58	243.2	.3174	6.66	1.65
150	6.80	32.98	25.88	215.3	.433	6.10	1.96
200	7.02	33.67	26.39	167.6	.529	5.27	1.95
250	6.58	33.85	26.59	149.0	.609	4.49	2.27
300	6.01	33.94	26.74	135.7	.681	3.67	2.59
400	5.07	33.92	26.84	126.9	.813	2.34	3.07
500	4.50	34.00	26.96	115.6	.935	1.56	3.35
600	4.06	34.11	27.10	103.2	1.046	1.15	3.46
700	3.75	34.20	27.20	94.0	1.145	0.89	3.54
800	3.55	34.27	27.27	87.3	1.237	0.73	3.60
1000	3.21	34.40	27.41	75.4	1.401	0.55	3.70

## STATION 301 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $42^{\circ}43'N$   $125^{\circ}14'W$  August 9, 1949 2040 GCT Wire angle:  $12^{\circ}$   
 Sounding: missing Depth of observation: 1,026 m. Weather: partly cloudy  
 Sea: very rough Wind:  $360^{\circ}$ , force 3-4.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}$ /oo)	$\sigma_t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2 - P}$ ( $\mu g$ at/L)
0	13.05	33.57	25.30	268.9	.0000	6.17	1.48
10	12.80	33.64	25.40	259.1	.0265	6.21	1.43
20	10.30	33.65	25.87	214.8	.0503	5.78	1.61
30	9.38	33.69	26.05	197.6	.0710	4.73	1.97
50	8.53	33.77	26.25	178.9	.1088	3.67	2.28
75	8.10	33.84	26.37	168.0	.1524	3.00	2.38
100	7.87	33.91	26.46	159.8	.1937	2.59	2.45
150	7.65	34.00	26.56	150.9	.272	2.06	2.45
200	7.26	33.91	26.55	152.7	.348	1.90	2.61
250	7.03	33.95	26.61	147.7	.424	1.77	2.74
300	6.80	34.00	26.68	141.7	.497	1.59	2.85
400	6.20	34.05	26.80	131.3	.634	1.20	3.01
500	5.58	34.10	26.92	121.0	.762	0.66	3.24
600	5.05	34.26	27.11	103.7	.875	0.56	3.30
700	4.59	34.36	27.24	91.6	.974	0.55	3.31
800	4.24	34.41	27.31	84.8	1.063	0.55	3.32
1000	3.67	34.45	27.40	76.9	1.226	0.56	3.32

## STATION 302 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $42^{\circ}35'N$   $125^{\circ}54'W$  August 9, 1949 1355, 1255 GCT Wire angle:  $35^{\circ}, 45^{\circ}$  Sounding: missing Depth of observation: 191, 1,226 m.  
 Weather: partly cloudy Sea: moderate Wind:  $360^{\circ}$ , force 4.

0	13.10	32.56	24.50	343.8	.0000	6.40	0.96
10	13.25	32.65	24.54	340.3	.0343	6.34	0.86
20	10.35	32.89	25.27	271.8	.0651	6.15	1.09
30	8.75	33.09	25.68	232.4	.0904	5.60	1.55
50	8.18	33.44	26.04	198.5	.1337	4.39	1.96
75	7.96	33.62	26.22	182.4	.1816	3.48	2.24
100	7.77	33.79	26.38	167.5	.2256	3.09	2.40
150	7.14	33.89	26.55	152.1	.306	2.60	2.49
200	6.80	33.99	26.67	141.0	.380	1.95	2.71
250	6.30	34.03	26.77	132.0	.448	1.44	2.95
300	5.97	34.05	26.83	127.0	.514	1.17	3.10
400	5.70	34.15	26.94	117.6	.637	0.89	3.22
500	5.29	34.20	27.03	109.8	.752	0.67	3.27
600	4.94	34.23	27.09	104.6	.860	0.53	3.37
700	4.69	34.28	27.16	98.7	.962	0.42	3.45
800	4.41	34.34	27.24	91.9	1.059	0.36	3.49
1000	3.76	34.36	27.32	84.5	1.237	0.43	3.49

## STATION 303 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $42^{\circ}30'N$   $126^{\circ}48'W$  August 9, 1949 0248 GCT Wire angle:  $10^{\circ}$   
 Sounding: missing Depth of observation: 1,139 m. Weather: cloudy Sea:  
 rough Wind: 360°, force 4-5.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm³)	$10^5 S$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2} - P$ (kg at/L)
0	15.99	31.91	23.40	449.7	.0000	6.04	0.59
10	15.77	31.94	23.47	443.1	.0448	6.09	0.49
20	15.40	31.92	23.54	437.0	.0890	6.12	0.49
30	14.76	31.91	23.67	424.7	.1323	6.16	0.53
50	10.65	32.51	24.92	305.3	.2056	6.50	0.77
75	7.94	32.93	25.68	233.5	.2734	6.38	1.22
100	7.58	32.97	25.76	225.8	.3311	5.75	1.58
150	7.35	33.73	26.39	166.7	.430	3.67	2.34
200	7.18	33.93	26.57	150.3	.510	2.67	2.58
250	6.79	33.95	26.64	144.5	.584	2.04	2.80
300	6.32	33.95	26.71	138.9	.655	1.60	3.00
400	5.71	34.10	26.90	121.5	.787	0.96	3.30
500	5.03	34.18	27.05	108.2	.902	0.61	3.51
600	4.58	34.24	27.14	99.5	1.007	0.50	3.60
700	4.28	34.29	27.21	93.2	1.104	0.49	3.61
800	4.01	34.33	27.28	87.9	1.196	0.50	3.61
1000	3.57	34.41	27.38	78.7	1.364	0.56	3.63

## STATION 304 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $42^{\circ}24'N$   $127^{\circ}50'W$  August 8, 1949 1810 GCT Wire angle:  $32^{\circ}$   
 Sounding: 1,500 fms Depth of observation: 484 m. Weather: cloudy Sea:  
 moderate Wind: 340°, force 2-3.

0	16.35	32.18	23.53	437.6	-	5.90	0.69
10	16.20	32.36	23.69	421.4	-	5.96	0.59
20	14.75	32.59	24.18	374.5	-	6.33	0.70
30	11.27	32.79	25.03	294.5	-	6.34	0.85
50	9.14	33.10	25.63	237.8	-	5.27	1.64
75	8.25	33.51	26.09	194.7	-	4.29	2.16
100	7.49	33.64	26.30	174.7	-	4.14	2.17
150	7.10	33.90	26.56	150.8	-	2.95	2.57
200	7.15	34.01	26.64	143.9	-	2.03	2.80
250	6.84	34.05	26.71	137.8	-	1.60	2.92
300	6.36	34.06	26.79	131.2	-	1.28	3.03
400	5.41	34.12	26.95	116.2	-	0.80	3.24
500	(4.78)	(34.22)	(27.11)	(102.2)	-	(0.57)	(3.40)

## STATION 305 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $42^{\circ}21'N$   $128^{\circ}35'W$  August 8, 1949 1428 GCT Wire angle:  $14^{\circ}$   
 Sounding: 1800 fms. Depth of observation: 1,107 m. Weather: precipitation  
 within sight Sea: moderate Wind:  $330^{\circ}$ , force 2.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm³)	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2 - P}$ (μg at/L)
0	16.90	31.80	23.10	477.5	.0000	5.76	0.60
10	16.69	31.78	23.14	474.5	.0478	5.78	0.67
20	15.95	32.67	23.99	393.7	.0914	5.95	0.78
30	13.67	32.72	24.51	343.8	.1284	6.25	0.85
50	11.99	32.79	24.90	307.8	.1939	6.54	0.86
75	8.70	32.99	25.61	239.8	.2627	5.99	1.49
100	8.60	33.15	25.76	226.7	.3214	5.29	1.78
150	7.99	33.70	26.28	178.1	.423	3.69	2.49
200	7.62	33.90	26.49	158.6	.508	2.71	2.74
250	7.24	34.00	26.62	146.7	.585	2.52	2.85
300	6.63	34.05	26.74	135.6	.656	2.26	3.00
400	5.97	34.10	26.87	124.5	.787	1.21	3.34
500	5.57	34.22	27.01	112.0	.906	0.69	3.57
600	5.20	34.33	27.14	100.3	1.014	0.47	3.71
700	4.83	34.39	27.23	92.4	1.111	0.41	3.74
800	4.50	34.41	27.29	87.6	1.202	0.43	3.75
1000	3.86	34.44	27.38	79.8	1.371	0.51	3.73

## STATION 306 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $42^{\circ}16'N$   $129^{\circ}29'W$  August 8, 1949 0720 GCT Wire angle:  $17^{\circ}$   
 Sounding: 1,900 fms. Depth of observation: 1,126 m. Weather: partly cloudy  
 Sea: rough Wind:  $340^{\circ}$ , force 2-3.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm³)	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2 - P}$ (μg at/L)
0	16.90	32.70	23.80	411.8	.0000	5.76	0.80
10	16.65	32.68	23.84	408.0	.0412	5.76	0.62
20	16.62	32.71	23.87	405.3	.0820	5.75	0.59
30	16.49	32.77	23.94	398.4	.1223	5.80	0.58
50	14.00	32.85	24.55	341.3	.1967	6.32	0.61
75	10.15	33.05	25.43	257.1	.2719	6.06	1.14
100	8.88	33.16	25.72	230.3	.3332	5.25	1.51
150	7.70	33.71	26.33	173.2	.435	3.82	2.13
200	7.33	33.87	26.51	156.7	.518	3.20	2.33
250	6.70	33.93	26.64	144.6	.594	2.72	2.47
300	6.28	33.99	26.74	135.4	.664	2.12	2.63
400	5.52	34.09	26.92	119.6	.793	1.11	2.99
500	5.02	34.16	27.03	109.5	.908	0.67	3.16
600	4.60	34.22	27.13	101.2	1.015	0.47	3.24
700	4.32	34.29	27.21	93.6	1.113	0.37	3.27
800	4.06	34.37	27.30	85.5	1.203	0.35	3.28
1000	3.49	34.46	27.43	74.1	1.365	0.44	3.18

## STATION 307 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $42^{\circ}11'N$   $130^{\circ}22'W$  August 8, 1949 0115 GCT Wire angle:  $20^{\circ}$   
 Sounding: 2,200 fms. Depth of observation: 1,085 m. Weather: partly  
 cloudy Sea: moderate Wind:  $320^{\circ}$ , force 3.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{^{\circ}}$ /oo)	$\sigma_t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2} - P$ ( $\mu g$ at/L)
0	16.70	32.84	23.95	397.0	.0000	5.83	0.66
10	16.45	32.77	23.95	397.0	.0399	5.85	0.62
20	16.29	32.82	24.03	390.0	.0794	5.88	0.63
30	16.25	32.80	24.02	391.0	.1186	5.82	0.62
50	16.19	32.68	23.95	399.1	.1980	4.99	0.63
75	9.38	32.65	25.24	275.3	.2828	6.95	1.00
100	8.39	32.76	25.48	252.7	.3492	6.41	1.29
150	7.58	33.23	25.97	207.3	.465	5.49	1.79
200	6.85	33.72	26.45	161.7	.558	4.54	2.07
250	6.32	33.94	26.70	138.9	.634	2.85	2.21
300	5.82	34.05	26.85	125.2	.700	1.59	2.30
400	5.06	34.17	27.03	108.1	.818	0.67	2.79
500	4.56	34.24	27.15	98.1	.921	0.44	3.32
600	4.21	34.29	27.22	91.6	1.017	0.34	3.59
700	3.95	34.33	27.28	86.4	1.107	0.31	3.67
800	3.75	34.37	27.33	82.1	1.192	0.32	3.68
1000	3.34	34.44	27.43	73.9	1.350	0.42	3.68

## STATION 308 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $42^{\circ}06'N$   $131^{\circ}16'W$  August 7, 1949 1855 GCT Wire angle:  $7^{\circ}$   
 Sounding: 1,850 fms. Depth of observation: 1,256 m. Weather: overcast  
 Sea: rough Wind:  $320^{\circ}$ , force 2.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{^{\circ}}$ /oo)	$\sigma_t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2} - P$ ( $\mu g$ at/L)
0	16.38	32.81	24.00	392.3	.0000	5.85	0.68
10	16.19	32.79	24.03	389.8	.0393	5.82	0.56
20	16.17	32.78	24.03	390.3	.0784	5.85	0.54
30	16.12	32.76	24.02	391.0	.1176	5.93	0.57
50	11.50	32.69	24.90	306.4	.1877	6.89	0.87
75	9.18	32.71	25.32	267.5	.2599	6.70	1.12
100	8.12	32.72	25.49	251.9	.3252	6.49	1.19
150	7.17	32.95	25.81	222.2	.445	6.05	1.58
200	7.03	33.63	26.36	170.7	.543	5.30	1.84
250	6.86	33.85	26.55	152.8	.625	4.44	1.87
300	6.21	33.92	26.70	139.7	.699	3.32	1.88
400	5.22	33.98	26.86	124.2	.832	3.15	2.94
500	4.79	34.05	26.97	114.9	.952	1.55	3.26
600	4.24	34.15	27.11	102.4	1.062	0.67	3.43
700	3.93	34.26	27.23	91.4	1.160	0.53	3.54
800	3.74	34.36	27.33	82.7	1.248	0.45	3.59
1000	3.38	34.44	27.43	74.2	1.406	0.40	3.60

## STATION 309 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $42^{\circ}02'N$   $132^{\circ}10'W$  August 7, 1949 1210 GCT Wire angle:  $30^{\circ}$   
 Sounding: 2,200 fms. Depth of observation: 1,154 m. Weather: cloudy  
 Sea: moderate Wind:  $340^{\circ}$ , force 2.

Depth (m)	T (°C)	S (°/oo)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2 - P}$ (kg at/L)
0	15.86	32.77	24.09	383.9	.0000	5.89	0.69
10	16.27	32.74	23.97	395.2	.0391	5.88	0.67
20	16.27	32.72	23.96	396.9	.0784	5.85	0.64
30	15.38	32.72	24.15	378.3	.1173	5.89	0.64
50	10.75	32.72	25.07	291.6	.1846	6.95	0.84
75	9.21	32.70	25.31	268.8	.2550	6.69	1.07
100	8.08	32.74	25.51	249.9	.3203	6.53	1.24
150	7.37	32.75	25.62	239.9	.4444	6.34	1.53
200	7.20	33.58	26.29	176.7	.548	4.75	1.88
250	6.87	33.85	26.55	152.9	.632	3.98	2.14
300	6.38	33.91	26.67	142.6	.706	3.31	2.43
400	5.41	33.96	26.83	128.0	.842	2.14	2.93
500	4.79	34.07	26.99	113.4	.964	1.21	3.30
600	4.39	34.16	27.10	103.3	1.073	0.63	3.51
700	4.08	34.23	27.19	95.2	1.174	0.40	3.59
800	3.81	34.30	27.27	88.0	1.266	0.35	3.62
1000	3.36	34.40	27.40	77.0	1.433	0.45	3.62

## STATION 310 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $41^{\circ}57'N$   $133^{\circ}03'W$  August 7, 1949 0450 GCT Wire angle:  
 missing Sounding: 2,200 fms. Depth of observation: 1,110 m. Weather:  
 partly cloudy Sea: moderate Wind:  $340^{\circ}$ , force 4.

0	16.94	32.88	23.92	399.5	.0000	5.75	0.83
10	16.90	32.88	23.93	398.9	.0401	5.72	0.66
20	16.88	32.85	23.91	400.7	.0802	5.73	0.63
30	16.60	32.81	23.95	397.9	.1203	5.92	0.62
50	12.47	32.77	24.79	318.1	.1923	6.84	0.65
75	10.26	32.79	25.21	278.7	.2673	6.52	0.86
100	8.93	32.74	25.38	262.2	.3353	6.40	1.13
150	7.80	33.06	25.80	222.8	.457	5.75	1.52
200	7.52	33.66	26.31	175.2	.558	5.02	1.79
250	7.18	33.85	26.51	157.1	.641	4.51	1.92
300	6.65	33.92	26.64	145.3	.718	3.79	2.06
400	5.34	33.94	26.82	128.7	.856	2.45	2.58
500	4.66	33.99	26.94	117.8	.980	1.47	2.92
600	4.31	34.09	27.05	107.6	1.094	0.81	3.07
700	4.05	34.19	27.16	97.9	1.197	0.58	3.14
800	3.80	34.28	27.26	88.9	1.292	0.52	3.16
1000	3.37	34.37	27.37	79.3	1.462	0.58	3.14

## STATION 401 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $40^{\circ}50'N$   $124^{\circ}50'W$  August 3, 1949 0610 GCT Wire angle:  $0^{\circ}$   
 Sounding: 850 fms. Depth of observation: 1,139 m. Weather: cloudy  
 Sea: slight Wind:  $330^{\circ}$ , force 1.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}$ /oo)	$\sigma_t$ (mg/cm $^3$ )	$10^5 \zeta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2 - P}$ ( $\mu g$ at/L)
0	14.41	33.31	24.82	314.4	.0000	6.21	1.23
10	13.88	33.33	24.94	302.8	.0310	6.18	1.08
20	10.65	33.37	25.59	241.3	.0583	5.75	1.69
30	10.08	33.47	25.76	224.9	.0817	5.63	1.79
50	10.15	33.75	25.97	205.5	.1250	5.57	1.90
75	9.42	33.75	26.09	194.4	.1752	4.88	2.10
100	8.68	33.85	26.29	176.2	.2218	4.63	2.41
150	7.92	33.95	26.48	158.1	.306	3.99	2.64
200	7.22	34.02	26.64	144.0	.382	2.26	2.81
250	6.80	34.08	26.74	135.0	.452	1.60	2.93
300	6.48	34.13	26.83	127.5	.518	1.22	3.08
400	5.87	34.16	26.93	118.9	.643	0.98	3.33
500	5.39	34.20	27.02	111.2	.759	0.69	3.39
600	5.02	34.27	27.12	102.5	.866	0.47	3.42
700	4.72	34.34	27.21	94.6	.966	0.48	3.45
800	4.44	34.41	27.29	87.2	1.058	0.51	3.46
1000	3.90	34.48	27.41	77.4	1.224	0.59	3.48

## STATION 402 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $40^{\circ}41'N$   $125^{\circ}41'W$  August 3, 1949 1520 GCT Wire angle:  $20^{\circ}$   
 Sounding: 1,680 fms. Depth of observation: 1,194 m. Weather: overcast  
 Sea: moderate Wind:  $350^{\circ}$ , force 2.

0	15.68	33.01	24.31	362.5	.0000	5.89	0.68
10	15.46	32.95	24.32	362.5	.0364	5.90	0.67
20	15.25	32.97	24.38	357.0	.0725	5.91	0.68
30	15.00	32.97	24.43	352.1	.1081	5.99	0.71
50	12.25	32.96	24.98	299.8	.1736	6.14	0.88
75	9.23	33.10	25.62	239.6	.2414	5.65	1.44
100	8.23	33.41	26.01	202.2	.2970	4.25	1.95
150	7.83	33.90	26.46	160.8	.388	2.78	2.59
200	7.35	34.00	26.61	147.3	.466	2.14	2.77
250	6.83	34.04	26.71	138.4	.538	1.82	2.83
300	6.26	34.05	26.79	130.8	.606	1.57	2.90
400	5.59	34.06	26.88	122.9	.734	1.14	3.13
500	5.18	34.12	26.98	114.5	.853	0.74	3.34
600	4.81	34.22	27.10	103.8	.963	0.50	3.47
700	4.45	34.32	27.22	92.9	1.063	0.40	3.54
800	4.13	34.38	27.30	85.7	1.153	0.36	3.57
1000	3.59	34.44	27.41	76.7	1.317	-	3.52

## STATION 403 (Interpolated Values at Standard Depths)

BLACK DOUGLÁS:  $40^{\circ}32'N$   $126^{\circ}32'W$  August 3, 1949 2250 GCT Wire angle:  $15^{\circ}$   
 Sounding: 1,720 fms. Depth of observation: 1,178 m. Weather: partly cloudy  
 Sea: smooth Wind:  $320^{\circ}$ , force 2.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	Δ D (dyn.m.)	O <sub>2</sub> (ml/L)	P <sub>O<sub>2</sub></sub> -P kg at/L)
0	16.58	32.50	23.71	419.5	.0000	5.89	0.61
10	16.00	32.48	23.84	408.4	.0416	5.87	0.49
20	15.37	32.87	24.27	366.7	.0805	6.32	0.75
30	14.53	32.96	24.52	343.2	.1161	6.35	0.85
50	11.67	32.99	25.11	287.3	.1795	6.25	0.94
75	9.65	32.91	25.40	260.3	.2483	6.21	1.16
100	8.74	33.27	25.83	220.1	.3087	4.95	1.29
150	8.06	33.78	26.33	173.0	.408	3.20	2.13
200	7.57	33.95	26.54	154.1	.490	2.31	2.78
250	7.06	33.97	26.62	146.5	.566	1.99	2.84
300	6.55	34.02	26.73	136.7	.637	1.64	3.01
400	5.74	34.13	26.92	119.6	.766	0.94	3.33
500	5.17	34.19	27.04	109.1	.882	0.61	3.52
600	4.77	34.24	27.12	101.7	.988	0.49	3.60
700	4.41	34.29	27.20	94.7	1.087	0.43	3.64
800	4.08	34.33	27.27	88.7	1.180	0.40	3.67
1000	3.54	34.40	27.38	79.1	1.349	0.49	3.68

## STATION 404 (Interpolated Values at Standard Depths)

BLACK DOUGLÁS:  $40^{\circ}23'N$   $127^{\circ}22'W$  August 4, 1949 0527 GCT Wire angle:  $0^{\circ}$   
 Sounding: 1,420 fms. Depth of observation: 1,122 m. Weather: cloudy  
 Sea: slight Wind:  $320^{\circ}$ , force 3.

0	16.55	32.66	23.84	406.9	.0000	5.81	0.60
10	16.11	32.59	23.89	402.8	.0406	5.86	0.54
20	15.73	32.59	23.97	394.9	.0807	5.91	0.54
30	15.20	32.60	24.10	383.3	.1198	5.96	0.59
50	12.89	32.71	24.66	330.0	.1914	6.16	0.79
75	10.30	32.79	25.20	279.4	.2680	6.16	1.20
100	9.20	33.10	25.62	239.5	.3333	5.58	1.51
150	8.49	33.58	26.10	194.4	.443	4.20	2.11
200	7.90	33.82	26.38	168.6	.534	3.00	2.41
250	7.20	33.92	26.56	152.0	.615	2.46	2.52
300	6.76	33.99	26.68	141.6	.689	2.07	2.64
400	6.10	34.08	26.84	127.6	.824	1.42	2.89
500	5.39	34.14	26.97	115.6	.947	0.73	3.04
600	4.90	34.19	27.07	107.0	1.059	0.51	3.18
700	4.50	34.26	27.17	97.9	1.163	0.40	3.28
800	4.14	34.33	27.26	89.5	1.257	0.36	3.33
1000	3.51	34.48	27.44	73.0	1.422	0.44	3.26

## STATION 405 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $40^{\circ}14'N$   $128^{\circ}14'W$  August 4, 1949 1140 GCT Wire angle:  
missing Sounding: 2,500 fms. Depth of observation: 1,126 m. Weather:  
overcast Sea: smooth Wind:  $340^{\circ}$ , force 1.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm³)	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ $\mu g$ at/L)
0	16.35	32.61	23.85	406.3	.0000	5.81	0.74
10	16.20	32.56	23.84	406.9	.0408	5.84	0.65
20	15.76	32.58	23.97	396.2	.0811	5.90	0.68
30	15.44	32.65	24.08	384.6	.1203	6.03	0.76
50	13.10	32.81	24.70	326.7	.1918	6.32	0.88
75	9.60	32.99	25.47	253.6	.2648	5.88	1.45
100	9.19	33.26	25.75	227.6	.3253	5.24	1.74
150	8.82	33.71	26.16	189.4	.430	3.24	2.41
200	8.24	33.92	26.41	166.1	.520	2.28	2.65
250	7.73	33.97	26.53	155.9	.601	2.02	2.78
300	7.32	34.02	26.63	147.0	.677	1.95	2.88
400	6.63	34.09	26.77	134.0	.819	1.80	3.15
500	6.00	34.16	26.91	121.8	.948	0.60	3.46
600	5.50	34.23	27.03	111.5	1.066	0.48	3.54
700	5.06	34.30	27.14	101.7	1.173	0.41	3.59
800	4.63	34.37	27.24	92.4	1.271	0.40	3.60
1000	3.82	34.41	27.36	81.5	1.447	0.46	3.60

## STATION 406 (Interpolated Values at Standard Depths)

BLACK DOUGLÁS:  $40^{\circ}05'N$   $129^{\circ}04'W$  August 4, 1949 1732 GCT Wire angle:  $0^{\circ}$   
Sounding: 2,300 fms. Depth of observation: 1,076 m. Weather: cloudy  
Sea: rough Wind:  $300^{\circ}$ , force 3.

0	16.75	32.61	23.76	415.1	.0000	5.88	0.69
10	16.53	32.61	23.80	410.4	.0414	5.85	0.65
20	15.85	32.59	23.94	397.4	.0820	5.96	0.65
30	14.46	32.57	24.24	370.4	.1205	6.18	0.70
50	12.73	32.67	24.66	330.0	.1909	6.42	0.83
75	11.23	32.87	25.10	289.1	.2687	6.23	1.04
100	10.18	32.97	25.36	264.8	.3384	5.99	1.23
150	8.84	33.34	25.87	217.3	.460	4.87	2.02
200	8.27	33.81	26.32	174.6	.558	2.74	2.61
250	7.78	33.98	26.53	155.8	.642	2.18	2.82
300	7.12	34.08	26.70	139.9	.716	1.77	2.99
400	5.82	33.98	26.79	131.6	.853	1.19	3.23
500	5.29	34.01	26.88	123.9	.982	0.76	3.36
600	4.88	34.07	26.97	115.7	1.103	0.56	3.46
700	4.52	34.14	27.07	107.0	1.215	0.47	3.54
800	4.19	34.21	27.16	99.0	1.319	0.43	3.61
1000	3.58	34.37	27.35	81.8	1.502	0.41	3.72

## STATION 407 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $39^{\circ}56'N$   $129^{\circ}56'W$  August 4, 1949 2350 GCT Wire angle:  $0^{\circ}$   
 Sounding: 2,360 fms. Depth of observation: 1,077 m. Weather: partly cloudy  
 Sea: moderate Wind:  $320^{\circ}$ , force 1.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}$ /oo)	$\sigma_t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2} - P$ ( $\mu$ g at/L)
0	17.94	32.86	23.67	423.7	.0000	5.74	0.67
10	17.27	32.84	23.82	410.0	.0418	5.75	0.66
20	16.78	32.87	23.95	397.2	.0824	5.80	0.67
30	16.17	32.88	24.10	383.3	.1216	5.90	0.70
50	13.70	32.83	24.59	336.8	.1939	6.41	0.74
75	10.01	32.80	25.26	274.1	.2707	6.65	0.77
100	8.53	32.70	25.41	259.2	.3378	6.50	1.19
150	7.51	33.15	25.91	212.2	.456	5.48	1.79
200	7.36	33.79	26.44	163.1	.551	4.29	2.09
250	7.02	33.91	26.58	150.4	.630	3.40	2.37
300	6.57	33.96	26.68	141.3	.703	2.67	2.66
400	5.75	34.03	26.84	127.1	.839	1.53	3.11
500	5.31	34.08	26.93	119.1	.963	0.86	3.36
600	4.94	34.14	27.02	111.3	1.079	0.57	3.49
700	4.58	34.19	27.10	103.9	1.188	0.45	3.56
800	4.23	34.26	27.20	95.6	1.288	0.43	3.60
1000	3.56	34.39	27.37	79.9	1.466	0.46	3.63

## STATION 408 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $39^{\circ}47'N$   $130^{\circ}46'W$  August 5, 1949 0638 GCT Wire angle:  $5^{\circ}$   
 Sounding: 2,480 fms. Depth of observation: 1,232 m. Weather: partly cloudy  
 Sea: moderate Wind:  $220^{\circ}$ , force 2.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}$ /oo)	$\sigma_t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2} - P$ ( $\mu$ g at/L)
0	17.88	32.86	23.69	422.2	.0000	5.73	0.68
10	16.91	32.86	23.92	400.6	.0413	5.81	0.60
20	16.56	32.85	23.99	393.7	.0812	5.88	0.64
30	16.18	32.81	24.05	388.5	.1204	5.97	0.69
50	11.75	32.68	24.85	311.6	.1908	6.93	0.69
75	9.77	32.92	25.39	261.2	.2628	6.50	0.82
100	8.38	32.74	25.47	254.1	.3276	6.51	1.23
150	7.67	33.07	25.83	220.1	.447	5.60	1.69
200	7.82	33.68	26.29	177.9	.547	4.25	2.05
250	7.43	33.85	26.48	160.4	.632	3.85	2.24
300	6.68	33.93	26.64	145.0	.709	3.26	2.50
400	5.52	34.00	26.84	126.4	.846	2.21	3.12
500	4.81	34.03	26.95	116.7	.969	1.39	3.36
600	4.44	34.08	27.03	109.8	1.083	0.77	3.51
700	4.16	34.18	27.14	99.9	1.189	0.43	3.61
800	3.95	34.28	27.24	91.0	1.285	0.37	3.69
1000	3.53	34.42	27.40	77.4	1.456	0.45	3.76

## STATION 409 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $39^{\circ}38'N$   $131^{\circ}36'W$  August 5, 1949 1427, 1320 GCT Wire angle:  $50^{\circ}$ ,  $50^{\circ}$  Sounding: 2,450 fms. Depth of observation: 251, 1,124 m. Weather: overcast Sea: rough Wind:  $220^{\circ}$ , force 4.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ at/L)
0	17.50	32.94	23.84	407.6	.0000	5.68	0.67
10	17.05	32.83	23.86	405.9	.0408	5.77	0.60
20	16.96	32.86	23.90	401.9	.0814	5.79	0.58
30	16.56	32.84	23.98	394.8	.1214	5.87	0.58
50	13.55	32.94	24.71	325.8	.1938	6.42	0.55
75	11.79	32.95	25.06	292.8	.2716	6.43	0.59
100	11.59	32.94	25.09	290.7	.3450	6.10	0.74
150	11.08	33.04	25.26	275.6	.487	5.13	1.37
200	9.10	33.68	26.09	196.8	.606	4.30	1.97
250	7.92	33.84	26.40	168.1	.698	3.61	2.22
300	6.96	33.92	26.60	149.6	.778	3.18	2.40
400	5.65	34.00	26.83	128.1	.918	2.40	2.94
500	5.06	34.06	26.95	117.4	1.042	1.19	3.35
600	4.74	34.15	27.05	108.0	1.156	0.64	3.54
700	4.41	34.25	27.17	97.6	1.265	0.53	3.62
800	4.10	34.33	27.27	89.0	1.364	0.45	3.64
1000	3.54	34.40	27.38	79.1	1.534	0.42	3.68

## STATION 410 (Interpolated Values at Standard Depths)

BLACK DOUGLAS:  $39^{\circ}29'N$   $132^{\circ}27'W$  August 6, 1949 0250 GCT Wire angle:  $25^{\circ}$  Sounding: 2,200 fms. Depth of observation: 1,010 m. Weather: cloudy Sea: very rough Wind:  $320^{\circ}$ , force 5.

0	17.82	33.04	23.84	407.5	.0000	5.67	0.50
10	17.75	33.02	23.84	407.8	.0409	5.67	0.48
20	17.75	33.01	23.83	408.9	.0819	5.68	0.44
30	17.57	33.00	23.87	405.7	.1228	5.81	0.44
50	14.50	32.89	24.47	348.3	.1986	6.35	0.48
75	11.90	32.88	24.98	300.0	.2801	6.49	0.51
100	11.03	33.01	25.24	275.8	.3525	6.23	0.60
150	9.84	33.17	25.57	245.4	.484	5.62	0.97
200	8.51	33.60	26.12	193.9	.594	4.75	1.54
250	7.68	33.83	26.42	165.6	.685	3.65	2.05
300	7.12	33.98	26.62	147.2	.764	2.70	2.38
400	6.07	34.06	26.82	123.7	.903	1.51	2.87
500	5.42	34.09	26.93	119.7	1.028	0.99	3.14
600	5.20	34.18	27.02	111.4	1.145	0.60	3.24
700	4.86	34.27	27.13	101.5	1.252	0.52	3.29
800	4.39	34.34	27.24	91.7	1.350	0.46	3.32
1000	3.53	34.42	27.40	77.5	1.521	0.40	3.35

## STATION 501 (Interpolated Values at Standard Depths)

HORIZON:  $38^{\circ}50'N$   $124^{\circ}05'W$  August 10, 1949 0350 GCT Wire angle:  $51^{\circ}$   
 Sounding: missing Depth of observation: 1,121 m. Weather: clear  
 Sea: high Wind:  $320^{\circ}$ , force 5.

Depth (m)	T (°C)	S (‰)	$\sigma-t$ (mg/cm³)	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ (μg at/L)
0	12.27	33.44	25.35	263.7	.0000	5.77	1.29
10	12.24	33.39	25.32	267.3	.0267	5.70	1.23
20	12.26	33.40	25.32	267.0	.0535	5.62	1.25
30	12.27	33.44	25.35	264.6	.0802	5.55	1.27
50	10.47	33.61	25.81	221.3	.1290	5.36	1.32
75	9.52	33.73	26.06	197.5	.1816	3.05	1.82
100	8.97	33.81	26.21	183.4	.2296	2.20	2.06
150	8.13	33.94	26.44	162.2	.317	2.15	2.23
200	7.72	34.02	26.57	151.1	.395	1.92	2.26
250	7.19	34.08	26.69	140.0	.469	1.50	2.28
300	6.59	34.12	26.80	129.9	.537	1.03	2.31
400	5.72	34.19	26.97	115.0	.660	0.59	2.40
500	5.28	34.25	27.07	106.1	.772	0.50	2.62
600	4.89	34.30	27.16	98.7	.875	0.43	2.93
700	4.58	34.35	27.23	92.2	.971	0.39	3.17
800	4.28	34.38	27.29	87.4	1.062	0.39	3.19
1000	3.74	34.42	27.37	80.0	1.231	0.49	3.15

## STATION 504 (Interpolated Values at Standard Depths)

HORIZON:  $38^{\circ}17'N$   $126^{\circ}32'W$  August 10, 1949 1808, 1820 GCT Wire  
 angle:  $48^{\circ}, 52^{\circ}$  Sounding: missing Depth of observation: 49, 923 m.  
 Weather: overcast Sea: very rough Wind:  $340^{\circ}$ , force 4.

0	15.70	33.04	24.33	360.7	.0000	5.68	0.36
10	15.67	32.99	24.30	364.0	.0364	5.80	0.36
20	15.62	32.99	24.31	363.1	.0729	5.75	0.45
30	14.35	32.97	24.57	338.7	.1081	5.99	0.50
50	10.66	32.97	25.28	271.5	.1694	5.99	0.62
75	9.78	33.18	25.59	242.3	.2340	5.54	1.09
100	9.21	33.46	25.90	213.1	.2913	4.52	1.49
150	8.64	33.78	26.24	181.5	.391	2.92	1.89
200	8.25	33.97	26.45	162.4	.477	2.27	2.12
250	7.68	34.05	26.60	149.1	.556	1.85	2.34
300	7.06	34.10	26.72	137.6	.628	1.51	2.43
400	6.04	34.14	26.89	122.6	.759	1.03	2.55
500	5.44	34.18	27.00	113.3	.878	0.71	2.77
600	4.93	34.22	27.09	105.3	.988	0.48	3.00
700	4.62	(34.27)	(27.16)	(98.6)	(1.091)	-	-
800	4.29	(34.32)	(27.24)	(92.1)	(1.187)	-	-
1000	(3.61)	(34.40)	(27.37)	(80.0)	(1.361)	-	-

## STATION 505 (Interpolated Values at Standard Depths)

HORIZON:  $38^{\circ}06'N$   $127^{\circ}20'W$  August 11, 1949 0254 GCT Wire angle:  $20^{\circ}$   
 Sounding: missing Depth of observation: 1,260 m. Weather: partly  
 cloudy Sea: rough Wind:  $310^{\circ}$ , force 3.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}$ /oo)	$\sigma-t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ ( $\mu$ g at/L)
0	16.14	33.12	24.29	364.4	.0000	5.43	0.53
10	16.10	33.50	24.59	336.2	.0352	5.55	0.54
20	16.02	33.15	24.34	360.1	.0701	5.62	0.55
30	15.64	33.17	24.44	350.8	.1058	5.68	0.60
50	13.35	33.29	25.02	296.2	.1708	5.80	0.94
75	11.47	33.05	25.20	280.0	.2433	5.73	1.03
100	10.22	33.18	25.52	249.8	.3099	5.79	1.01
150	9.02	33.73	26.14	191.1	.421	3.44	2.14
200	8.44	33.93	26.39	168.2	.511	2.44	2.33
250	7.75	34.14	26.66	143.6	.590	2.42	2.30
300	7.17	34.20	26.79	137.6	.659	2.36	2.34
400	6.37	34.26	26.94	118.0	.785	1.06	2.88
500	5.76	34.28	27.04	109.9	.900	0.68	3.01
600	5.28	34.29	27.10	104.3	1.008	0.44	3.10
700	4.87	34.31	27.17	98.7	1.111	0.30	3.18
800	4.49	34.34	27.23	92.8	1.207	0.25	3.26
1000	3.83	34.42	27.36	81.0	1.383	0.34	3.28

## STATION 506 (Interpolated Values at Standard Depths)

HORIZON:  $37^{\circ}55'N$   $128^{\circ}10'W$  August 11, 1949 0907 GCT Wire angle:  $0^{\circ}$   
 Sounding: missing Depth of observation: 1,172 m. Weather: partly  
 cloudy Sea: rough Wind:  $300^{\circ}$ , force 2.

0	16.42	33.06	24.18	374.7	.0000	5.54	0.53
10	16.41	33.01	24.15	378.6	.0378	5.50	0.53
20	16.37	33.00	24.15	378.6	.0758	5.48	0.51
30	16.10	32.98	24.19	374.6	.1136	5.52	0.51
50	14.20	32.97	24.60	336.4	.1851	5.90	0.66
75	11.69	33.10	25.19	280.2	.2626	5.95	0.99
100	10.00	33.12	25.51	250.8	.3294	5.28	1.26
150	8.63	33.73	26.20	185.1	.439	3.25	1.98
200	7.74	33.94	26.50	157.4	.525	2.65	2.25
250	7.00	33.97	26.63	145.8	.602	2.31	2.44
300	6.48	33.98	26.71	138.6	.673	1.95	2.59
400	5.71	34.03	26.84	126.7	.807	1.07	2.84
500	5.26	34.11	26.96	116.2	.929	0.58	3.11
600	4.88	(34.19)	(27.07)	(106.8)	(1.042)	0.41	3.20
700	4.48	(34.26)	(27.17)	(97.6)	(1.145)	0.37	3.20
800	4.13	(34.32)	(27.26)	(90.0)	(1.240)	0.35	3.18
1000	3.57	(34.43)	(27.40)	(77.3)	(1.409)	0.41	3.16

## STATION 507 (Interpolated Values at Standard Depths)

HORIZON:  $37^{\circ}43'N$   $128^{\circ}58'W$  August 11, 1949 1659 GCT Wire angle:  $12^{\circ}$   
 Sounding: missing Depth of observation: 1,168 m. Weather: overcast  
 Sea: rough Wind:  $300^{\circ}$ , force 4.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm³)	$10^5 \delta$	AD (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ (4g at/L)
0	16.70	32.86	23.97	395.5	.0000	5.48	0.53
10	16.68	32.80	23.92	399.8	.0399	5.53	0.53
20	16.64	32.77	23.91	401.4	.0801	5.51	0.55
30	16.50	32.77	23.94	398.6	.1203	5.54	0.58
50	13.12	32.84	24.72	324.8	.1930	6.05	0.62
75	10.62	32.75	25.11	287.8	.2700	5.65	0.67
100	9.44	32.80	25.35	265.5	.3396	5.95	0.73
150	8.32	33.15	25.80	223.6	.463	4.80	1.54
200	7.59	33.64	26.29	177.6	.564	3.87	2.00
250	7.48	33.83	26.45	162.8	.649	2.98	2.32
300	7.20	33.92	26.56	152.7	.729	2.48	2.59
400	5.77	33.99	26.81	130.3	.872	1.80	2.90
500	4.87	34.08	26.98	113.8	.995	1.00	3.08
600	4.39	34.18	27.12	101.7	1.103	0.69	3.20
700	4.23	34.24	27.18	96.3	1.203	0.56	3.28
800	4.07	34.31	27.25	90.2	1.298	0.50	3.34
1000	3.62	(34.40)	(27.37)	( 80.0)	(1.470)	-	-

## STATION 508 (Interpolated Values at Standard Depths)

HORIZON:  $37^{\circ}32'N$   $129^{\circ}47'W$  August 12, 1949 0030 GCT Wire angle:  $15^{\circ}$   
 Sounding: missing Depth of observation: 1,139 m. Weather: cloudy  
 Sea: moderate Wind:  $330^{\circ}$ , force 2.

0	18.08	33.03	23.77	414.6	.0000	5.30	0.54
10	17.81	33.06	23.86	406.3	.0412	5.31	0.54
20	17.57	33.06	23.91	401.0	.0817	5.37	0.53
30	17.26	33.03	23.96	396.5	.1218	5.47	0.54
50	14.84	32.89	24.40	355.0	.1973	5.77	0.54
75	11.09	32.84	25.10	289.0	.2782	6.28	0.62
100	9.85	33.07	25.49	252.0	.3463	5.70	0.83
150	8.58	33.07	25.70	233.2	.468	5.13	1.30
200	7.82	33.69	26.29	177.1	.572	4.10	1.74
250	7.32	33.88	26.52	156.8	.656	3.33	2.10
300	6.89	33.93	26.61	147.9	.733	2.63	2.40
400	6.18	33.99	26.75	135.5	.875	1.53	7.86
500	5.55	34.09	26.91	121.2	1.005	0.88	3.01
600	4.97	34.21	27.08	106.4	1.120	0.58	3.05
700	4.50	34.29	27.19	95.6	1.222	0.42	3.07
800	4.11	34.33	27.27	89.2	1.315	0.39	3.08
1000	3.52	34.37	27.36	81.1	1.487	0.50	3.06

## STATION 509 (Interpolated Values at Standard Depths)

HORIZON:  $37^{\circ}21'N$   $130^{\circ}36'W$  August 12, 1949 0628 GCT Wire angle:  $27^{\circ}$   
 Sounding: missing Depth of observation: 1,062 m. Weather: overcast,  
 squally Sea: moderate Wind:  $240^{\circ}$ , force 4.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}/oo$ )	$\sigma_t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_4-P}$ ( $\mu g$ at/L)
0	18.45	33.30	23.88	403.4	.0000	5.30	0.40
10	18.35	33.26	23.88	404.3	.0406	5.25	0.40
20	18.22	33.27	23.92	400.9	.0810	5.35	0.45
30	18.08	33.26	23.94	398.8	.1211	5.45	0.46
50	15.28	33.22	24.56	340.2	.1954	5.74	0.47
75	12.66	33.22	25.10	289.0	.2745	5.78	0.48
100	11.99	33.23	25.24	276.4	.3456	5.76	0.52
150	10.53	33.45	25.67	236.1	.475	5.12	0.97
200	8.87	33.75	26.18	183.1	.581	4.64	1.46
250	7.83	33.92	26.47	161.0	.669	3.79	1.86
300	7.20	33.95	26.59	150.5	.748	3.07	2.17
400	6.13	33.96	26.74	137.0	.893	2.01	2.70
500	5.44	34.04	26.89	123.7	1.024	1.38	3.04
600	4.97	34.14	27.02	111.5	1.143	0.90	3.23
700	4.59	34.23	27.14	101.1	1.250	0.61	3.30
800	4.23	34.31	27.24	92.0	1.348	0.55	3.30
1000	3.58	34.44	27.41	76.8	1.518	0.54	3.30

## STATION 510 (Interpolated Values at Standard Depths)

HORIZON:  $37^{\circ}10'N$   $131^{\circ}25'W$  August 12, 1949 1240 GCT Wire angle:  $15^{\circ}$   
 Sounding: missing Depth of observation: 1,161 m. Weather: overcast  
 Sea: moderate Wind:  $270^{\circ}$ , force 2.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}/oo$ )	$\sigma_t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_4-P}$ ( $\mu g$ at/L)
0	18.50	33.06	23.69	422.0	.0000	5.25	0.44
10	18.47	33.04	23.68	423.3	.0424	5.25	0.44
20	18.40	33.03	23.69	422.5	.0849	5.28	0.46
30	18.23	33.05	23.75	417.4	.1270	5.37	0.47
50	15.44	33.15	24.47	348.6	.2040	5.75	0.43
75	12.87	33.15	25.01	297.9	.2853	6.00	0.44
100	11.92	33.23	25.29	271.4	.3569	5.72	0.53
150	10.42	33.27	25.55	247.6	.483	5.15	0.85
200	8.60	33.73	26.21	185.4	.597	4.60	1.30
250	7.81	33.86	26.43	165.3	.685	4.20	1.49
300	7.09	33.93	26.59	150.5	.764	3.71	1.68
400	5.87	33.99	26.80	131.4	.907	2.26	2.39
500	5.12	34.01	26.90	121.9	1.034	1.29	2.38
600	4.70	34.08	27.00	112.8	1.153	0.82	3.03
700	4.39	34.19	27.12	101.8	1.261	0.69	3.05
800	4.10	34.30	27.24	91.2	1.358	0.63	3.07
1000	3.54	34.40	27.38	79.1	1.530	0.55	3.08

## STATION 601 (Interpolated Values at Standard Depths)

HORIZON:  $37^{\circ}12'N$   $123^{\circ}22'W$  August 15, 1949 1101 GCT Wire angle:  $10^{\circ}$   
 Sounding: missing Depth of observation: 1,269 m. Weather: clear  
 Sea: rough Wind:  $320^{\circ}$ , force 3.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}$ /oo)	$\sigma_t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$PO_4-P$ ( $\mu$ g at/L)
0	15.62	33.39	24.62	333.5	.0000	5.58	0.38
10	15.45	33.31	24.59	336.1	.0336	5.50	0.38
20	15.00	33.38	24.74	321.9	.0666	5.61	0.40
30	13.83	33.34	24.96	301.5	.0979	5.63	0.44
50	10.22	33.21	25.54	246.6	.1530	4.88	0.91
75	9.03	33.57	26.02	201.8	.2094	3.70	1.49
100	8.53	33.69	26.19	185.8	.2581	3.07	1.64
150	8.17	33.91	26.42	165.0	.346	2.15	1.78
200	7.77	33.97	26.52	155.5	.427	1.33	2.06
250	7.20	33.99	26.62	146.9	.503	1.30	2.07
300	6.70	34.00	26.69	140.2	.576	1.30	2.09
400	6.09	34.09	26.85	126.8	.710	1.12	2.20
500	5.65	34.19	26.98	115.3	.832	0.50	2.42
600	5.18	34.27	27.10	104.4	.943	0.37	2.50
700	4.77	34.35	27.21	94.4	1.043	0.36	2.52
800	4.42	34.41	27.30	86.8	1.135	0.36	2.56
1000	3.82	34.48	27.41	76.5	1.300	0.45	2.60

## STATION 602 (Interpolated Values at Standard Depths)

HORIZON:  $37^{\circ}03'N$   $123^{\circ}57'W$  August 15, 1949 0550 GCT Wire angle:  $35^{\circ}$   
 Sounding: missing Depth of observation: 1,120 m. Weather: overcast  
 Sea: rough Wind:  $340^{\circ}$ , force 2-3.

0	15.35	33.39	24.68	327.9	.0000	5.40	0.44
10	15.28	33.36	24.67	328.9	.0330	5.58	0.44
20	14.81	33.31	24.73	322.9	.0657	5.60	0.46
30	12.73	33.33	25.17	281.1	.0960	5.56	0.49
50	9.75	33.51	25.85	216.9	.1461	4.05	1.54
75	9.03	33.65	26.08	195.7	.1979	3.40	1.83
100	8.63	33.79	26.25	179.7	.2452	2.92	1.96
150	8.03	33.91	26.44	163.0	.331	2.27	2.01
200	7.42	33.93	26.54	153.5	.411	2.31	1.96
250	6.80	33.96	26.65	143.9	.486	2.13	2.07
300	6.37	34.04	26.77	132.7	.556	1.11	2.45
400	6.08	34.17	26.91	120.7	.683	0.57	2.65
500	5.64	34.20	26.99	114.4	.802	0.51	2.74
600	5.22	34.23	27.06	108.0	.914	0.50	2.80
700	4.83	34.27	27.14	101.1	1.020	0.50	2.83
800	4.48	34.31	27.21	95.0	1.119	0.52	2.83
1000	3.82	34.39	27.34	83.1	1.299	0.61	2.78

## STATION 603 (Interpolated Values at Standard Depths)

HORIZON:  $36^{\circ}50'N$   $124^{\circ}43'W$  August 14, 1949 2353 GCT Wire angle:  $40^{\circ}$   
 Sounding: missing Depth of observation: 885 m. Weather: overcast  
 Sea: rough Wind:  $340^{\circ}$ , force 3.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm³)	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_4-P}$ μg at/L)
0	15.99	33.28	24.45	349.6	.0000	5.60	0.58
10	15.63	33.28	24.53	342.1	.0347	5.64	0.58
20	15.40	33.35	24.63	332.3	.0686	5.69	0.62
30	15.03	33.34	24.71	325.6	.1016	5.73	0.76
50	13.09	33.22	25.02	296.4	.1641	5.90	0.91
75	11.18	33.30	25.44	256.6	.2336	5.42	1.16
100	9.16	33.40	25.86	216.7	.2932	4.44	1.52
150	8.37	33.30	26.30	176.1	.392	2.76	1.92
200	7.83	33.99	26.53	154.9	.475	2.01	2.06
250	*7.37	34.05	26.64	144.8	.551	1.54	2.19
300	*6.95	34.08	26.72	137.7	.622	1.22	2.35
400	*6.19	34.13	26.86	125.1	.755	0.73	2.65
500	*5.47	34.18	26.99	113.6	.875	0.43	2.82
600	4.81	34.24	27.12	102.4	.984	0.34	2.89
700	4.42	34.32	27.22	92.5	1.082	0.34	2.88
800	4.12	34.39	27.31	84.7	1.172	0.39	2.86
1000	(3.63)	(34.47)	(27.42)	(75.0)	(1.333)	-	-

## STATION 604 (Interpolated Values at Standard Depths)

HORIZON:  $36^{\circ}37'N$   $125^{\circ}30'W$  August 14, 1949 1741 GCT Wire angle:  $32^{\circ}$   
 Sounding: missing Depth of observation: 1,113 m. Weather: overcast  
 Sea: high Wind:  $340^{\circ}$ , force 4.

0	16.93	33.17	24.15	378.0	.0000	5.45	0.45
10	16.92	33.12	24.11	381.8	.0381	5.44	0.45
20	16.91	33.12	24.11	382.1	.0765	5.43	0.43
30	16.92	33.13	24.12	381.5	.1148	5.43	0.44
50	16.74	33.09	24.13	381.0	.1914	5.52	0.52
75	12.24	33.09	25.08	290.8	.2759	6.04	0.51
100	11.19	33.03	25.23	277.1	.3473	5.30	0.58
150	9.62	33.51	25.87	216.8	.472	4.75	1.55
200	8.31	33.84	26.34	173.0	.570	3.50	1.91
250	7.68	33.98	26.54	154.3	.652	2.48	2.19
300	7.22	34.01	26.63	146.3	.778	1.98	2.44
400	6.54	34.08	26.78	133.5	.869	1.42	2.82
500	5.87	34.16	26.93	120.1	.997	0.93	3.04
600	5.16	34.24	27.08	106.4	1.111	0.50	3.14
700	4.61	34.30	27.19	96.2	1.213	0.34	3.18
800	4.19	34.35	27.27	88.6	1.307	0.39	3.17
1000	3.62	34.43	27.39	77.9	1.475	0.58	3.10

\* All values at these depths are questionable.

## STATION 605 (Interpolated Values at Standard Depths)

HORIZON:  $36^{\circ}24'N$   $126^{\circ}17'W$  August 14, 1949 1010, 0940 GCT Wire angle:  $45^{\circ}$ ,  $40^{\circ}$  Sounding: missing Depth of observation: 64, 1,064 m. Weather: overcast Sea: rough Wind:  $320^{\circ}$ , force 3-4.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}$ /oo)	$\sigma-t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ at/L)
0	17.06	33.15	24.10	382.4	.0000	5.35	0.46
10	17.05	33.10	24.07	386.2	.0386	5.25	0.46
20	17.03	33.10	24.07	386.1	.0774	5.42	0.48
30	16.96	33.13	24.11	382.6	.1159	5.60	0.48
50	15.23	32.99	24.40	355.9	.1902	6.23	0.48
75	11.99	33.07	25.12	287.8	.2711	5.15	0.60
100	10.40	33.07	25.40	260.9	.3401	4.10	0.78
150	8.94	33.58	26.04	201.1	.456	2.94	1.48
200	8.17	33.84	26.36	170.9	.550	2.40	1.74
250	8.00	33.86	26.40	168.0	.635	2.42	1.68
300	7.71	33.89	26.47	162.3	.719	2.37	1.69
400	6.74	34.00	26.69	142.2	.872	2.00	1.98
500	5.93	34.11	26.88	124.5	1.007	1.31	2.43
600	5.28	34.20	27.03	110.8	1.125	0.62	2.71
700	4.77	34.26	27.14	101.1	1.232	0.43	2.77
800	4.36	34.31	27.22	93.5	1.331	0.53	2.74
1000	3.77	34.40	27.35	81.8	1.508	0.84	2.66

## STATION 606 (Interpolated Values at Standard Depths)

HORIZON:  $36^{\circ}11'N$   $127^{\circ}04'W$  August 14, 1949 0313 GCT Wire angle:  $20^{\circ}$  Sounding: missing Depth of observation: 1,277 m. Weather: partly cloudy Sea: very rough Wind:  $320^{\circ}$ , force 4.

0	17.57	33.13	23.97	395.3	.0000	5.32	0.49
10	17.56	33.08	23.93	399.0	.0399	5.25	0.49
20	17.53	33.09	23.94	397.9	.0799	5.42	0.48
30	17.23	33.08	24.01	392.2	.1195	5.42	0.48
50	15.09	32.85	24.32	363.3	.1955	5.12	0.52
75	10.62	32.81	25.16	283.4	.2768	5.43	0.68
100	9.46	32.83	25.37	263.5	.3456	5.30	0.98
150	8.66	32.83	25.50	252.1	.475	5.35	1.66
200	7.77	33.49	26.14	191.3	.587	4.50	2.06
250	7.09	33.84	26.52	156.6	.675	3.72	2.26
300	6.64	34.00	26.70	139.4	.749	3.07	2.47
400	5.96	34.13	26.89	122.3	.881	1.93	2.85
500	5.43	34.19	27.00	112.5	.999	1.18	3.08
600	4.98	34.25	27.11	103.5	1.108	0.74	3.13
700	4.57	34.31	27.20	95.0	1.209	0.50	3.12
800	4.23	34.36	27.28	88.5	1.301	0.40	3.10
1000	3.65	34.44	27.40	77.5	1.469	0.45	3.08

## STATION 607 (Interpolated Values at Standard Depths)

HORIZON:  $35^{\circ}58'N$   $127^{\circ}51'W$  August 13, 1949 2115 GCT Wire angle:  $23^{\circ}$   
 Sounding: missing Depth of observation: 1,101 m. Weather: partly cloudy  
 Sea: moderate Wind:  $310^{\circ}$ , force 4.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}$ /oo)	$\sigma-t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_4-P}$ ( $\mu$ g at/L)
0	17.35	32.97	23.90	402.0	.0000	5.37	0.83
10	17.30	32.97	23.91	401.2	.0403	5.41	0.48
20	17.25	32.95	23.91	401.8	.0806	5.42	0.52
30	16.95	32.84	23.89	403.5	.1211	5.45	0.54
50	15.81	32.74	24.08	386.3	.2004	5.72	0.54
75	12.12	32.89	24.95	303.4	.2871	5.94	0.58
100	9.87	32.89	25.35	265.5	.3587	6.08	0.61
150	8.63	33.06	25.68	234.8	.485	4.45	1.36
200	8.23	33.77	26.30	177.0	.583	3.20	1.79
250	7.52	33.92	26.52	156.5	.672	2.53	2.10
300	6.86	33.98	26.66	143.7	.748	2.02	2.38
400	5.77	34.02	26.83	128.1	.885	1.23	2.74
500	5.03	34.10	26.98	114.1	1.007	0.81	2.88
600	4.63	34.19	27.10	103.8	1.117	0.56	3.00
700	4.34	34.27	27.19	95.3	1.217	0.43	3.12
800	4.07	34.33	27.27	88.7	1.310	0.37	3.20
1000	3.57	34.44	27.41	76.5	1.477	0.50	3.12

## STATION 608 (Interpolated Values at Standard Depths)

HORIZON:  $35^{\circ}44'N$   $128^{\circ}37'W$  August 13, 1949 1354, 1418 GCT Wire  
 angle:  $28^{\circ}$ ,  $27^{\circ}$  Sounding: missing Depth of observation: 86, 1,026 m.  
 Weather: partly cloudy Sea: moderate Wind:  $310^{\circ}$ , force 3.

0	17.71	33.03	23.86	406.0	.0000	5.20	0.47
10	17.68	32.94	23.79	412.2	.0411	5.30	0.47
20	17.50	32.92	23.82	409.7	.0823	5.40	0.50
30	16.91	32.91	23.95	397.5	.1228	5.50	0.51
50	14.94	32.92	24.40	355.0	.1985	5.71	0.52
75	10.97	32.85	25.13	286.2	.2791	5.95	0.60
100	9.86	32.90	25.36	264.7	.3484	5.86	0.87
150	8.77	33.32	25.86	217.6	.470	4.40	1.36
200	8.05	33.79	26.34	172.9	.568	3.20	1.80
250	7.42	33.94	26.55	153.6	.650	2.43	2.22
300	6.77	33.96	26.65	144.1	.725	2.00	2.55
400	5.91	34.01	26.81	130.5	.864	1.18	2.86
500	5.27	34.13	26.98	114.8	.987	0.68	3.00
600	4.73	34.23	27.11	102.6	1.097	0.44	3.12
700	4.38	34.30	27.21	93.6	1.196	0.35	3.25
800	4.07	34.36	27.29	86.3	1.287	0.35	3.31
1000	3.58	34.44	27.41	76.7	1.452	0.55	3.36

## STATION 609 (Interpolated Values at Standard Depths)

HORIZON:  $35^{\circ}31'N$   $129^{\circ}24'W$  August 13, 1949 0806 GCT Wire angle:  $20^{\circ}$   
 Sounding: missing Depth of observation: 1,151 m. Weather: clear  
 Sea: moderate Wind:  $340^{\circ}$ , force 3.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}$ /oo)	$\sigma_t$ (mg/cm $^3$ )	$10^5 \gamma$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ ( $\mu$ g at/L)
0	17.91	33.03	23.81	410.5	.0000	5.25	0.43
10	17.90	33.04	23.82	409.9	.0412	4.85	0.43
20	17.55	33.03	23.89	402.8	.0820	4.97	0.46
30	16.46	33.03	24.15	378.6	.1212	5.08	0.43
50	14.71	33.13	24.61	335.0	.1929	5.26	0.49
75	12.67	33.08	24.99	299.5	.2727	5.26	0.43
100	11.62	33.01	25.14	286.1	.3464	5.10	0.55
150	9.70	33.27	25.67	235.8	.478	4.57	1.04
200	8.47	33.70	26.20	186.0	.584	3.94	1.40
250	7.71	33.89	26.46	161.6	.671	3.31	1.71
300	6.92	33.95	26.62	146.9	.749	2.80	2.02
400	5.73	33.99	26.81	129.9	.889	1.95	2.54
500	5.22	34.09	26.95	117.2	1.013	0.93	2.82
600	4.67	34.23	27.13	101.3	1.123	0.45	2.97
700	4.16	34.35	27.28	87.1	1.219	0.34	3.05
800	3.80	34.40	27.35	80.5	1.303	0.33	3.06
1000	3.45	34.44	27.42	75.1	1.461	0.45	3.03

## STATION 610 (Interpolated Values at Standard Depths)

HORIZON:  $35^{\circ}18'N$   $130^{\circ}11'W$  August 13, 1949 0114 GCT Wire angle:  
 estimated  $25^{\circ}$  Sounding: missing Depth of observation: 1,094 m.  
 Weather: cloudy Sea: rough Wind:  $310^{\circ}$ , force 4.

0	18.79	33.28	23.78	413.0	.0000	4.96	0.39
10	18.50	33.26	23.84	408.0	.0412	5.25	0.39
20	18.08	33.23	23.92	400.7	.0818	5.25	0.40
30	17.51	33.21	24.04	389.2	.1215	5.30	0.41
50	15.75	33.19	24.44	352.1	.1960	5.71	0.41
75	13.36	33.30	25.03	296.4	.2775	5.95	0.39
100	12.90	33.33	25.14	286.0	.3508	5.66	0.41
150	10.80	33.48	25.65	238.5	.483	5.15	0.82
200	8.92	33.50	25.93	207.5	.595	4.30	1.50
250	8.16	33.77	26.31	176.8	.692	3.88	1.71
300	7.47	33.96	26.56	153.4	.775	3.25	1.96
400	6.33	34.02	26.76	135.6	.921	1.42	2.63
500	5.47	34.07	26.91	121.7	1.050	0.90	2.91
600	4.97	34.18	27.05	108.6	1.166	0.80	3.00
700	4.58	34.30	27.19	95.8	1.270	0.75	3.06
800	4.26	34.36	27.27	88.6	1.363	0.73	3.10
1000	3.67	34.42	27.38	79.2	1.532	0.65	3.16

## STATION 704 (Interpolated Values at Standard Depths)

HORIZON:  $34^{\circ}54'N$   $124^{\circ}04'W$  August 17, 1949 1924 GCT Wire angle:  $17^{\circ}$   
 Sounding: missing Depth of observation: 1,156 m. Weather: overcast  
 Sea: rough Wind: 310, force 3.

Depth (m)	T (°C)	S (‰)	$\sigma-t$ (mg/cm³)	$10^5 \delta$	Δ D (dyn.m.)	O₂ (ml/L)	P <sub>O₂</sub> -P (µg at/L)
0	16.55	33.21	24.27	366.8	.0000	5.28	0.40
10	16.52	33.22	24.28	365.6	.0368	5.55	0.41
20	16.45	33.21	24.29	365.1	.0734	5.55	0.44
30	16.24	33.20	24.33	361.5	.1099	5.57	0.47
50	12.99	33.17	25.00	298.1	.1762	6.16	0.53
75	11.43	33.34	25.42	258.9	.2462	5.18	1.27
100	10.22	33.57	25.82	220.9	.3066	4.16	1.46
150	9.00	33.72	26.14	191.5	.410	3.15	1.89
200	8.19	33.96	26.45	162.3	.499	2.13	2.33
250	7.41	33.96	26.57	152.0	.579	2.10	2.37
300	6.82	33.99	26.67	142.6	.653	2.02	2.42
400	6.22	34.13	26.86	125.7	.788	1.16	2.91
500	5.49	34.19	27.00	113.1	.908	0.59	2.99
600	4.96	34.24	27.10	104.0	1.018	0.50	3.01
700	4.65	34.30	27.18	96.6	1.119	0.51	3.00
800	4.35	34.36	27.26	89.7	1.213	0.52	2.99
1000	3.84	34.43	27.37	80.4	1.385	0.63	2.93

## STATION 705 (Interpolated Values at Standard Depths)

HORIZON:  $34^{\circ}39'N$   $124^{\circ}48'W$  August 18, 1949 0055 GCT Wire angle:  $36^{\circ}$   
 Sounding: missing Depth of observation: 1,071 m. Weather: partly  
 cloudy Sea: moderate Wind: 330, force 4.

0	17.65	33.22	24.02	390.7	.0000	5.25	0.46
10	17.57	33.22	24.04	389.2	.0392	5.35	0.46
20	17.40	33.19	24.05	387.6	.0782	5.42	0.47
30	17.01	33.17	24.13	360.8	.1167	5.51	0.48
50	14.10	33.11	24.73	324.2	.1876	5.95	0.52
75	11.08	32.90	25.15	284.4	.2641	5.98	0.62
100	10.14	32.98	25.37	263.4	.3330	5.72	0.85
150	8.58	33.59	26.10	194.8	.448	4.00	1.55
200	8.00	33.89	26.42	164.8	.539	3.30	1.74
250	7.46	34.03	26.61	147.5	.617	2.63	1.86
300	6.87	34.07	26.73	137.3	.689	1.86	2.17
400	5.91	34.12	26.89	122.5	.820	1.23	2.44
500	5.36	34.20	27.02	110.8	.938	0.83	2.59
600	4.94	34.30	27.15	99.4	1.044	0.43	2.73
700	4.58	34.38	27.26	89.8	1.139	0.31	2.77
800	4.28	34.42	27.32	84.5	1.227	0.37	2.77
1000	3.75	34.46	27.40	77.2	1.391	0.57	2.76

## STATION 706 (Interpolated Values at Standard Depths)

HORIZON:  $34^{\circ}23'N$   $125^{\circ}33'W$  August 18, 1949 0650 GCT Wire angle:  $20^{\circ}$   
 Sounding: missing Depth of observation: 662 m. Weather: partly cloudy  
 Sea: moderate Wind:  $320^{\circ}$ , force 4.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}/\text{oo}$ )	$\sigma-t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ (kg at/L)
0	17.60	33.22	24.03	389.6	.0000	5.95	0.40
10	17.53	33.17	24.01	391.9	.0392	5.95	0.40
20	17.39	33.17	24.04	388.8	.0784	5.95	0.48
30	17.10	33.17	24.11	382.9	.1172	5.94	0.53
50	15.68	33.15	24.42	353.5	.1912	5.67	0.55
75	12.79	33.14	25.02	297.2	.2730	5.99	0.50
100	11.57	33.19	25.29	272.0	.3446	5.41	0.52
150	9.56	33.55	25.91	212.9	.467	4.37	1.31
200	8.14	33.83	26.36	171.3	.563	3.16	2.16
250	7.33	33.91	26.54	154.6	.645	2.81	2.48
300	6.72	33.96	26.66	143.2	.720	2.45	2.70
400	5.68	34.03	26.85	126.2	.855	1.18	2.93
500	5.08	34.13	27.00	112.4	.976	1.04	3.06
600	4.77	34.24	27.12	102.5	1.084	1.20	3.11

## STATION 707 (Interpolated Values at Standard Depths)

HORIZON:  $34^{\circ}07'N$   $126^{\circ}17'W$  August 18, 1949 1317 GCT Wire angle:  $17^{\circ}$   
 Sounding: missing Depth of observation: 1,152 m. Weather: overcast  
 Sea: moderate Wind:  $360^{\circ}$ , force 4.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}/\text{oo}$ )	$\sigma-t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ (kg at/L)
0	18.07	33.22	23.91	400.5	.0000	5.10	0.47
10	17.95	33.17	23.91	401.6	.0403	5.38	0.47
20	17.36	33.15	24.03	389.6	.0800	5.23	0.52
30	16.65	33.14	24.19	374.9	.1184	5.24	0.54
50	15.69	33.12	24.40	355.9	.1918	5.65	0.54
75	12.18	33.06	25.07	292.0	.2733	6.05	0.66
100	11.27	33.22	25.37	264.5	.3433	5.13	0.87
150	9.42	33.46	25.87	217.4	.465	4.59	1.42
200	8.36	33.74	26.25	181.1	.565	3.64	1.95
250	7.69	33.93	26.50	158.3	.650	2.95	2.19
300	7.08	33.99	26.63	145.9	.727	2.37	2.37
400	6.00	34.01	26.79	131.6	.867	1.45	2.72
500	5.30	34.08	26.93	119.0	.993	0.88	3.03
600	4.82	34.19	27.08	106.1	1.107	0.62	3.17
700	4.51	34.27	27.17	97.2	1.209	0.48	3.20
800	4.22	34.34	27.26	89.7	1.304	0.45	3.22
1000	3.73	34.42	27.37	79.9	1.475	0.55	3.21

## STATION 708 (Interpolated Values at Standard Depths)

HORIZON:  $33^{\circ}51'N$   $127^{\circ}02'W$  August 18, 1949 1829 GCT Wire angle:  $27^{\circ}$   
 Sounding: missing Depth of observation: 1,027 m. Weather: partly  
 cloudy Sea: moderate Wind:  $310^{\circ}$ , force 2.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}$ /oo)	$\sigma-t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	P <sub>0.4</sub> -P ( $\mu$ g at/L)
0	18.06	33.15	23.86	405.3	.0000	5.38	0.46
10	17.89	33.15	23.91	401.6	.0405	5.16	0.46
20	17.58	33.16	23.99	393.9	.0804	5.18	0.52
30	17.56	33.19	24.02	391.7	.1199	5.28	0.53
50	17.58	33.46	24.22	373.0	.1967	5.59	0.47
75	14.03	33.37	24.94	304.4	.2819	5.77	0.44
100	14.04	33.48	25.02	297.1	.3576	5.49	0.46
150	11.71	33.46	25.47	255.8	.497	5.16	0.85
200	9.62	33.68	26.01	205.1	.613	4.48	1.39
250	8.42	33.91	26.33	170.4	.707	3.64	1.93
300	7.58	34.00	26.57	152.2	.789	2.78	2.30
400	6.38	34.10	26.81	130.0	.931	1.12	2.72
500	5.70	34.18	26.96	116.8	1.055	0.50	3.02
600	5.16	34.24	27.08	106.4	1.168	0.39	3.17
700	4.69	34.29	27.17	97.8	1.271	0.35	3.22
800	4.32	34.35	27.26	90.0	1.366	0.41	3.25
1000	3.76	34.46	27.40	77.2	1.535	0.62	3.29

## STATION 709 (Interpolated Values at Standard Depths)

HORIZON:  $33^{\circ}35'N$   $127^{\circ}46'W$  August 19, 1949 0036 GCT Wire angle:  $26^{\circ}$   
 Sounding: missing Depth of observation: 1,078 m. Weather: cloudy  
 Sea: moderate Wind:  $340^{\circ}$ , force 3.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}$ /oo)	$\sigma-t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	P <sub>0.4</sub> -P ( $\mu$ g at/L)
0	19.08	33.35	23.76	414.9	.0000	5.45	0.51
10	18.77	33.33	23.83	409.2	.0414	5.36	0.51
20	18.29	33.24	23.88	404.5	.0822	5.51	0.51
30	18.20	33.32	23.96	397.0	.1225	5.53	0.48
50	18.01	33.60	24.22	372.8	.1998	5.54	0.41
75	14.91	33.50	24.86	312.6	.2860	5.18	0.40
100	13.81	33.54	25.12	288.2	.3616	5.89	0.48
150	11.83	33.47	25.46	257.0	.499	5.30	0.76
200	10.13	33.76	25.98	207.5	.616	4.73	1.18
250	8.62	33.91	26.35	173.3	.712	4.34	1.54
300	7.66	33.93	26.51	158.5	.795	3.84	1.83
400	6.36	33.96	26.71	140.0	.946	2.14	2.35
500	5.49	34.07	26.90	122.0	1.078	1.07	2.87
600	4.97	34.17	27.04	109.3	1.194	0.67	3.06
700	4.54	34.25	27.16	98.9	1.300	0.43	3.12
800	4.20	34.32	27.25	90.9	1.395	0.32	3.14
1000	3.68	34.42	27.38	79.3	1.568	0.49	3.03

## STATION 710 (Interpolated Values at Standard Depths)

HORIZON:  $33^{\circ}19'N$   $128^{\circ}32'W$  August 19, 1949 0615 GCT Wire angle:  $5^{\circ}$   
 Sounding: missing Depth of observation: 1,184 m. Weather: clear  
 Sea: rough Wind: 320°, force 3.

Depth (m)	T (°C)	S (°/oo)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2 - P}$ kg at/L)
0	19.80	33.39	23.61	429.6	.0000	5.15	0.46
10	19.44	33.42	23.72	418.9	.0426	5.15	0.46
20	19.41	33.70	23.94	398.1	.0836	5.19	0.40
30	19.34	33.78	24.02	391.0	.1232	5.24	0.37
50	18.10	33.78	24.33	361.9	.1489	5.30	0.36
75	16.10	34.04	25.01	298.5	.2819	5.26	0.37
100	15.26	33.78	25.00	300.1	.3572	5.17	0.39
150	14.00	33.94	25.39	264.1	.499	5.12	0.55
200	10.02	33.66	25.92	213.1	.619	4.58	1.23
250	8.89	33.88	26.28	179.8	.718	4.16	1.51
300	7.95	33.98	26.50	159.0	.804	3.78	1.78
400	6.41	34.00	26.72	137.7	.953	2.02	2.36
500	5.35	34.06	26.91	121.1	1.084	1.16	2.81
600	4.70	34.14	27.05	108.3	1.199	0.80	2.93
700	4.32	34.22	27.16	98.5	1.304	0.60	2.92
800	4.04	34.30	27.25	90.5	1.399	0.46	2.92
1000	3.60	34.44	27.40	77.0	1.569	0.49	2.93

## STATION 801 (Interpolated Values at Standard Depths)

HORIZON:  $33^{\circ}50'N$   $120^{\circ}40'W$  August 22, 1949 0528, 0649 GCT Wire  
 angle:  $41^{\circ}, 47^{\circ}$  Sounding: missing Depth of observation: 94, 142 m.  
 Weather: clear Sea: very rough Wind: 330°, force 5.

0	15.82	33.55	24.69	326.0	.0000	5.26	0.47
10	15.76	33.40	24.59	336.0	.0332	5.41	0.47
20	15.55	33.46	24.69	327.4	.0665	5.49	0.44
30	15.10	33.40	24.74	322.7	.0992	5.42	0.57
50	10.79	33.46	25.63	237.6	.1555	4.40	1.30
75	9.75	33.49	25.83	219.0	.2129	4.40	1.39
100	9.08	33.64	26.06	197.6	.2653	3.80	1.62

STATION 802 (Interpolated Values at Standard Depths)

HORIZON:  $33^{\circ}32'N$   $121^{\circ}22'W$  August 21, 1949 2342 GCT Wire angle:  $35^{\circ}$   
 Sounding: missing Depth of observation: 1,057 m. Weather: cloudy  
 Sea: very rough Wind:  $330^{\circ}$ , force 4.

Depth (m)	T (°C)	S (°/oo)	$\sigma-t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_4-P}$ (μg at/L)
0	16.03	33.62	24.70	325.6	.0000	5.47	0.45
10	15.84	33.60	24.73	323.3	.0326	5.66	0.45
20	15.58	33.54	24.74	322.2	.0650	5.65	0.48
30	15.12	33.43	24.76	320.9	.0972	5.63	0.58
50	12.26	33.36	25.29	270.6	.1567	5.35	0.83
75	9.65	33.41	25.79	223.2	.2188	4.25	1.45
100	9.32	33.76	26.12	192.6	.2711	3.13	1.91
150	8.97	33.98	26.35	171.8	.363	1.92	2.11
200	8.46	34.06	26.49	158.9	.446	1.25	2.30
250	8.00	34.12	26.61	148.6	.523	1.03	2.45
300	7.60	34.16	26.69	140.8	.596	0.96	2.47
400	6.46	34.23	26.91	121.4	.728	0.58	2.63
500	5.57	34.27	27.05	108.1	.844	0.39	2.77
600	4.92	34.34	27.18	96.1	.947	0.36	2.87
700	4.50	34.41	27.29	86.6	1.039	0.35	2.91
800	4.23	34.44	27.34	82.4	1.125	0.40	2.92
1000	3.78	34.47	27.41	76.8	1.286	0.59	2.93

STATION 803 (Interpolated Values at Standard Depths)

HORIZON:  $33^{\circ}15'N$   $122^{\circ}05'W$  August 21, 1949 1747 GCT Wire angle:  $35^{\circ}$   
 Sounding: missing Depth of observation: 1,159 m. Weather: partly  
 cloudy Sea: high Wind:  $340^{\circ}$ , force 5.

Depth (m)	T (°C)	S (°/oo)	$\sigma-t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_4-P}$ (μg at/L)
0	17.33	33.31	24.16	376.8	.0000	5.22	0.50
10	17.33	33.26	24.12	380.8	.0380	5.30	0.50
20	17.33	33.28	24.14	379.5	.0762	5.34	0.53
30	17.33	33.27	24.13	380.6	.1144	5.34	0.53
50	16.31	33.26	24.36	359.2	.1887	5.32	0.53
75	13.30	33.32	25.05	293.8	.2720	5.70	0.56
100	12.08	33.49	25.42	259.1	.3416	5.23	0.83
150	9.26	33.59	25.99	205.2	.458	4.44	1.42
200	8.26	33.81	26.32	174.5	.554	3.58	1.91
250	7.76	33.93	26.49	159.2	.638	2.42	2.21
300	7.20	33.99	26.62	147.6	.715	1.86	2.43
400	6.37	34.08	26.80	131.3	.856	1.02	2.75
500	5.76	34.19	26.96	116.5	.931	0.51	2.91
600	5.24	34.29	27.11	103.7	1.092	0.38	2.94
700	4.80	34.38	27.23	92.7	1.191	0.37	2.99
800	4.45	34.44	27.32	84.9	1.281	0.37	3.04
1000	3.88	34.49	27.41	76.6	1.444	0.53	3.14

## STATION 805 (Interpolated Values at Standard Depths)

HORIZON:  $32^{\circ}40'N$   $123^{\circ}30'W$  August 21, 1949 0721 GCT Wire angle:  $20^{\circ}$   
 Sounding: missing Depth of observation: 1,262 m. Weather: partly cloudy  
 Sea: very high Wind:  $340^{\circ}$ , force 5.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}$ /oo)	$\sigma-t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ (kg at/L)
0	17.65	33.31	24.08	384.2	.0000	5.15	0.44
10	17.65	33.31	24.08	384.5	.0386	5.26	0.44
20	17.65	33.30	24.08	385.4	.0772	5.28	0.47
30	17.64	33.30	24.08	385.6	.1159	5.32	0.49
50	14.47	33.31	24.80	316.9	.1865	5.89	0.50
75	10.83	33.42	25.60	241.8	.2568	4.74	1.27
100	9.83	33.60	25.91	212.6	.3139	3.70	1.63
150	8.58	33.88	26.33	173.3	.411	2.37	1.97
200	7.86	34.01	26.54	153.8	.493	1.85	2.15
250	7.35	34.08	26.67	142.2	.568	1.57	2.27
300	6.70	34.09	26.77	133.5	.637	1.41	2.36
400	5.45	34.08	26.92	119.7	.765	1.21	2.54
500	5.01	34.18	27.05	108.0	.880	0.64	2.67
600	4.78	34.28	27.15	98.8	.984	0.42	2.76
700	4.58	34.36	27.24	91.4	1.080	0.43	2.84
800	4.34	34.42	27.31	85.1	1.169	0.44	2.90
1000	3.82	34.48	27.41	76.6	1.332	0.55	2.86

## STATION 806 (Interpolated Values at Standard Depths)

HORIZON:  $32^{\circ}22'N$   $124^{\circ}13'W$  August 21, 1949 0023 GCT Wire angle:  $45^{\circ}$   
 Sounding: missing Depth of observation: 1,020 m. Weather: overcast  
 Sea: very rough Wind:  $360^{\circ}$ , force 4.

0	17.46	33.26	24.09	383.5	.0000	5.11	0.50
10	17.45	33.18	24.03	389.4	.0388	5.23	0.50
20	17.45	33.15	24.01	391.8	.0780	5.22	0.50
30	17.45	33.19	24.04	389.3	.1172	5.27	0.52
50	16.55	33.24	24.29	366.0	.1931	5.34	0.50
75	13.11	33.22	25.01	297.5	.2765	5.62	0.52
100	12.37	33.32	25.24	276.9	.3488	5.30	0.63
150	10.04	33.44	25.75	228.8	.473	4.66	1.15
200	8.82	33.76	26.20	186.5	.581	3.90	1.72
250	8.35	33.95	26.42	166.2	.669	2.80	2.13
300	7.89	34.05	26.57	153.0	.750	2.12	2.44
400	6.93	34.15	26.78	133.7	.894	1.26	2.86
500	5.97	34.21	26.96	117.7	1.021	0.69	3.08
600	5.19	34.27	27.10	104.6	1.133	0.43	3.17
700	4.73	34.33	27.20	95.4	1.234	0.44	3.18
800	4.39	34.38	27.28	88.6	1.327	0.48	3.16
1000	3.79	34.46	27.40	77.5	1.495	0.62	3.08

## STATION 807 (Interpolated Values at Standard Depths)

HORIZON:  $32^{\circ}05'N$   $124^{\circ}55'W$  August 20, 1949 1808 GCT Wire angle:  $40^{\circ}$   
 Sounding: missing Depth of observation: 1,069 m. Weather: overcast  
 Sea: very rough Wind:  $360^{\circ}$ , force 4.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm³)	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_4-P}$ (µg at/L)
0	17.97	33.33	24.02	390.1	.0000	5.25	0.52
10	17.97	33.31	24.01	392.0	.0393	5.11	0.52
20	17.96	33.34	24.03	389.8	.0785	5.21	0.54
30	17.96	33.44	24.11	382.8	.1173	5.21	0.53
50	17.80	33.60	24.27	368.0	.1928	5.22	0.45
75	16.06	33.34	24.48	348.7	.2828	5.24	0.47
100	14.16	33.33	24.89	310.4	.3658	5.24	0.49
150	11.36	33.56	25.61	242.1	.505	4.91	0.90
200	9.30	33.87	26.21	185.9	.613	2.77	1.92
250	8.62	33.99	26.41	167.4	.702	2.04	2.31
300	8.13	34.05	26.53	156.5	.783	1.82	2.48
400	6.96	34.12	26.75	136.3	.931	0.87	2.66
500	6.16	34.18	26.91	122.3	1.061	0.48	2.80
600	5.50	34.24	27.04	110.8	1.179	0.34	2.91
700	4.97	34.30	27.15	100.6	1.286	0.31	2.97
800	4.52	34.36	27.25	91.7	1.383	0.35	2.96
1000	3.88	34.46	27.39	78.7	1.555	0.56	2.94

## STATION 808 (Interpolated Values at Standard Depths)

HORIZON:  $31^{\circ}47'N$   $125^{\circ}38'W$  August 20, 1949 1038 GCT Wire angle:  $34^{\circ}$   
 Sounding: missing Depth of observation: 1,180 m. Weather: partly  
 cloudy Sea: rough Wind:  $350^{\circ}$ , force 5.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm³)	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_4-P}$ (µg at/L)
0	18.80	33.42	23.89	403.1	.0000	5.31	0.52
10	18.17	33.40	24.03	389.9	.0398	5.26	0.52
20	17.70	33.40	24.14	379.4	.0784	5.25	0.52
30	17.22	33.38	24.24	370.2	.1161	5.28	0.52
50	14.86	33.33	24.74	323.3	.1858	5.74	0.55
75	13.00	33.21	25.03	296.2	.2636	5.76	0.62
100	12.06	33.18	25.19	281.4	.3363	5.76	0.73
150	11.22	33.35	25.47	255.0	.471	4.93	1.14
200	9.59	33.67	26.00	205.3	.587	3.75	1.77
250	8.52	33.95	26.39	168.9	.681	2.57	2.30
300	7.87	34.06	26.58	151.9	.762	1.73	2.51
400	6.94	34.19	26.81	130.9	.905	0.71	2.88
500	6.23	34.28	26.98	114.8	1.029	0.39	3.20
600	5.61	34.33	27.09	105.6	1.140	0.39	3.29
700	5.08	34.37	27.19	96.8	1.242	0.39	3.31
800	4.65	34.41	27.27	89.6	1.336	0.40	3.32
1000	4.00	34.46	27.38	80.0	1.508	0.56	3.26

## STATION 809 (Interpolated Values at Standard Depths)

HORIZON:  $31^{\circ}29'N$   $126^{\circ}20'W$  August 20, 1949 0435 GCT Wire angle:  $30^{\circ}$   
 Sounding: missing Depth of observation: 1,123 m. Weather: partly  
 cloudy Sea: rough Wind:  $360^{\circ}$ , force 3-4.

Depth (m)	T (°C)	S (‰)	$\sigma-t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	Δ D (dyn.m.)	O <sub>2</sub> (ml/L)	P <sub>O<sub>2</sub></sub> -P (μg at/L)
0	19.09	33.39	23.79	412.1	.0000	5.27	0.46
10	19.07	33.40	23.80	411.3	.0413	5.10	0.46
20	19.06	33.39	23.80	412.0	.0827	5.19	0.47
30	18.96	33.39	23.82	409.9	.1239	5.24	0.47
50	17.10	33.37	24.26	368.8	.2022	5.44	0.44
75	14.21	33.35	24.89	309.4	.2874	5.63	0.45
100	11.85	33.41	25.40	260.7	.3592	4.98	0.47
150	9.55	33.57	25.93	211.3	.478	4.07	1.40
200	8.52	33.78	26.26	180.6	.577	3.48	1.65
250	7.70	33.88	26.46	162.3	.663	2.99	1.90
300	7.05	33.94	26.60	149.3	.741	2.53	2.11
400	6.13	34.03	26.79	131.8	.883	1.71	2.47
500	5.65	34.14	26.94	118.8	1.010	1.05	2.73
600	5.24	34.30	27.12	103.1	1.121	0.57	2.94
700	4.88	34.40	27.24	92.1	1.220	0.37	3.11
800	4.53	34.45	27.32	85.1	1.309	0.48	3.07
1000	3.91	34.50	27.42	76.2	1.473	0.86	2.97

## STATION 810 (Interpolated Values at Standard Depths)

HORIZON:  $31^{\circ}11'N$   $127^{\circ}03'W$  August 19, 1949 2224 GCT Wire angle:  $24^{\circ}$   
 Sounding: missing Depth of observation: 969 m. Weather: clear  
 Sea: rough Wind:  $360^{\circ}$ , force 4.

0	19.12	33.48	23.85	406.4	.0000	5.18	0.46
10	19.07	33.52	23.89	402.7	.0406	5.24	0.50
20	19.00	33.47	23.87	404.8	.0812	5.18	0.49
30	18.79	33.32	23.81	411.0	.1221	5.18	0.49
50	15.75	33.21	24.45	350.8	.1987	5.67	0.49
75	13.49	33.34	25.03	295.9	.2800	5.90	0.46
100	12.25	33.42	25.34	267.3	.3508	5.10	0.65
150	10.20	33.47	25.75	229.1	.476	4.59	1.40
200	8.75	33.74	26.19	186.9	.580	3.70	1.79
250	8.00	33.92	26.45	163.5	.669	3.49	1.89
300	7.28	33.98	26.60	149.4	.747	3.13	2.12
400	6.08	34.04	26.81	130.4	.888	1.33	2.71
500	5.46	34.13	26.96	117.0	1.013	0.72	3.03
600	5.19	34.29	27.11	103.1	1.124	0.47	3.17
700	4.94	34.41	27.24	92.2	1.223	0.42	3.23
800	4.52	34.46	27.33	84.1	1.312	0.51	3.22
1000	(3.81)	(34.51)	(27.44)	(74.2)	(1.472)		

## STATION 901 (Interpolated Values at Standard Depths)

CREST:  $32^{\circ}38'N$   $118^{\circ}10'W$  August 17, 1949 0436 GCT Wire angle:  $6^{\circ}$   
 Sounding: missing Depth of observation: 1,280 m. Weather: partly cloudy  
 Sea: rough Wind:  $320^{\circ}$ , force 5.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{o}/oo$ )	$\sigma-t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_4-P}$ ( $\mu$ g at/L)
0	18.50	33.58	24.08	384.4	.0000	5.66	0.53
10	17.85	33.55	24.22	371.7	.0380	5.64	0.48
20	16.25	33.48	24.54	341.0	.0737	5.81	0.54
30	14.25	33.41	24.93	304.7	.1062	5.93	0.58
50	12.55	33.31	25.19	279.8	.1649	5.86	0.64
75	11.14	33.39	25.52	249.4	.2314	5.25	1.10
100	10.13	33.46	25.75	227.8	.2914	4.08	1.51
150	8.87	33.85	26.26	179.9	.394	3.02	1.95
200	8.14	33.95	26.45	162.4	.480	2.62	2.14
250	7.66	34.02	26.58	151.1	.559	2.19	2.35
300	7.38	34.09	26.67	142.6	.633	1.39	2.56
400	7.03	34.27	26.86	126.1	.769	0.50	2.90
500	6.29	34.30	26.98	115.2	.890	0.36	2.98
600	5.69	34.34	27.09	105.9	1.002	0.32	3.02
700	5.22	34.37	27.17	98.6	1.105	0.35	3.07
800	4.79	34.40	27.25	92.2	1.201	0.40	3.12
1000	4.07	34.45	27.36	81.5	1.377	0.55	3.13

## STATION 902 (Interpolated Values at Standard Depths)

CREST:  $32^{\circ}18'N$   $118^{\circ}51'W$  August 16, 1949 2124 GCT Wire angle:  $20^{\circ}$   
 Sounding: missing Depth of observation: 1,104 m. Weather: partly cloudy  
 Sea: very rough Wind:  $320^{\circ}$ , force 5.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{o}/oo$ )	$\sigma-t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_4-P}$ ( $\mu$ g at/L)
0	18.00	33.73	24.32	361.7	.0000	5.56	0.52
10	17.40	33.70	24.44	350.4	.0358	5.60	0.51
20	17.25	33.69	24.47	347.9	.0708	5.61	0.51
30	16.10	33.68	24.73	323.6	.1045	5.64	0.53
50	11.41	33.63	25.66	235.8	.1607	5.57	1.30
75	9.41	33.63	26.00	203.3	.2159	3.50	1.86
100	9.14	33.85	26.22	183.0	.2645	2.85	2.03
150	8.55	33.96	26.40	167.0	.353	2.32	2.24
200	7.90	34.07	26.58	149.9	.432	2.02	2.44
250	7.59	34.16	26.70	139.8	.505	1.27	2.64
300	7.26	34.20	26.78	132.9	.574	0.89	2.77
400	6.55	34.27	26.93	119.7	.701	0.63	2.93
500	5.96	34.33	27.05	108.6	.816	0.39	3.02
600	5.44	34.36	27.14	101.3	.922	0.35	3.05
700	5.00	34.38	27.21	95.1	1.021	0.36	3.06
800	4.62	34.42	27.28	88.5	1.114	0.41	3.07
1000	3.95	34.48	27.40	78.1	1.283	0.60	3.11

STATION 903 (Interpolated Values at Standard Depths)

CREST:  $31^{\circ}54'N$   $119^{\circ}31'W$  August 16, 1949 1524 GCT Wire angle:  $30^{\circ}$   
 Sounding: missing Depth of observation: 1,165 m. Weather: cloudy  
 Sea: very rough Wind:  $320^{\circ}$ , force 5.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm³)	$10^5 \xi$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ (kg at/L)
0	17.49	33.77	24.47	347.1	.0000	5.54	0.52
10	17.05	33.75	24.56	338.9	.0344	5.68	0.51
20	17.04	33.75	24.57	338.8	.0685	5.66	0.53
30	16.95	33.74	24.58	337.9	.1024	5.61	0.56
50	11.70	33.66	25.62	238.7	.1604	5.05	1.23
75	9.84	33.74	26.02	202.0	.2158	3.45	1.90
100	9.28	33.87	26.21	183.6	.2643	2.76	2.11
150	8.51	34.04	26.46	160.5	.351	1.93	2.37
200	7.95	34.11	26.61	147.6	.428	1.59	2.51
250	7.45	34.16	26.72	137.7	.500	1.45	2.60
300	6.93	34.21	26.83	127.6	.567	1.07	2.79
400	6.28	34.25	26.95	117.5	.691	0.50	2.97
500	5.90	34.29	27.03	110.9	.806	0.40	3.03
600	5.33	34.35	27.14	100.4	.912	0.40	3.08
700	4.86	34.39	27.23	92.6	1.010	0.44	3.12
800	4.48	34.43	27.31	85.8	1.100	0.51	3.15
1000	3.85	34.48	27.41	76.9	1.264	0.70	3.15

STATION 904 (Interpolated Values at Standard Depths)

CREST:  $31^{\circ}45'N$   $120^{\circ}13'W$  August 16, 1949 0843 GCT Wire angle:  $20^{\circ}$   
 Sounding: missing Depth of observation: 1,173 m. Weather: partly cloudy  
 Sea: very rough Wind:  $350^{\circ}$ , force 4.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm³)	$10^5 \xi$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ (kg at/L)
0	17.00	33.40	24.31	363.0	.0000	5.74	0.59
10	16.30	33.33	24.42	353.0	.0359	5.71	0.50
20	16.30	33.33	24.42	353.1	.0714	5.79	0.51
30	16.25	33.32	24.42	352.9	.1068	5.89	0.52
50	14.45	33.24	24.76	321.6	.1746	6.05	0.55
75	12.05	33.19	25.20	280.0	.2502	6.01	0.81
100	10.62	33.35	25.58	243.9	.3162	5.30	1.10
150	9.02	33.80	26.20	185.9	.424	3.20	1.90
200	8.39	34.03	26.48	160.0	.511	2.25	2.26
250	7.78	34.13	26.64	144.7	.588	1.68	2.47
300	7.37	34.18	26.74	135.9	.659	1.27	2.64
400	6.74	34.27	26.90	122.1	.789	0.66	2.89
500	6.17	34.32	27.02	112.2	.907	0.43	3.04
600	5.56	34.37	27.13	101.9	1.015	0.39	3.10
700	5.07	34.40	27.20	94.5	1.114	0.37	3.13
800	4.67	34.43	27.28	88.4	1.207	0.37	3.14
1000	4.03	34.48	27.39	78.9	1.376	0.55	3.10

## STATION 905 (Interpolated Values at Standard Depths)

CREST:  $31^{\circ}23'N$   $120^{\circ}54'W$  August 16, 1949 0300 GCT Wire angle:  $0^{\circ}$   
 Sounding: missing Depth of observation: 1,311 m. Weather: partly cloudy  
 Sea: rough Wind:  $340^{\circ}$ , force 3.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}$ /oo)	$\sigma_t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2}-P$ ( $\mu$ g at/L)
0	18.00	33.63	24.24	369.0	.0000	5.71	0.62
10	17.15	33.53	24.37	357.3	.0365	5.75	0.52
20	16.55	33.50	24.49	346.1	.0718	6.01	0.52
30	15.00	33.45	24.80	317.0	.1051	6.06	0.52
50	12.38	33.35	25.26	273.8	.1644	5.68	0.80
75	11.22	33.48	25.57	244.1	.2295	4.80	1.22
100	10.10	33.58	25.85	218.4	.2877	4.00	1.65
150	8.85	33.91	26.31	175.1	.387	2.89	2.11
200	8.25	34.05	26.51	156.5	.470	2.14	2.36
250	7.94	34.20	26.68	141.9	.545	1.41	2.62
300	7.64	34.25	26.76	134.6	.615	0.95	2.87
400	6.71	34.25	26.89	123.2	.745	0.66	3.02
500	6.03	34.29	27.01	112.6	.864	0.44	3.11
600	5.43	34.34	27.12	102.5	.972	0.35	3.16
700	4.94	34.40	27.23	92.8	1.071	0.39	3.19
800	4.52	34.44	27.31	85.7	1.161	0.48	3.22
1000	3.87	34.50	27.42	75.7	1.324	0.63	3.22

## STATION 906 (Interpolated Values at Standard Depths)

CREST:  $31^{\circ}08'N$   $121^{\circ}34'W$  August 15, 1949 2000 GCT Wire angle:  $25^{\circ}$   
 Sounding: missing Depth of observation: 1,155 m. Weather: cloudy  
 Sea: rough Wind:  $350^{\circ}$ , force 3.

0	18.01	33.39	24.06	386.7	.0000	5.71	0.51
10	17.49	33.39	24.18	375.1	.0382	5.64	0.48
20	17.46	33.40	24.20	373.7	.0758	5.57	0.50
30	17.45	33.39	24.19	374.7	.1134	5.85	0.49
50	13.82	33.34	24.96	301.7	.1814	6.02	0.48
75	12.25	33.38	25.31	269.7	.2532	5.72	0.77
100	10.90	33.45	25.61	241.4	.3175	4.75	1.21
150	9.18	33.77	26.15	190.6	.426	3.19	2.03
200	8.32	34.05	26.50	157.6	.514	2.42	2.29
250	7.65	34.13	26.66	142.9	.590	1.95	2.43
300	7.09	34.14	26.75	135.0	.660	1.44	2.63
400	6.40	34.23	26.92	120.7	.783	0.70	2.89
500	5.88	34.28	27.02	111.4	.906	0.43	3.06
600	5.33	34.34	27.14	101.2	1.013	0.40	3.18
700	4.87	34.37	27.21	94.2	1.111	0.40	3.25
800	4.50	34.42	27.30	86.9	1.203	0.42	3.26
1000	3.89	34.48	27.41	77.2	1.369	0.60	3.16

## STATION 907 (Interpolated Values at Standard Depths)

CREST:  $30^{\circ}49.5'N$   $122^{\circ}15'W$  August 15, 1949 1210 GCT Wire angle:  $5^{\circ}$   
 Sounding: missing Depth of observation: 1,283 m. Weather: overcast  
 Sea: rough Wind:  $360^{\circ}$ , force 4.

Depth (m)	T (°C)	S (‰)	$\sigma-t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2}-P$ $\mu g$ at/L
0	18.40	33.46	24.02	390.6	.0000	5.52	0.55
10	17.96	33.49	24.15	378.6	.0386	5.81	0.58
20	17.95	33.50	24.16	378.0	.0766	5.60	0.55
30	17.94	33.51	24.17	377.4	.1145	5.58	0.52
50	16.35	33.44	24.49	346.9	.1873	5.80	0.51
75	13.42	33.37	25.07	292.5	.2677	6.07	0.61
100	11.89	33.40	25.39	262.1	.3374	5.45	0.97
150	10.03	33.60	25.88	216.8	.458	3.82	1.69
200	8.95	33.91	26.29	177.5	.557	2.97	2.06
250	8.03	34.05	26.55	154.2	.641	2.42	2.33
300	7.30	34.09	26.68	141.5	.715	1.82	2.52
400	6.33	34.14	26.85	126.4	.850	0.81	2.80
500	5.71	34.22	26.99	113.8	.971	0.70	3.04
600	5.27	34.31	27.12	102.7	1.081	0.61	3.22
700	4.89	34.39	27.23	92.9	1.179	0.55	3.30
800	4.53	34.44	27.31	85.7	1.269	0.50	3.34
1000	3.88	34.50	27.42	75.8	1.433	0.57	3.33

## STATION 908 (Interpolated Values at Standard Depths)

CREST:  $30^{\circ}30'N$   $122^{\circ}55'W$  August 15, 1949 0639 GCT Wire angle:  $5^{\circ}$   
 Sounding: missing Depth of observation: 1,271 m. Weather: partly cloudy  
 Sea: rough Wind:  $360^{\circ}$ , force 4.

0	18.40	33.33	23.92	400.0	.0000	5.61	0.59
10	18.00	33.33	24.02	391.2	.0397	5.53	0.51
20	18.00	33.32	24.01	392.2	.0790	5.54	0.48
30	17.99	33.30	23.99	393.7	.1185	5.61	0.46
50	15.55	33.30	24.56	340.0	.1922	6.03	0.45
75	13.70	33.37	25.01	297.9	.2724	6.12	0.49
100	13.10	33.40	25.16	284.7	.3457	5.91	0.52
150	10.36	33.40	25.66	236.9	.477	4.99	1.22
200	8.80	33.75	26.19	187.0	.584	3.60	1.88
250	8.16	33.99	26.48	160.6	.671	2.64	2.33
300	7.53	34.07	26.63	146.3	.749	1.88	2.59
400	6.49	34.16	26.85	126.9	.886	0.91	2.86
500	6.00	34.26	26.99	114.4	1.008	0.47	3.05
600	5.50	34.33	27.11	104.1	1.118	0.35	3.16
700	4.99	34.39	27.22	94.1	1.218	0.36	3.20
800	4.58	34.43	27.30	87.1	1.310	0.42	3.22
1000	3.93	34.49	27.41	77.1	1.476	0.63	3.19

## STATION 911 (Interpolated Values at Standard Depths)

CREST:  $29^{\circ}34'N$   $124^{\circ}57'W$  August 14, 1949 1325 GCT Wire angle:  $3^{\circ}$   
 Sounding: missing Depth of observation: 1,296 m. Weather: cloudy  
 Sea: moderate Wind:  $360^{\circ}$ , force 4.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}$ /oo)	$\sigma-t$ (mg/cm $^3$ )	$10^5 \gamma$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ ( $\mu$ g at/L)
0	19.70	33.89	24.01	391.0	.0000	5.04	0.51
10	19.20	33.82	24.09	384.2	.0389	5.11	0.44
20	19.20	33.82	24.09	334.4	.0775	5.18	0.45
30	19.17	33.82	24.10	383.9	.1161	5.31	0.45
50	17.05	33.82	24.62	334.8	.1883	5.79	0.40
75	15.52	33.78	24.92	306.7	.2689	5.87	0.49
100	14.72	33.66	25.02	297.7	.3450	5.72	0.45
150	12.60	33.66	25.45	257.4	.485	5.12	0.90
200	9.32	33.70	26.07	198.8	.600	3.95	1.70
250	8.63	33.93	26.36	172.0	.693	3.32	2.01
300	8.06	34.08	26.56	153.3	.775	2.66	2.26
400	6.87	34.13	26.77	134.4	.920	1.14	2.77
500	6.09	34.20	26.93	119.9	1.048	0.54	3.04
600	5.45	34.26	27.06	108.7	1.163	0.40	3.18
700	4.96	34.32	27.16	98.9	1.268	0.42	3.25
800	4.56	34.37	27.25	91.4	1.364	0.46	3.27
1000	3.92	34.44	27.37	80.6	1.538	0.63	3.28

## STATION 1001 (Interpolated Values at Standard Depths)

CREST:  $31^{\circ}18'N$   $116^{\circ}58'W$  August 11, 1949 1313 GCT Wire angle:  $0^{\circ}$   
 Sounding: missing Depth of observation: 600 m. Weather: cloudy  
 Sea: moderate Wind:  $320^{\circ}$ , force 4.

0	19.60	33.71	23.90	401.6	.0000	5.55	0.35
10	18.95	33.69	24.05	387.4	.0396	5.52	0.34
20	18.91	33.54	23.95	397.6	.0790	6.06	0.34
30	14.08	33.44	24.99	299.2	.1140	6.20	0.34
50	12.15	33.39	25.33	266.5	.1708	5.75	0.65
75	10.75	33.63	25.77	225.1	.2326	3.76	1.43
100	10.42	33.70	25.39	214.7	.2880	3.39	1.62
150	9.94	34.04	26.23	182.8	.388	1.91	2.02
200	9.32	34.22	26.47	160.6	.475	1.41	2.24
250	8.20	34.23	26.66	143.6	.551	1.11	2.41
300	7.36	34.23	26.79	132.7	.621	0.81	2.54
400	6.75	34.34	26.96	117.0	.747	0.41	2.72
500	6.17	34.35	27.04	109.9	.861	0.37	2.82
600	5.46	34.35	27.13	102.1	.968	0.34	2.90

## STATION 1002 (Interpolated Values at Standard Depths)

CREST:  $30^{\circ}59'N$   $117^{\circ}33'W$  August 11, 1949 1758 GCT Wire angle:  $10^{\circ}$   
 Sounding: missing Depth of observation: 1,266 m. Weather: cloudy  
 Sea: rough Wind:  $310^{\circ}$ , force 4.

Depth (m)	T (°C)	S (‰)	$\sigma-t$ (mg/cm³)	$10^5 \gamma$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ (µg at/L)
0	19.00	33.64	24.00	392.0	.0000	5.57	0.41
10	18.20	33.61	24.18	375.5	.0385	5.55	0.40
20	17.90	33.58	24.23	371.0	.0760	5.45	0.39
30	17.50	33.52	24.28	366.5	.1130	5.45	0.39
50	12.90	33.42	25.21	278.1	.1778	5.46	0.59
75	10.92	33.43	25.59	242.6	.2432	3.74	1.15
100	10.02	33.71	25.96	207.4	.2999	3.03	1.62
150	9.64	33.99	26.25	181.6	.398	2.34	1.88
200	9.57	34.26	26.47	161.4	.484	1.30	2.29
250	9.14	34.31	26.58	151.7	.563	1.06	2.40
300	8.55	34.30	26.66	144.4	.638	1.00	2.46
400	7.25	34.28	26.84	128.4	.775	0.84	2.59
500	6.34	34.28	26.96	117.4	.899	0.50	2.78
600	5.76	34.31	27.06	108.9	1.013	0.41	2.87
700	5.30	34.37	27.16	99.6	1.119	0.39	2.87
800	4.88	34.41	27.24	92.5	1.216	0.38	2.87
1000	4.16	34.46	27.36	81.9	1.392	0.52	2.86

## STATION 1003 (Interpolated Values at Standard Depths)

CREST:  $30^{\circ}36'N$   $118^{\circ}12'W$  August 11, 1949 2327 GCT Wire angle:  $20^{\circ}$   
 Sounding: missing Depth of observation: 1,219 m. Weather: cloudy  
 Sea: rough Wind:  $310^{\circ}$ , force 4.

0	19.00	33.69	24.04	388.3	.0000	5.45	0.41
10	18.95	33.68	24.05	387.9	.0390	5.31	0.38
20	18.80	33.61	24.03	389.9	.0780	5.41	0.35
30	18.45	33.57	24.09	384.7	.1169	5.70	0.36
50	14.78	33.52	24.90	307.7	.1865	6.01	0.38
75	11.96	33.40	25.38	262.8	.2582	5.25	0.82
100	10.35	33.62	25.84	219.5	.3189	3.89	1.30
150	9.25	33.94	26.27	179.1	.419	2.85	1.84
200	8.94	34.19	26.51	156.7	.504	1.61	2.15
250	8.76	34.30	26.63	146.6	.580	1.11	2.34
300	8.36	34.31	26.70	140.9	.653	0.89	2.47
400	7.26	34.31	26.86	126.2	.787	0.66	2.65
500	6.31	34.32	27.00	114.1	.908	0.44	2.78
600	5.44	34.36	27.14	101.2	1.017	0.37	2.85
700	4.74	34.40	27.25	90.5	1.114	0.35	2.89
800	4.37	34.44	27.32	84.0	1.202	0.42	2.88
1000	3.87	(34.49)	(27.42)	(76.4)	(1.364)	0.61	2.86

## STATION 1004 (Interpolated Values at Standard Depths)

CREST:  $30^{\circ}16'N$   $118^{\circ}50'W$  August 12, 1949 0517 GCT Wire angle:  $35^{\circ}$   
 Sounding: missing Depth of observation: 1,085 m. Weather: cloudy  
 Sea: moderate Wind:  $310^{\circ}$ , force 4.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm³)	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ (µg at/L)
0	19.00	33.58	23.96	396.3	.0000	5.54	0.43
10	18.33	33.57	24.12	381.4	.0390	5.59	0.37
20	18.33	33.58	24.13	380.9	.0773	5.46	0.36
30	18.23	33.56	24.14	380.3	.1155	5.80	0.35
50	14.12	33.40	24.95	303.4	.1842	6.09	0.35
75	13.20	33.40	25.13	286.0	.2583	6.06	0.41
100	12.00	33.40	25.37	264.2	.3275	5.56	0.69
150	9.20	33.72	26.11	194.7	.443	3.57	1.69
200	8.66	34.04	26.44	163.4	.533	2.58	2.16
250	8.19	34.14	26.59	149.9	.612	1.94	2.32
300	7.74	34.20	26.70	139.9	.685	1.32	2.43
400	6.99	34.26	26.86	126.2	.819	0.64	2.62
500	6.27	34.30	26.99	115.0	.941	0.39	2.75
600	5.61	34.33	27.09	105.5	1.052	0.33	2.82
700	5.07	34.36	27.18	97.4	1.154	0.32	2.84
800	4.62	34.38	27.25	91.5	1.250	0.37	2.84
1000	3.93	34.44	27.37	80.8	1.424	0.61	2.79

## STATION 1005 (Interpolated Values at Standard Depths)

CREST:  $29^{\circ}50'N$   $119^{\circ}33'W$  August 12, 1949 1055 GCT Wire angle:  $35^{\circ}$   
 Sounding: missing Depth of observation: 1,171 m. Weather: cloudy  
 Sea: very rough Wind:  $330^{\circ}$ , force 5.

0	18.90	33.51	23.93	399.0	.0000	5.50	0.46
10	18.32	33.46	24.04	389.2	.0396	5.27	0.43
20	18.30	33.52	24.09	384.7	.0784	5.36	0.42
30	18.30	33.61	24.16	378.4	.1167	5.53	0.38
50	15.31	33.70	24.92	305.7	.1855	5.79	0.35
75	14.44	33.64	25.06	292.9	.2607	5.79	0.36
100	14.00	33.57	25.10	289.8	.3340	5.69	0.40
150	9.83	33.50	25.83	221.1	.463	4.40	1.26
200	8.87	33.96	26.35	172.5	.562	3.25	1.81
250	8.33	34.04	26.49	159.4	.645	2.52	2.03
300	7.45	34.04	26.62	147.3	.723	1.96	2.27
400	6.32	34.08	26.81	130.6	.863	0.94	2.67
500	5.63	34.21	27.00	113.5	.986	0.51	2.82
600	5.02	34.33	27.17	98.1	1.093	0.45	2.90
700	4.53	34.41	27.29	86.9	1.186	0.45	2.93
800	4.15	34.47	27.37	79.1	1.270	0.50	2.92
1000	3.59	34.52	27.47	70.8	1.421	0.68	2.91

STATION 1006 (Interpolated Values at Standard Depths)

CREST:  $29^{\circ}31'N$   $120^{\circ}07'W$  August 12, 1949 1806 GCT Wire angle:  $10^{\circ}$   
 Sounding: missing Depth of observation: 1,253 m. Weather: cloudy  
 Sea: rough Wind:  $330^{\circ}$ , force 5.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm³)	$10^5 \gamma$	$\Delta D$ (dyn.m.)	O₂ (ml/L)	P₀₄-P (kg at/L)
0	19.70	33.75	23.91	401.1	.0000	5.46	0.41
10	19.03	33.71	24.05	387.9	.0396	5.28	0.41
20	19.03	33.68	24.03	390.3	.0787	5.33	0.40
30	19.02	33.69	24.04	389.7	.1178	5.40	0.39
50	18.12	33.86	24.39	356.5	.1928	5.64	0.40
75	15.39	33.63	24.85	313.1	.2770	5.96	0.43
100	14.31	33.57	25.04	296.1	.3536	5.75	0.44
150	12.61	33.55	25.37	265.8	.495	4.26	0.89
200	9.67	33.94	26.20	186.5	.609	3.00	1.86
250	8.70	34.06	26.45	163.5	.697	2.75	2.00
300	7.87	34.09	26.60	149.7	.776	2.48	2.16
400	6.53	34.10	26.80	131.9	.918	1.18	2.59
500	5.67	34.21	26.99	114.0	1.042	0.59	2.81
600	5.17	34.30	27.12	102.2	1.151	0.46	2.88
700	4.80	34.36	27.21	94.1	1.250	0.47	2.89
800	4.45	34.40	27.29	87.9	1.342	0.49	2.91
1000	3.85	34.46	27.40	78.3	1.510	0.62	2.89

STATION 1007 (Interpolated Values at Standard Depths)

CREST:  $29^{\circ}08.5'N$   $120^{\circ}46'W$  August 12, 1949 2345 GCT Wire angle:  $12^{\circ}$   
 Sounding: missing Depth of observation: 1,228 m. Weather: partly cloudy  
 Sea: very rough Wind:  $330^{\circ}$ , force 4.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm³)	$10^5 \gamma$	$\Delta D$ (dyn.m.)	O₂ (ml/L)	P₀₄-P (kg at/L)
0	20.20	34.02	23.98	393.8	.0000	5.39	0.37
10	19.71	33.93	24.04	388.7	.0393	5.41	0.34
20	19.68	33.99	24.09	383.9	.0781	5.36	0.34
30	19.63	33.99	24.11	383.0	.1166	5.38	0.33
50	18.02	33.84	24.40	355.7	.1908	5.69	0.31
75	15.70	33.66	24.81	317.5	.2754	5.93	0.37
100	14.59	33.60	25.00	299.4	.3530	5.82	0.39
150	12.92	33.57	25.32	270.1	.496	4.94	0.77
200	9.97	33.74	25.99	206.4	.616	3.90	1.29
250	8.87	33.97	26.35	172.8	.712	2.96	1.79
300	8.34	34.12	26.55	154.6	.794	2.05	2.25
400	7.46	34.24	26.78	134.1	.940	0.85	2.58
500	6.20	34.25	26.96	117.7	1.067	0.53	2.79
600	5.44	34.31	27.10	105.0	1.179	0.46	2.91
700	5.11	34.37	27.18	97.5	1.281	0.44	2.96
800	4.78	34.41	27.26	91.2	1.377	0.43	2.98
1000	4.12	34.48	27.38	80.0	1.550	0.56	2.96

## STATION 1008 (Interpolated Values at Standard Depths)

CREST:  $28^{\circ}50'N$   $121^{\circ}19'W$  August 13, 1949 0505 GCT Wire angle:  $10^{\circ}$   
 Sounding: missing Depth of observation: 1,259 m. Weather: overcast  
 Sea: rough Wind:  $360^{\circ}$ , force 4.

Depth (m)	T (°C)	S (‰)	$\sigma-t$ (mg/cm³)	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ (μg at/L)
0	20.40	34.00	23.91	400.4	.0000	5.28	0.36
10	19.80	33.96	24.04	388.6	.0396	5.27	0.37
20	19.80	33.96	24.04	389.0	.0786	5.16	0.38
30	19.81	33.95	24.03	390.3	.1178	5.16	0.38
50	18.02	33.89	24.44	351.9	.1924	5.43	0.36
75	16.07	33.76	24.80	318.3	.2766	5.70	0.36
100	15.26	33.68	24.92	307.3	.3553	5.66	0.40
150	12.37	33.68	25.51	251.7	.496	4.92	0.85
200	10.22	33.70	25.92	213.3	.613	4.13	1.60
250	8.95	33.81	26.22	185.9	.714	3.19	1.85
300	8.39	34.17	26.59	151.4	.799	2.20	2.11
400	7.61	34.25	26.76	136.0	.943	0.87	2.63
500	6.45	34.25	26.92	121.0	1.073	0.55	2.81
600	5.68	34.27	27.04	111.1	1.190	0.46	2.90
700	5.21	34.34	27.15	100.8	1.297	0.45	2.95
800	4.81	34.38	27.23	94.0	1.396	0.46	2.96
1000	4.13	34.45	27.36	82.4	1.574	0.60	2.96

## STATION 1009 (Interpolated Values at Standard Depths)

CREST:  $28^{\circ}31'N$   $121^{\circ}52'W$  August 13, 1949 0959 GCT Wire angle:  $9^{\circ}$   
 Sounding: missing Depth of observation: 1,258 m. Weather: cloudy  
 Sea: very rough Wind:  $310^{\circ}$ , force 4.

Depth (m)	T (°C)	S (‰)	$\sigma-t$ (mg/cm³)	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ (μg at/L)
0	20.50	33.99	23.83	403.6	.0000	5.26	0.45
10	20.02	34.00	24.02	391.1	.0399	5.27	0.47
20	20.02	34.00	24.02	391.5	.0792	5.32	0.46
30	20.00	33.90	23.94	398.8	.1188	5.48	0.45
50	16.36	33.75	24.73	324.3	.1915	6.06	0.44
75	15.23	33.71	24.95	304.1	.2705	6.18	0.49
100	14.79	33.78	25.10	290.3	.3453	5.78	0.54
150	12.31	33.72	25.56	247.5	.4807	5.25	0.97
200	10.36	33.96	26.10	196.5	.592	2.81	2.10
250	9.43	34.15	26.40	168.3	.684	2.16	2.40
300	8.68	34.22	26.58	152.2	.765	1.81	2.56
400	7.50	34.23	26.77	135.8	.910	1.06	2.83
500	6.63	34.27	26.92	122.0	1.040	0.56	3.11
600	5.93	34.34	27.06	108.9	1.157	0.49	3.23
700	5.38	34.39	27.17	99.1	1.262	0.49	3.30
800	4.93	34.43	27.26	91.6	1.358	0.49	3.34
1000	4.20	34.50	27.39	79.6	1.531	0.58	3.36

## STATION 1010 (Interpolated Values at Standard Depths)

CREST:  $28^{\circ}12'N$   $122^{\circ}25'W$  August 13, 1949 1453 GCT Wire angle:  $7^{\circ}$   
 Sounding: missing Depth of observation: 1,276 m. Weather: overcast  
 Sea: very rough Wind:  $360^{\circ}$ , force 4.

Depth (m)	T (°C)	S (°/oo)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	P O <sub>2</sub> -P (μg at/L)
0	20.51	33.95	23.85	406.7	.0000	5.32	0.49
10	19.96	33.87	23.93	399.1	.0404	5.32	0.40
20	19.96	33.89	23.95	398.0	.0805	5.30	0.40
30	19.94	33.91	23.97	396.5	.1203	5.30	0.41
50	18.08	33.96	24.48	348.5	.1952	5.63	0.45
75	16.40	34.00	24.91	307.9	.2777	5.87	0.42
100	15.27	33.76	24.98	301.8	.3544	5.69	0.47
150	11.96	33.70	25.61	242.4	.491	4.58	1.08
200	9.86	33.89	26.13	193.4	.601	3.45	1.77
250	8.94	34.01	26.37	171.0	.693	2.75	2.16
300	8.20	34.09	26.55	154.7	.775	2.19	2.45
400	7.08	34.17	26.78	134.0	.920	1.20	2.83
500	6.35	34.24	26.93	120.4	1.049	0.57	3.04
600	5.70	34.30	27.06	109.0	1.164	0.45	3.15
700	5.18	34.35	27.16	99.5	1.270	0.46	3.24
800	4.75	34.39	27.24	92.3	1.367	0.50	3.30
1000	4.02	(34.46)	(27.38)	(80.4)	(1.541)	0.65	3.30

## STATION 1011 (Interpolated Values at Standard Depths)

CREST:  $27^{\circ}53'N$   $122^{\circ}58'W$  August 13, 1949 1928, 2105 GCT Wire angle:  
 $10^{\circ}$ ,  $28^{\circ}$  Sounding: missing Depth of observation: 1,272, 3,762 m.  
 Weather: overcast Sea: very rough Wind:  $360^{\circ}$ , force 4.

0	20.51	34.00	23.89	403.0	.0000	5.19	0.51
10	19.98	33.98	24.01	391.6	.0399	5.15	0.43
20	19.96	33.98	24.02	391.5	.0792	5.21	0.40
30	19.91	34.06	24.09	384.8	.1182	5.30	0.37
50	19.05	34.12	24.36	359.9	.1930	5.55	0.30
75	16.30	34.06	24.97	301.5	.2762	5.74	0.39
100	15.44	33.91	25.06	294.4	.3511	5.69	0.39
150	13.09	33.81	25.47	255.7	.490	5.05	0.70
200	10.02	33.73	25.98	208.0	.606	4.36	1.42
250	8.91	33.97	26.35	173.6	.703	3.88	1.82
300	7.86	34.03	26.56	154.0	.785	3.00	2.20
400	6.52	34.12	26.81	130.3	.928	1.25	2.86
500	5.82	34.20	26.96	116.6	1.053	0.58	3.11
600	5.32	34.28	27.09	105.5	1.165	0.45	3.18
700	4.91	34.34	27.18	97.1	1.267	0.49	3.24
800	4.56	34.39	27.27	89.9	1.362	0.50	3.29
1000	3.93	34.46	27.39	79.3	1.533	0.66	3.26
1200	3.43	34.51	27.48	71.1	1.685	0.96	3.17
1500	2.93	34.55	27.56	64.4	1.891	1.02	3.10
2000	2.14	34.63	27.69	51.7	2.186	1.20	2.98
2500	1.79	34.68	27.75	45.4	2.433	2.48	2.80
3000	1.60	34.67	27.76	45.2	2.664	2.80	2.71
4000	(1.54)	(34.66)	(27.76)	(47.8)	(3.139)		

## STATION 1101 (Interpolated Values at Standard Depths)

CREST:  $29^{\circ}38'N$   $116^{\circ}03'W$  August 11, 1949 0030 GCT Wire angle:  $16^{\circ}$   
 Sounding: missing Depth of observation: 1,237 m. Weather: cloudy  
 Sea: moderate Wind:  $340^{\circ}$ , force 4.

Depth (m)	T (°C)	S (‰)	$\sigma-t$ (mg/cm³)	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2}-P$ μg at/L)
0	19.79	33.69	23.84	407.6	.0000	5.44	0.46
10	19.05	33.67	24.01	391.2	.0401	5.36	0.39
20	18.80	33.64	24.05	387.8	.0792	5.24	0.38
30	18.47	33.61	24.11	382.2	.1179	5.23	0.38
50	14.87	33.48	24.85	312.6	.1877	5.70	0.43
75	12.37	33.42	25.31	269.0	.2608	5.50	0.67
100	11.47	33.42	25.48	253.4	.3265	5.00	0.97
150	9.22	33.95	26.28	177.9	.435	3.02	1.82
200	8.61	34.22	26.59	149.5	.518	1.44	2.28
250	8.53	34.22	26.60	149.3	.593	1.45	2.31
300	8.03	34.23	26.68	141.8	.666	1.36	2.38
400	7.10	34.29	26.87	125.7	.801	0.60	2.70
500	6.94	34.35	26.94	120.4	.925	0.31	2.77
600	6.43	34.37	27.02	113.4	1.043	0.32	2.85
700	5.76	34.39	27.12	104.0	1.153	0.35	2.91
800	5.17	34.41	27.21	96.3	1.254	0.41	2.95
1000	4.27	34.47	27.36	82.4	1.435	0.56	2.93

## STATION 1102 (Interpolated Values at Standard Depths)

CREST:  $29^{\circ}21'N$   $116^{\circ}44'W$  August 10, 1949 1927 GCT Wire angle:  $8^{\circ}$   
 Sounding: missing Depth of observation: 1,280 m. Weather: cloudy  
 Sea: rough Wind:  $330^{\circ}$ , force 3.

0	21.01	33.89	23.67	423.9	.0000	5.17	0.43
10	20.03	33.86	23.90	401.5	.0414	5.06	0.35
20	20.02	33.84	23.89	403.2	.0818	5.05	0.38
30	20.01	33.83	23.89	404.0	.1224	5.07	0.39
50	16.64	33.60	24.54	341.7	.1973	5.65	0.36
75	14.77	33.53	24.91	307.5	.2789	5.57	0.37
100	12.62	33.48	25.31	269.6	.3515	5.64	0.66
150	10.52	33.59	25.79	225.2	.476	3.27	1.33
200	9.67	34.11	26.33	174.1	.576	1.77	2.17
250	9.52	34.24	26.46	163.1	.661	1.18	2.30
300	9.23	34.34	26.58	152.2	.741	0.85	2.44
400	8.18	34.42	26.81	131.6	.884	0.45	2.73
500	7.22	34.40	26.94	120.6	1.011	0.36	2.84
600	6.32	34.38	27.04	111.2	1.128	0.35	2.89
700	5.58	34.39	27.14	101.8	1.235	0.39	2.94
800	4.99	34.41	27.23	93.9	1.334	0.44	2.97
1000	4.09	34.47	27.38	80.3	1.510	0.61	2.98

## STATION 1103 (Interpolated Values at Standard Depths)

CREST:  $29^{\circ}03'N$   $117^{\circ}20'W$  August 10, 1949 1343 GCT Wire angle:  $5^{\circ}$   
 Sounding: missing Depth of observation: 1,297 m. Weather: cloudy  
 Sea: rough Wind:  $330^{\circ}$ , force 3.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm³)	$10^5 s$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_4-P}$ (μg at/L)
0	19.70	33.71	23.88	404.0	.0000	5.45	0.40
10	19.14	33.68	24.00	393.0	.0400	5.41	0.40
20	19.02	33.67	24.02	390.8	.0794	5.42	0.41
30	18.73	33.65	24.08	385.5	.1183	5.48	0.41
50	14.27	33.46	24.96	302.0	.1874	6.16	0.41
75	13.26	33.51	25.21	279.0	.2605	6.07	0.47
100	11.22	33.49	25.58	243.8	.3262	4.69	1.16
150	10.04	34.01	26.19	186.5	.435	2.15	2.00
200	10.22	34.28	26.37	170.7	.524	1.25	2.29
250	10.04	34.37	26.47	162.3	.608	0.90	2.42
300	9.71	34.41	26.56	154.8	.688	0.69	2.50
400	8.88	34.42	26.70	142.0	.838	0.49	2.63
500	7.83	34.38	26.83	131.0	.975	0.35	2.75
600	6.84	34.36	26.96	119.7	1.102	0.30	2.85
700	6.03	34.38	27.08	108.8	1.217	0.30	2.92
800	5.38	34.40	27.18	99.6	1.323	0.31	2.97
1000	4.37	34.45	27.33	85.4	1.510	0.45	2.97

## STATION 1104 (Interpolated Values at Standard Depths)

CREST:  $23^{\circ}47.5'N$   $117^{\circ}56.5'W$  August 10, 1949 0831 GCT Wire angle:  $2^{\circ}$   
 Sounding: missing Depth of observation: 1,230 m. Weather: cloudy  
 Sea: rough Wind:  $360^{\circ}$ , force 3.

0	21.10	33.86	23.62	428.5	.0000	5.15	0.57
10	20.60	33.82	23.73	418.7	.0425	5.37	0.39
20	20.61	33.85	23.75	417.2	.0845	5.60	0.39
30	20.52	33.85	23.77	415.1	.1263	5.83	0.39
50	16.10	33.59	24.66	330.7	.2012	6.30	0.40
75	13.60	33.44	25.09	290.8	.2793	6.00	0.44
100	11.98	33.49	25.44	257.2	.3483	5.50	0.97
150	9.82	33.87	26.12	193.2	.462	3.26	1.71
200	9.04	34.13	26.45	162.8	.551	2.57	2.16
250	8.71	34.28	26.62	147.5	.629	1.69	2.41
300	8.42	34.31	26.69	141.8	.702	1.15	2.55
400	6.50	34.22	26.89	122.6	.836	1.04	2.74
500	5.72	34.32	27.07	106.3	.951	0.42	3.06
600	5.20	34.43	27.22	92.8	1.051	0.37	3.04
700	4.80	34.48	27.31	84.9	1.141	0.51	3.02
800	4.47	34.50	27.36	80.8	1.225	0.62	3.02
1000	3.95	34.53	27.44	74.5	1.382	0.78	3.01

## STATION 1105 (Interpolated Values at Standard Depths)

CREST:  $28^{\circ}27'N$   $118^{\circ}36'W$  August 9, 1949 2216 GCT Wire angle:  $20^{\circ}$   
 Sounding: missing Depth of observation: 1,148 m. Weather: cloudy  
 Sea: rough Wind:  $340^{\circ}$ , force 4.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}$ /oo)	$\sigma_t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P O_2 - P$ (kg at/L)
0	21.50	33.91	23.55	435.0	.0000	5.25	0.41
10	20.87	33.93	23.74	417.6	.0428	5.29	0.38
20	20.77	33.90	23.74	417.6	.0847	5.24	0.40
30	20.66	33.85	23.73	418.7	.1267	5.37	0.40
50	15.12	33.64	24.92	306.2	.1996	6.07	0.40
75	13.29	33.39	25.11	288.3	.2743	6.15	0.45
100	12.64	33.48	25.31	269.9	.3445	5.91	0.48
150	10.43	33.85	26.00	204.7	.464	2.89	1.70
200	9.52	34.00	26.27	179.8	.561	2.34	2.01
250	9.01	34.10	26.43	165.8	.648	1.78	2.20
300	8.56	34.22	26.60	150.6	.728	1.11	2.44
400	7.66	34.38	26.86	126.8	.867	0.42	2.73
500	6.78	34.42	27.01	112.9	.988	0.28	2.84
600	5.96	34.43	27.13	102.5	1.097	0.27	2.90
700	5.28	34.44	27.22	94.2	1.196	0.29	2.97
800	4.73	34.46	27.30	87.0	1.288	0.31	2.98
1000	3.92	34.49	27.41	77.0	1.454	0.56	2.95

## STATION 1106 (Interpolated Values at Standard Depths)

CREST:  $28^{\circ}01'N$   $119^{\circ}15'W$  August 9, 1949 1641 GCT Wire angle:  $5^{\circ}$   
 Sounding: missing Depth of observation: 1,285 m. Weather: cloudy  
 Sea: very rough Wind:  $330^{\circ}$ , force 4.

0	20.00	33.84	23.90	402.0	.0000	5.35	0.43
10	19.56	33.82	24.00	392.7	.0399	5.33	0.42
20	19.53	33.81	24.00	393.5	.0794	5.34	0.41
30	19.50	33.79	23.99	394.1	.1189	5.45	0.39
50	17.22	33.75	24.52	343.8	.1931	5.95	0.37
75	15.53	33.62	24.81	316.8	.2761	5.94	0.40
100	14.62	33.66	25.04	295.5	.3531	5.82	0.42
150	11.90	33.40	25.39	263.4	.494	5.00	0.96
200	9.92	33.80	26.05	201.1	.611	3.41	1.68
250	8.78	33.95	26.35	172.7	.705	2.92	1.91
300	7.87	34.01	26.54	155.7	.790	2.57	2.14
400	6.70	34.12	26.79	132.7	.936	1.17	2.56
500	6.25	34.23	26.93	119.9	1.063	0.51	2.79
600	5.77	34.28	27.04	111.4	1.180	0.39	2.89
700	5.23	34.31	27.13	103.2	1.288	0.40	2.95
800	4.76	34.34	27.20	96.2	1.389	0.45	3.00
1000	4.02	34.41	27.34	84.2	1.571	0.61	3.00

## STATION 1107 (Interpolated Values at Standard Depths)

CREST:  $27^{\circ}36'N$   $119^{\circ}52'W$  August 9, 1949 1050 GCT Wire angle:  $8^{\circ}$   
 Sounding: missing Depth of observation: 1,252 m. Weather: cloudy  
 Sea: very rough Wind:  $350^{\circ}$ , force 3.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}$ /oo)	$\sigma-t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	O <sub>2</sub> (ml/L)	P <sub>O<sub>2</sub></sub> -P (kg at/L)
0	21.01	33.84	23.63	427.5	.0000	5.03	0.40
10	20.22	33.82	23.82	409.4	.0420	5.27	0.38
20	20.20	33.81	23.82	409.7	.0831	5.05	0.38
30	20.17	33.77	23.80	412.1	.1244	5.13	0.37
50	16.82	33.63	24.53	343.6	.2003	5.64	0.34
75	15.13	33.62	24.90	308.5	.2823	5.38	0.39
100	14.32	33.63	25.08	291.8	.3578	5.28	0.43
150	11.36	33.54	25.60	243.7	.493	4.30	1.09
200	9.70	33.82	26.10	196.2	.603	3.35	1.68
250	8.92	34.02	26.38	169.9	.696	2.49	2.03
300	8.41	34.15	26.57	153.4	.777	1.75	2.31
400	7.52	34.29	26.81	131.6	.921	1.77	2.72
500	6.67	34.31	26.94	119.5	1.047	0.35	2.88
600	5.93	34.36	27.08	107.5	1.162	0.30	2.95
700	5.38	34.43	27.20	96.1	1.265	0.34	2.97
800	4.93	34.49	27.30	87.2	1.357	0.40	2.98
1000	4.20	34.53	27.41	77.2	1.523	0.58	2.98

## STATION 1108 (Interpolated Values at Standard Depths)

CREST:  $27^{\circ}07'N$   $120^{\circ}29'W$  August 9, 1949 0445 GCT Wire angle:  $2^{\circ}$   
 Sounding: missing Depth of observation: 1,314 m. Weather: cloudy  
 Sea: very rough Wind:  $360^{\circ}$ , force 4.

0	22.00	34.38	23.77	414.3	.0000	5.40	0.42
10	21.02	33.98	23.73	418.2	.0418	5.22	0.37
20	21.00	33.99	23.75	417.1	.0837	5.24	0.36
30	20.93	33.90	23.70	422.2	.1258	5.38	0.36
50	17.59	33.75	24.44	352.1	.2037	5.95	0.38
75	15.38	33.66	24.88	310.9	.2870	5.96	0.44
100	14.12	33.61	25.11	289.2	.3625	5.66	0.50
150	11.38	33.55	25.60	243.0	.496	4.40	1.11
200	9.63	33.88	26.16	190.5	.606	3.30	1.67
250	8.82	34.09	26.46	163.2	.695	2.41	2.04
300	8.23	34.17	26.61	149.3	.774	1.79	2.28
400	7.19	34.28	26.85	127.6	.913	0.88	2.66
500	6.36	34.34	27.01	113.1	1.034	0.46	2.84
600	5.67	34.36	27.11	103.9	1.144	0.37	2.89
700	5.19	34.38	27.19	97.3	1.246	0.40	2.91
800	4.79	34.40	27.25	92.0	1.341	0.46	2.92
1000	4.12	34.45	27.36	82.3	1.517	0.64	2.92

## STATION 1109 (Interpolated Values at Standard Depths)

CREST:  $26^{\circ}46'N$   $121^{\circ}07'W$  August 8, 1949 2241 GCT Wire angle:  $15^{\circ}$   
 Sounding: missing Depth of observation: 1,203 m. Weather: cloudy  
 Sea: very rough Wind:  $010^{\circ}$ , force 4.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}$ /oo)	$\sigma_t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ ( $\mu$ g at/L)
0	22.00	34.05	23.52	438.2	.0000	5.22	0.36
10	21.16	34.02	23.73	418.5	.0430	5.20	0.37
20	21.05	34.01	23.75	416.9	.0850	5.20	0.36
30	20.73	33.99	23.82	410.5	.1265	5.26	0.36
50	18.91	33.85	24.19	376.0	.2055	5.60	0.39
75	15.82	33.67	24.79	319.4	.2929	5.86	0.43
100	13.76	33.59	25.17	283.6	.3688	5.50	0.46
150	10.69	33.57	25.74	229.7	.498	3.90	1.50
200	9.52	34.02	26.29	178.3	.601	2.95	1.94
250	8.78	34.10	26.47	161.8	.686	2.22	2.19
300	7.98	34.14	26.63	147.5	.764	1.67	2.37
400	6.92	34.18	26.80	131.3	.905	0.76	2.68
500	6.32	34.25	26.94	119.2	1.031	0.44	2.90
600	5.72	(34.35)	(27.10)	(105.5)	(1.144)	0.43	2.99
700	5.17	(34.41)	(27.21)	(95.0)	(1.246)	0.45	3.02
800	4.69	(34.45)	(27.30)	(87.2)	(1.338)	0.47	3.04
1000	4.01	(34.51)	(27.42)	(76.6)	(1.503)	0.63	3.09

## STATION 1110 (Interpolated Values at Standard Depths)

CREST:  $26^{\circ}14'N$   $121^{\circ}45'W$  August 8, 1949 1723 GCT Wire angle:  $14^{\circ}$   
 Sounding: missing Depth of observation: 1,247 m. Weather: cloudy  
 Sea: very rough Wind:  $010^{\circ}$ , force 4.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}$ /oo)	$\sigma_t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ ( $\mu$ g at/L)
0	21.70	34.25	23.75	415.8	.0000	5.13	0.40
10	21.05	34.23	23.92	400.6	.0410	5.07	0.37
20	21.05	34.22	23.91	401.8	.0813	5.14	0.33
30	21.00	34.20	23.91	402.3	.1216	5.16	0.31
50	18.73	34.13	24.45	351.4	.1974	5.16	0.30
75	17.42	34.09	24.74	324.3	.2823	5.78	0.35
100	16.03	33.93	24.94	305.6	.3616	5.45	0.38
150	13.47	33.81	25.40	262.8	.505	5.15	0.51
200	10.27	33.66	25.88	217.2	.625	4.05	1.62
250	9.12	33.89	26.25	182.6	.726	3.21	1.93
300	8.42	34.15	26.56	153.6	.811	2.37	2.17
400	7.33	34.27	26.82	130.5	.954	0.94	2.65
500	6.88	34.30	26.91	123.2	1.082	0.64	2.91
600	5.70	34.33	27.08	106.6	1.198	0.56	3.02
700	5.24	34.40	27.19	96.7	1.300	0.52	3.08
800	4.83	34.46	27.29	88.1	1.394	0.50	3.11
1000	4.12	34.52	27.41	77.1	1.561	0.62	3.10

## STATION 1111 (Interpolated Values at Standard Depths)

CREST:  $25^{\circ}52'N$   $122^{\circ}24'W$  August 8, 1949 1135 GCT Wire angle:  $13^{\circ}$   
 Sounding: missing Depth of observation: 1,233 m. Weather: partly  
 cloudy Sea: rough Wind:  $020^{\circ}$ , force 4.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm³)	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P O_2 - P$ (kg at/L)
0	21.41	34.18	23.78	413.2	.0000	5.20	0.43
10	20.98	34.05	23.80	411.8	.0414	5.19	0.44
20	20.98	34.11	23.84	407.9	.0826	5.15	0.45
30	20.78	34.12	23.90	402.5	.1232	5.18	0.44
50	18.56	34.11	24.47	348.8	.1988	5.66	0.42
75	17.26	34.07	24.76	322.1	.2831	5.65	0.43
100	16.46	33.92	24.83	315.8	.3633	5.58	0.46
150	13.24	33.70	25.36	266.6	.510	4.80	0.85
200	10.31	33.67	25.88	217.2	.632	3.82	1.57
250	9.08	33.80	26.19	188.7	.709	3.05	1.93
300	8.46	34.16	26.57	153.3	.795	2.40	2.21
400	7.38	34.27	26.81	131.8	.942	1.16	2.66
500	6.46	34.32	26.98	116.0	1.067	0.58	2.96
600	5.73	34.36	27.10	104.9	1.178	0.49	3.05
700	5.18	34.40	27.20	95.8	1.280	0.46	3.07
800	4.72	34.44	27.28	88.4	1.373	0.45	3.09
1000	4.00	34.49	27.40	78.0	1.541	0.58	3.14

## STATION 1201 (Interpolated Values at Standard Depths)

CREST:  $27^{\circ}30'N$   $115^{\circ}18'W$  August 5, 1949 1252 GCT Wire angle:  $17^{\circ}$   
 Sounding: missing Depth of observation: 1,140 m. Weather: overcast  
 Sea: rough Wind:  $290^{\circ}$ , force 4.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm³)	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P O_2 - P$ (kg at/L)
0	21.00	33.77	23.58	432.4	.0000	5.15	0.55
10	20.70	33.86	23.73	418.4	.0427	5.13	0.41
20	18.85	33.81	24.17	376.8	.0826	5.61	0.41
30	16.85	33.54	24.45	350.3	.1191	5.76	0.44
50	12.80	33.42	25.23	276.2	.1821	5.73	0.70
75	11.00	33.63	25.73	229.2	.2456	4.00	1.42
100	10.58	33.89	26.01	203.3	.3000	2.77	1.80
150	10.43	34.25	26.31	175.2	.395	1.55	2.32
200	10.13	34.41	26.49	159.7	.480	1.00	2.73
250	9.86	34.51	26.62	148.6	.557	0.62	2.89
300	9.52	34.51	26.67	144.1	.631	0.40	2.99
400	8.15	34.44	26.83	129.8	.769	0.34	3.10
500	6.77	34.33	26.95	119.3	.895	0.39	3.16
600	6.06	34.37	27.07	108.5	1.009	0.40	3.22
700	5.50	34.41	27.17	99.3	1.114	0.37	3.26
800	5.00	34.44	27.25	91.7	1.210	0.36	3.29
1000	4.18	34.49	27.38	79.9	1.384	0.45	3.32

## STATION 1202 (Interpolated Values at Standard Depths)

CREST:  $27^{\circ}05'N$   $115^{\circ}53'W$  August 5, 1949 2152 GCT Wire angle:  $10^{\circ}$   
 Sounding: missing Depth of observation: 1,136 m. Weather: overcast  
 Sea: moderate Wind:  $310^{\circ}$ , force 3.

Depth (m)	T ( $^{\circ}$ C)	S (‰)	$\sigma_t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2-P}$ ( $\mu$ g at/L)
0	20.10	33.69	23.76	415.3	.0000	5.43	0.40
10	18.95	33.68	24.05	388.3	.0403	5.52	0.38
20	18.44	33.64	24.14	379.3	.0789	5.63	0.40
30	17.43	33.50	24.28	366.2	.1163	5.82	0.43
50	14.14	33.44	24.97	300.9	.1833	6.25	0.50
75	11.39	33.50	25.56	245.4	.2520	3.90	1.25
100	10.48	33.82	25.97	206.5	.3088	3.05	1.78
150	9.87	34.20	26.37	169.4	.403	2.00	2.12
200	10.49	34.47	26.48	161.0	.487	0.63	2.68
250	9.92	34.47	26.57	152.5	.566	0.44	2.78
300	9.17	34.45	26.68	142.9	.640	0.45	2.81
400	7.88	34.40	26.84	128.7	.777	0.45	2.86
500	7.13	34.42	26.96	117.7	.901	0.34	2.99
600	6.32	34.43	27.08	107.6	1.015	0.36	3.09
700	5.58	34.43	27.18	98.9	1.119	0.44	3.13
800	4.97	34.43	27.25	92.2	1.216	0.49	3.16
1000	4.06	34.48	27.39	79.3	1.389	0.60	3.15

## STATION 1203 (Interpolated Values at Standard Depths)

CREST:  $26^{\circ}41'N$   $116^{\circ}28'W$  August 6, 1949 0341 GCT Wire angle:  $15^{\circ}$   
 Sounding: missing Depth of observation: 1,133 m. Weather: overcast  
 Sea: moderate Wind:  $310^{\circ}$ , force 2.

0	21.00	33.71	23.53	436.7	.0000	5.15	0.42
10	20.14	33.71	23.76	415.4	.0428	5.35	0.40
20	19.87	33.69	23.87	410.0	.0842	5.35	0.39
30	17.60	33.54	24.27	367.3	.1232	5.45	0.39
50	14.44	33.42	24.89	308.3	.1911	5.99	0.40
75	13.27	33.43	25.14	285.1	.2657	5.82	0.46
100	11.10	33.40	25.53	248.5	.3329	5.12	0.92
150	9.76	33.91	26.16	189.2	.443	2.96	1.83
200	10.12	34.34	26.44	164.6	.532	1.10	2.48
250	9.90	34.47	26.58	152.2	.612	0.50	2.64
300	9.33	34.51	26.70	141.2	.686	0.45	2.76
400	8.13	34.44	26.83	129.6	.822	0.43	2.95
500	7.21	34.43	26.96	118.3	.947	0.24	3.06
600	6.32	34.43	27.08	107.6	1.061	0.20	3.12
700	5.57	34.43	27.18	98.7	1.165	0.24	3.16
800	4.96	34.43	27.25	92.0	1.262	0.31	3.18
1000	4.13	34.49	27.39	79.5	1.435	0.55	3.19

## STATION 1204 (Interpolated Values at Standard Depths)

CREST:  $26^{\circ}15.5'N$   $117^{\circ}03'W$  August 6, 1949 0940 GCT Wire angle:  $8^{\circ}$   
 Sounding: missing Depth of observation: 1,280 m. Weather: overcast  
 Sea: moderate Wind:  $330^{\circ}$ , force 2.

Depth (m)	T (°C)	S (‰)	σ-t (mg/cm³)	$10^5 \delta$	Δ D (dyn.m.)	O <sub>2</sub> (ml/L)	P O <sub>2</sub> -P kg at/L)
0	21.10	33.77	23.55	435.1	.0000	5.21	0.45
10	20.65	33.73	23.64	426.6	.0433	5.27	0.43
20	19.96	33.68	23.79	413.1	.0854	5.32	0.42
30	18.93	33.62	24.01	392.5	.1258	5.45	0.41
50	16.19	33.56	24.62	334.8	.1989	5.90	0.36
75	14.25	33.46	24.97	302.2	.2790	5.86	0.42
100	12.68	33.39	25.23	278.3	.3520	5.90	0.60
150	10.72	33.95	26.03	202.2	.473	3.89	1.62
200	9.94	34.09	26.27	180.0	.569	1.91	2.26
250	9.42	34.09	26.36	172.5	.658	1.18	2.47
300	8.82	34.11	26.47	162.6	.742	0.77	2.64
400	7.66	34.39	26.87	126.2	.888	0.41	2.93
500	6.67	34.42	27.03	111.4	1.008	0.31	3.06
600	5.88	34.42	27.13	102.3	1.116	0.29	3.13
700	5.33	34.44	27.21	94.7	1.215	0.30	3.17
800	4.88	34.45	27.27	89.4	1.308	0.36	3.21
1000	4.13	34.50	27.40	78.7	1.478	0.57	3.21

## STATION 1205 (Interpolated Values at Standard Depths)

CREST:  $25^{\circ}51'N$   $117^{\circ}37'W$  August 6, 1949 1537 GCT Wire angle:  $8^{\circ}$   
 Sounding: missing Depth of observation: 1,282 m. Weather: overcast  
 Sea: rough Wind:  $330^{\circ}$ , force 2.

0	21.70	33.77	23.39	450.6	.0000	5.28	0.44
10	21.07	33.77	23.56	434.5	.0444	5.29	0.47
20	20.96	33.75	23.58	433.5	.0880	5.35	0.44
30	20.34	33.70	23.70	421.7	.1309	5.47	0.43
50	16.50	33.64	24.61	335.7	.2070	6.02	0.44
75	14.64	33.56	24.96	302.7	.2873	5.75	0.43
100	13.29	33.53	25.22	278.7	.3604	5.80	0.56
150	10.73	33.68	25.82	222.3	.487	3.75	1.56
200	9.81	34.08	26.29	178.7	.588	2.50	2.16
250	9.22	34.22	26.49	159.9	.673	1.66	2.44
300	8.75	34.30	26.63	147.6	.750	1.07	2.62
400	7.81	34.37	26.83	129.9	.890	0.48	2.86
500	6.96	34.40	26.97	116.7	1.015	0.27	3.02
600	6.15	34.42	27.10	105.9	1.127	0.24	3.12
700	5.52	34.44	27.20	97.2	1.229	0.28	3.18
800	5.01	34.47	27.27	89.7	1.324	0.35	3.21
1000	4.23	34.52	27.40	78.4	1.494	0.55	3.21

## STATION 1206 (Interpolated Values at Standard Depths)

CREST:  $25^{\circ}26'N$   $118^{\circ}12'W$  August 6, 1949 2026 GCT Wire angle:  $6^{\circ}$   
 Sounding: missing Depth of observation: 1,306 m. Weather: overcast  
 Sea: very rough Wind:  $360^{\circ}$ , force 2.

Depth (m)	T ( $^{\circ}$ C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_4}-P$ (kg at/L)
0	23.30	34.43	23.44	446.1	.0000	5.17	0.47
10	22.65	34.43	23.62	428.6	.0439	5.20	0.45
20	22.61	34.42	23.63	428.7	.0870	4.90	0.44
30	22.49	34.20	23.49	441.7	.1306	4.88	0.42
50	18.92	34.01	24.31	364.5	.2117	5.65	0.41
75	16.73	33.95	24.79	318.9	.2976	5.03	0.62
100	14.14	33.77	25.23	277.8	.3726	4.15	1.13
150	10.89	33.89	25.95	209.4	.495	3.03	1.86
200	9.99	34.10	26.27	180.1	.593	2.20	2.28
250	9.62	34.32	26.50	158.9	.679	1.23	2.58
300	9.31	34.43	26.64	146.8	.756	0.66	2.78
400	8.23	34.45	26.83	130.3	.895	0.37	2.99
500	7.07	34.42	26.97	117.0	1.020	0.27	3.10
600	6.09	34.40	27.09	106.6	1.133	0.25	3.19
700	5.46	34.42	27.18	98.0	1.236	0.29	3.25
800	4.93	34.44	27.26	91.3	1.332	0.35	3.28
1000	4.12	34.51	27.41	77.8	1.503	0.54	3.29

## STATION 1207 (Interpolated Values at Standard Depths)

CREST:  $25^{\circ}02'N$   $118^{\circ}46'W$  August 7, 1949 0159 GCT Wire angle:  $18^{\circ}$   
 Sounding: missing Depth of observation: 1,188 m. Weather: overcast  
 Sea: rough Wind:  $010^{\circ}$ , force 2.

Depth (m)	T ( $^{\circ}$ C)	S (‰)	$\sigma_t$ (mg/cm <sup>3</sup> )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_4}-P$ (kg at/L)
0	22.30	34.25	23.59	431.7	.0000	5.13	0.45
10	21.81	34.23	23.71	420.4	.0428	5.12	0.46
20	21.75	34.23	23.72	419.3	.0849	5.13	0.45
30	21.03	34.10	23.82	410.3	.1266	5.27	0.44
50	17.67	33.91	24.54	342.2	.2022	5.68	0.42
75	15.64	33.82	24.94	304.6	.2835	5.80	0.47
100	14.36	33.67	25.10	289.6	.3583	5.60	0.52
150	11.57	33.68	25.67	236.8	.491	4.50	1.46
200	10.32	34.25	26.33	174.4	.594	1.98	2.20
250	9.67	34.39	26.55	154.4	.677	1.22	2.52
300	9.12	34.45	26.69	142.3	.752	0.73	2.71
400	8.07	34.46	26.86	127.2	.888	0.32	2.94
500	7.06	34.45	27.00	114.7	1.010	0.29	3.07
600	6.23	34.46	27.12	104.0	1.120	0.27	3.14
700	5.55	34.47	27.21	95.4	1.221	0.30	3.20
800	5.02	34.49	27.29	88.6	1.313	0.36	3.21
1000	4.21	34.53	27.41	77.3	1.481	0.54	3.21

## STATION 1208 (Interpolated Values at Standard Depths)

CREST:  $24^{\circ}36'N$   $119^{\circ}21'W$  August 7, 1949 0746 GCT Wire angle:  $2^{\circ}$   
 Sounding: missing Depth of observation: 1,316 m. Weather: overcast  
 Sea: rough Wind:  $360^{\circ}$ , force 2.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}$ /oo)	$\sigma_t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2 - P}$ (ug at/L)
0	24.10	34.63	23.35	454.1	.0000	4.95	0.38
10	23.42	34.52	23.47	443.1	.0450	4.90	0.38
20	23.42	34.55	23.49	441.5	.0894	4.90	0.37
30	23.15	34.45	23.50	441.6	.1338	4.99	0.38
50	18.10	34.02	24.52	344.5	.2128	5.40	0.44
75	15.90	33.82	24.88	310.2	.2951	5.74	0.37
100	14.78	33.69	25.03	296.6	.3714	5.64	0.46
150	11.29	33.59	25.65	233.6	.506	4.23	1.30
200	9.85	34.05	26.26	181.4	.612	2.88	1.99
250	9.49	34.27	26.49	160.3	.698	1.93	2.32
300	9.18	34.37	26.62	149.2	.776	1.21	2.58
400	8.10	34.42	26.82	130.5	.917	0.53	2.92
500	7.05	34.42	26.98	116.7	1.042	0.32	3.14
600	6.15	34.43	27.11	105.2	1.154	0.28	3.24
700	5.54	34.45	27.20	96.7	1.255	0.31	3.24
800	5.05	34.48	27.28	89.4	1.349	0.38	3.24
1000	4.24	34.53	27.41	77.8	1.519	0.56	3.24

## STATION 1209 (Interpolated Values at Standard Depths)

CREST:  $24^{\circ}07'N$   $120^{\circ}03'W$  August 7, 1949 1329 GCT Wire angle:  $2^{\circ}$   
 Sounding: missing Depth of observation: 1,291 m. Weather: cloudy  
 Sea: rough Wind:  $360^{\circ}$ , force 3.

Depth (m)	T ( $^{\circ}$ C)	S ( $^{\circ}$ /oo)	$\sigma_t$ (mg/cm $^3$ )	$10^5 \delta$	$\Delta D$ (dyn.m.)	$O_2$ (ml/L)	$P_{O_2 - P}$ (ug at/L)
0	23.90	34.44	23.27	462.1	.0000	5.17	0.41
10	22.94	34.38	23.50	440.0	.0453	5.13	0.42
20	22.94	34.39	23.51	439.8	.0895	5.16	0.40
30	22.90	34.40	23.53	438.4	.1336	5.25	0.39
50	18.71	34.07	24.41	355.2	.2133	5.50	0.40
75	15.99	33.81	24.85	312.9	.2973	5.68	0.38
100	14.85	33.68	25.01	298.9	.3742	5.72	0.53
150	11.31	33.57	25.63	240.4	.510	4.48	1.18
200	9.98	34.06	26.26	181.2	.616	2.66	1.92
250	9.23	34.28	26.54	155.6	.701	1.70	2.26
300	8.65	34.33	26.67	143.8	.776	1.15	2.53
400	7.55	34.37	26.87	126.1	.912	0.65	2.88
500	6.58	34.40	27.02	111.7	1.032	0.30	3.01
600	5.88	34.43	27.14	101.6	1.140	0.18	3.08
700	5.36	34.45	27.22	94.3	1.239	0.25	3.12
800	4.91	34.48	27.30	87.7	1.331	0.42	3.14
1000	4.18	34.51	27.40	78.4	1.499	0.70	3.14

## STATION 1210 (Interpolated Values at Standard Depths)

CREST:  $23^{\circ}48'N$   $120^{\circ}30'W$  August 7, 1949 1810 GCT Wire angle:  $2^{\circ}$   
 Sounding: missing Depth of observation: 1,301 m. Weather: partly  
 cloudy Sea: rough Wind:  $330^{\circ}$ , force 4.

Depth (m)	T (°C)	S (‰)	$\sigma_t$ (mg/cm³)	$10^5 \delta$	Δ D (dyn.m.)	O₂ (ml/L)	P <small>O</small> <sub>4</sub> -P μg at/L)
0	23.00	34.20	23.35	454.3	.0000	5.10	0.36
10	22.29	34.14	23.51	439.7	.0449	4.91	0.36
20	22.19	34.04	23.46	444.7	.0893	5.04	0.33
30	20.10	33.99	23.99	394.7	.1314	5.27	0.32
50	18.07	33.95	24.47	348.7	.2061	5.68	0.33
75	16.55	33.95	24.84	314.8	.2895	5.68	0.34
100	15.52	33.80	24.96	304.0	.3674	5.51	0.42
150	12.66	33.64	25.43	259.7	.509	4.70	0.90
200	10.00	33.92	26.13	193.6	.623	3.17	1.76
250	9.00	34.12	26.45	163.7	.713	2.06	2.19
300	8.27	34.24	26.66	144.7	.791	1.58	2.45
400	7.41	34.35	26.87	125.5	.927	0.71	2.72
500	6.79	34.40	27.00	114.2	1.048	0.33	2.92
600	6.10	34.43	27.11	104.5	1.158	0.25	3.04
700	5.48	34.47	27.22	94.6	1.259	0.33	3.05
800	4.94	34.50	27.31	86.5	1.350	0.41	3.06
1000	4.13	34.54	27.43	75.7	1.514	0.62	3.05

DISTRIBUTION LIST

- Dr. E. H. Ahlstrom  
U. S. Fish and Wildlife Service  
c/o Scripps Institution of Oceanography  
La Jolla, California
- Mr. W. Wade Ambrose, President  
Westgate Sea Products Company  
1245 W. Laurel Street  
San Diego, California
- Mr. J. R. Biven  
Coast Fishing Company  
P. O. Box 877  
Wilmington, California
- Dr. Lawrence Blinks  
Hopkins Marine Station  
Pacific Grove, California
- Mr. Rolf Bolin  
Hopkins Marine Station  
Pacific Grove, California
- Mr. J. Burnette  
P. O. Box 807  
Los Altos, California
- Herrn Professor Dr. Albert Defant  
Institut für Geophysik  
der Universität Innsbruck  
Schöpfstrasse 41  
Innsbruck, Austria
- Director  
Chesapeake Bay Institute  
The Johns Hopkins University  
1315 St. Paul Street  
Baltimore 2, Maryland
- Dr. F. N. Clark  
Division of Fish and Game  
California State Fisheries Laboratory  
Terminal Island Station  
San Pedro, California (2 copies)
- Mr. R. S. Croker  
California Division of Fish and Game  
Ferry Building  
San Francisco, California
- Department of Oceanography  
School of Arts and Sciences  
A. & M. College of Texas  
College Station, Texas
- Department of Zoology  
University of California  
Berkeley 4, California  
Attn: Professor Harold Kirby
- Department of Zoology  
University of California  
405 Hilgard Avenue  
Los Angeles 24, California  
Attn: Dr. Boyd W. Walker
- Hancock Foundation  
University of Southern California  
University Park  
Los Angeles 7, California
- General Warren T. Hannum  
Director of Natural Resources  
State Building 1  
Sacramento, California
- Dr. John L. Hart  
Pacific Biological Station  
Nanaimo, British Columbia
- Dr. Robert W. Hiatt  
University of Hawaii  
Honolulu, T.H.
- Dean V. O. Knudsen  
Dean of the Graduate Division  
University of California  
136 Administration Building  
Los Angeles 24, California
- Mr. E. L. Macaulay  
Executive Officer  
California Fish and Game Commission  
Ferry Building  
San Francisco, California

Director  
Marine Physical Laboratory  
University of California  
at the U. S. Navy Electronics Laboratory  
San Diego 52, California

Dr. M. B. Schaefer  
Section of Biology and Oceanography  
Pacific Oceanic Fishery Investigations  
P. O. Box 3830  
Honolulu, T. H.

Dr. John C. Marr  
U. S. Fish and Wildlife Service  
450-B Jordan Hall  
Stanford, California

Director  
School of Fisheries  
University of Washington  
Seattle 4, Washington

Mr. Donald McKernan  
Fish Commission Laboratory  
Route 1, Box 31A  
Clackamas, Oregon

Mr. O. E. Sette  
Section of Biology and Oceanography  
Pacific Oceanic Fishery Investigations  
P. O. Box 3830  
Honolulu, T. H.

Dr. R. C. Miller  
California Academy of Science  
Golden Gate Park  
San Francisco, California

Dr. Robert G. Sproul, President  
250 Administration Building  
University of California  
Berkeley 4, California

Director  
Oceanographic Laboratories  
University of Washington  
Seattle 5, Washington

Miss Margaret Storey  
Librarian, Natural History Museum  
Stanford, California

Librarian  
Oceanographic Laboratories  
University of Washington  
Friday Harbor, Washington

Dr. Harald U. Sverdrup  
Norwegian Polar Institute  
Observatorieg 1  
Oslo, Norway

Office of Naval Research  
Room T3-2059  
Navy Department  
Washington 25, D. C.  
Attn: Dr. John N. Adkins

Dr. John P. Tully  
Pacific Biological Station  
Nanaimo, British Columbia

Attn: Dr. R. H. Fleming (2 copies)

Dr. Willis H. Rich  
Professor of Fishery Biology  
Stanford, California

Director  
U. S. Navy Electronics Laboratory  
San Diego 52, California (2 copies)

Mr. Norman A. Riddell  
Washington Department of Fisheries  
Smith Tower  
Seattle, Washington

U. S. Hydrographic Office  
Navy Department  
Washington 25, D. C.  
Attn: Dr. R. H. Fleming (2 copies)

Mr. Don T. Saxby  
California Packing Corporation  
101 California Street  
San Francisco, California

Dr. Lionel A. Walford  
Chief, Branch of Fishery Biology  
U. S. Fish and Wildlife Service  
Department of the Interior  
Washington 25, D. C.

Director  
Woods Hole Oceanographic Institution  
Woods Hole, Massachusetts