PHYSICAL OCEANOGRAPHIC, BIOLOGICAL, AND CHEMICAL DATA— SOUTH ATLANTIC COAST OF THE UNITED STATES

Gill Cruise 9

SPECIAL SCIENTIFIC REPORT–FISHERIES No. 313

UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

Explanatory Note

The Special Scientific Report series comprises results of investigations, usually of restricted scope, intended to aid or direct management or utilization practices and as guides for administrative or legislative action. Reports in this series are issued in limited quantities for the official use of Federal, State, or other cooperating agencies, and in processed form for economy and to avoid delay in publication.

United States Department of the Interior, Fred A. Seaton, Secretary
Fish and Wildlife Service, Arnie J. Suomela, Commissioner

PHYSICAL OCEANOGRAPHIC, BIOLOGICAL, AND CHEMICAL DATA SOUTH ATLANTIC COAST OF THE UNITED STATES M/V THEODORE N. GILL CRUISE 9

by

William W. Anderson and Jack W. Gehringer
Fishery Research Biologists
Bureau of Commercial Fisheries

Special Scientific Report--Fisheries No. 313

Washington, D. C.
September 1959

This is one of a series of reports of data collected on cruises of the Theodore N. Gill. The Library of Congress has cataloged this Gill cruise series as follows:

U. S. *Bureau of Commercial Fisheries.*
Physical oceanographic, biological, and chemical data—South Atlantic coast of the United States, M/V Theodore N. Gill. Cruise 1–
Washington, 1956–

v. Illus., charts, diagrs., tables. 26 cm. (U. S. Fish and Wildlife Service. Special scientific report : fisheries)

Report on cruise 1 by the U. S. Fish and Wildlife Service's South Atlantic Fishery Investigations.

1. Atlantic Ocean. 2. Marine biology—Atlantic Ocean. 3. Theodore N. Gill (Motor vessel) I. Title. (Series)

SH11.A335 574.924 59–60028

Library of Congress

The Fish and Wildlife Service series, Special Scientific Report--Fisheries, is cataloged as follows:

U. S. *Fish and Wildlife Service.*
Special scientific report : fisheries. no. 1–
[Washington] 1949–

no. Illus., maps, diagrs. 27 cm.

Supersedes in part the Service's Special scientific report.

1. Fisheries—Research.

SH11.A335 639.2072 59–60217

Library of Congress

CONTENTS

LIST OF FIGURES

LIST OF TABLES

PHYSICAL OCEANOGRAPHIC, BIOLOGICAL, AND CHEMICAL DATA
SOUTH ATLANTIC COAST OF THE UNITED STATES
M/V THEODORE N. GILL CRUISE 9

This is the ninth, and final, in a series of reports presenting basic data from cruises of the Theodore N. Gill in waters off the south Atlantic coast of the United States.

Background of the investigations; objectives; procedures on station; and chemical, biological, and oceanographic methods and procedures were presented in the report for Cruise 1 (Anderson, Gehringer, and Cohen, 1956). Biological methods and procedures were the same as those modified on Cruise 3 (Anderson and Gehringer, 1957). The basic station plan is shown in figure 1.

NARRATIVE ACCOUNT OF CRUISE 9

The Gill sailed on November 3, 1954 from Brunswick, Georgia to begin the southern leg of the cruise. Special station 5 was reached and occupied on November 4, and special stations 6, 7, and 8 were worked on November 5. The vessel proceeded to the standard station off Elbow Cay, B.W.I. and occupied it for 44 continuous hours during November 6, 7, and 8. A total of 15 Nansen bottle casts were made on this station, including one 2500-meter cast. Routine meteorological and bathythermograph observations were made.

On November 8 the vessel moored at Nassau, B.W.I., and equipment for special ambient work was installed by scientists from Hudson Laboratories. This ambient work was conducted in the Tongue of the Ocean on November 10, 11, and 12--including a 1200-meter Nansen bottle cast. The vessel returned to Nassau where the special equipment was unloaded and preparations were made for resuming regular cruise work. Unfavorable winds delayed occupation of regular station 1 until November 16.

Workable weather prevailed until regular station 31 was reached, where heavy seas and rain squalls forced cancellation of regular stations 31 to 34. The vessel returned to Brunswick on November 20, terminating the southern leg of the cruise.

Departure of the vessel from Brunswick on November 29 began the northern leg of the cruise. High winds and rough seas made this leg of the cruise very difficult to work, with the vessel being forced into port or favorable anchorage several times by winds 40 to 60 miles per hour. In the Cape Lookout area a sleet and snow storm converted the vessel into an unusual sight for southern waters. Owing to continuous bad weather and storm warnings it was necessary to terminate the cruise without occupation of regular stations 64, 73 to 80, and special stations 1 through 4. The Gill returned to Brunswick on December 12, terminating the northern leg of the cruise. The cruise track is shown in figure 2.

Sixty-seven regular stations, 5 special stations, standard station, and one Tongue of the Ocean station were occupied during the cruise. On these stations 88 Nansen bottle casts and bathythermograph lowerings were made. Determinations for oxygen were run aboard vessel for all stations and all levels. Water samples for shore analysis of salinity, total phosphorus, inorganic phosphate, carbohydrate, proteins, and nitrate-nitrite were obtained for all stations and all levels. Bottom sampling with a modified orange-peel dredge was attempted on those stations where a number of bottom sediment samples had not been secured on previous cruises. Secchi disk readings were taken during daylight hours when conditions permitted. Oblique plankton tows (surface tows in shallow water) were made with the Gulf III all-metal plankton

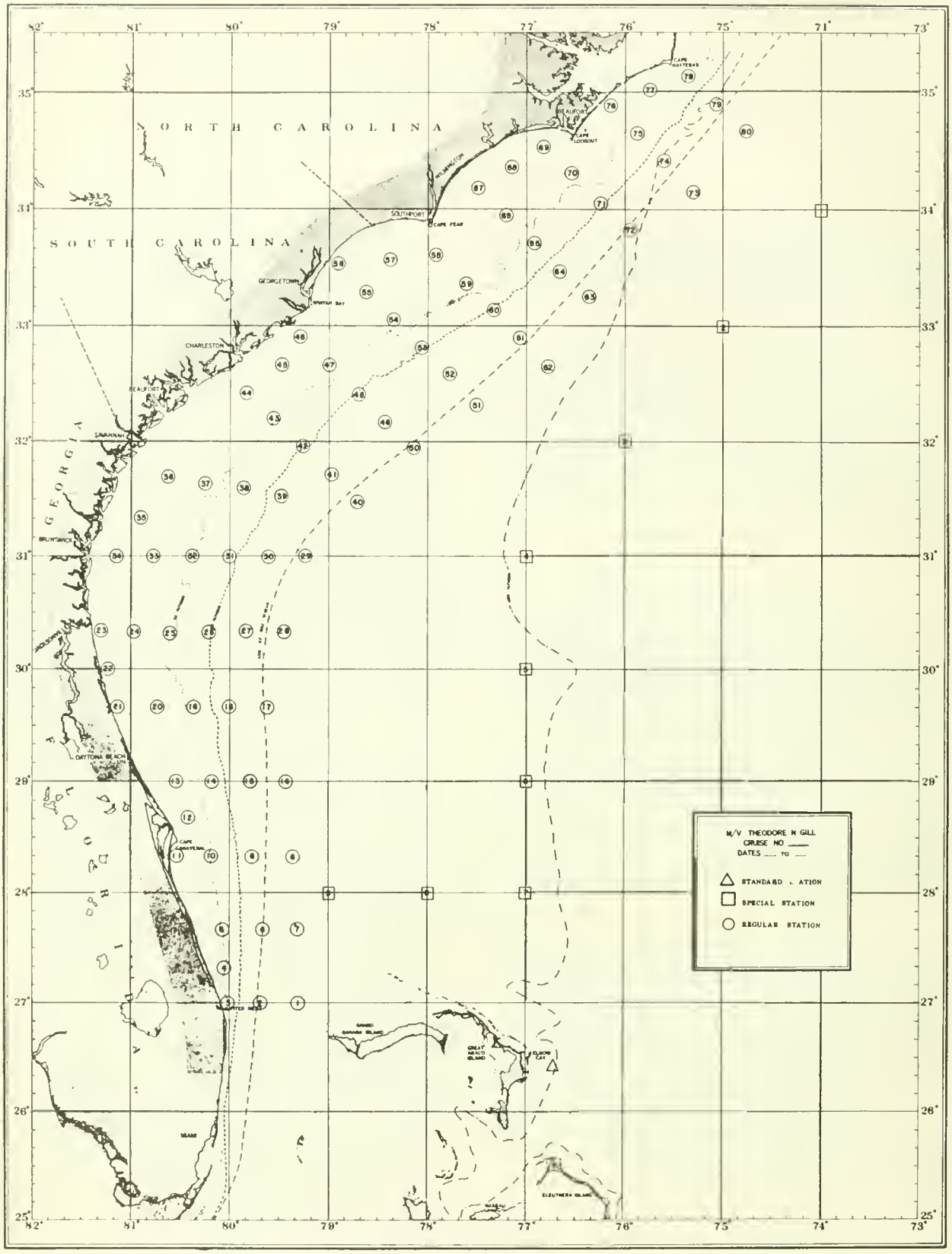

Figure 1.--Basic station plan.

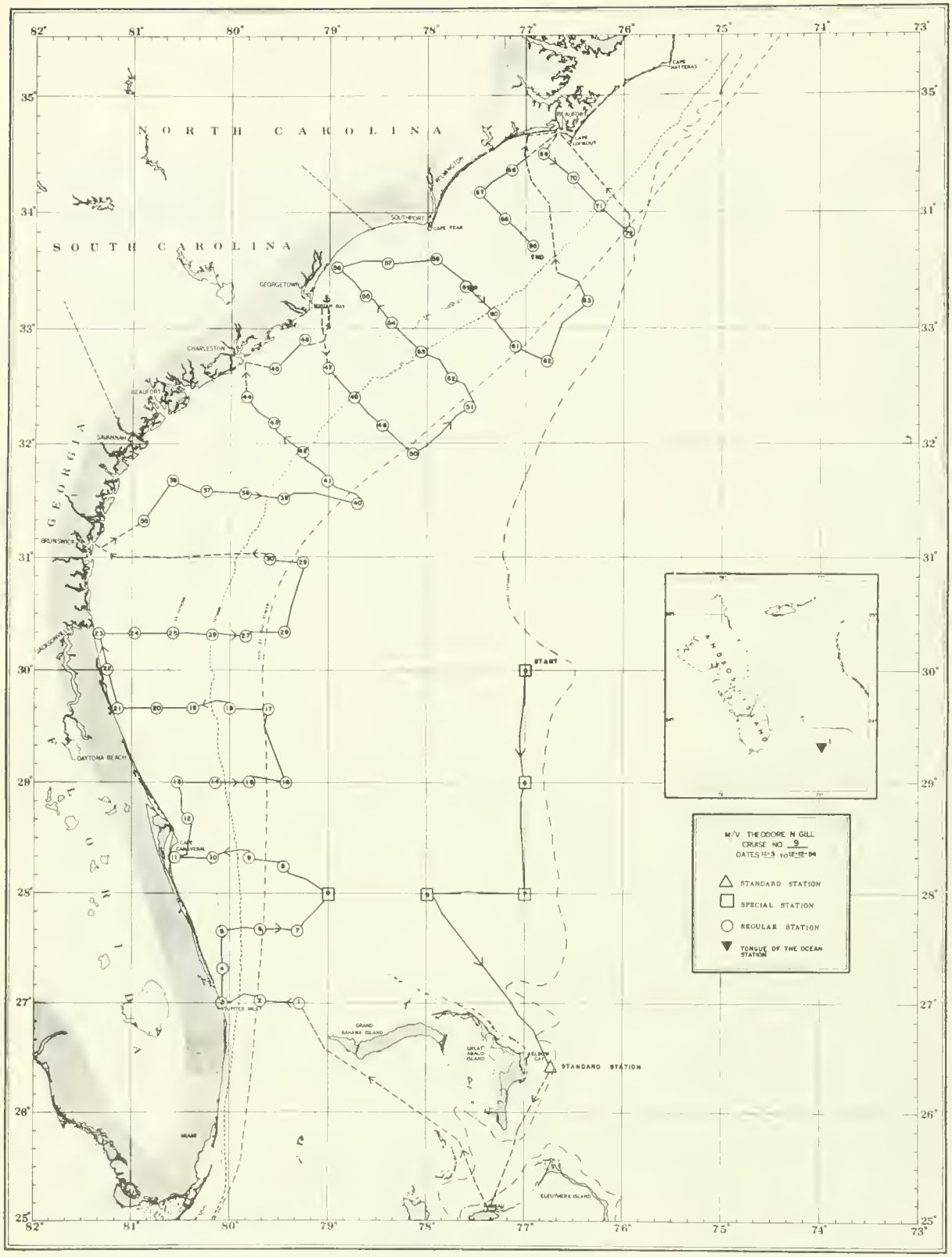

Figure 2.--Track chart.

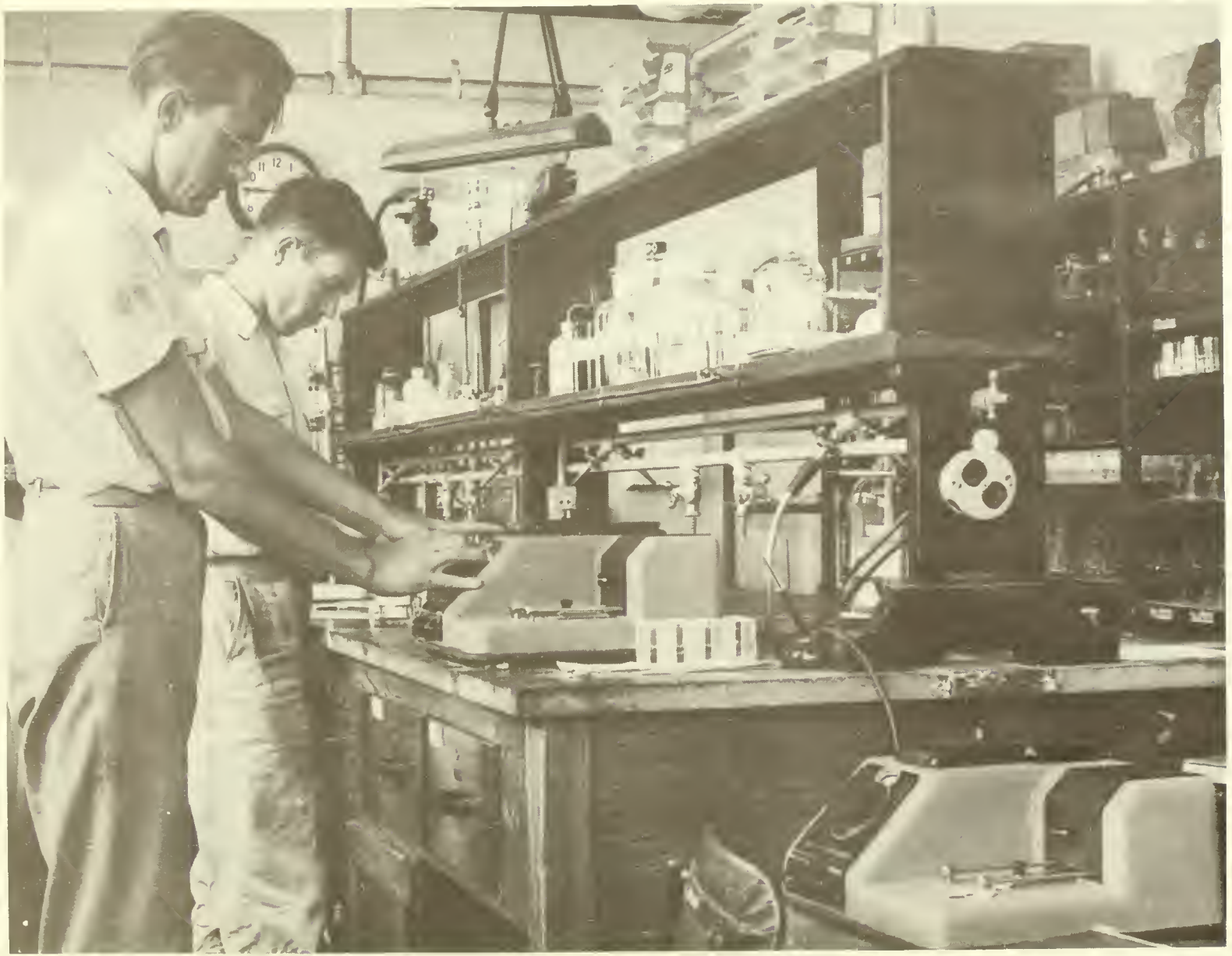

Figure 3.--Laboratory analysis of water samples.

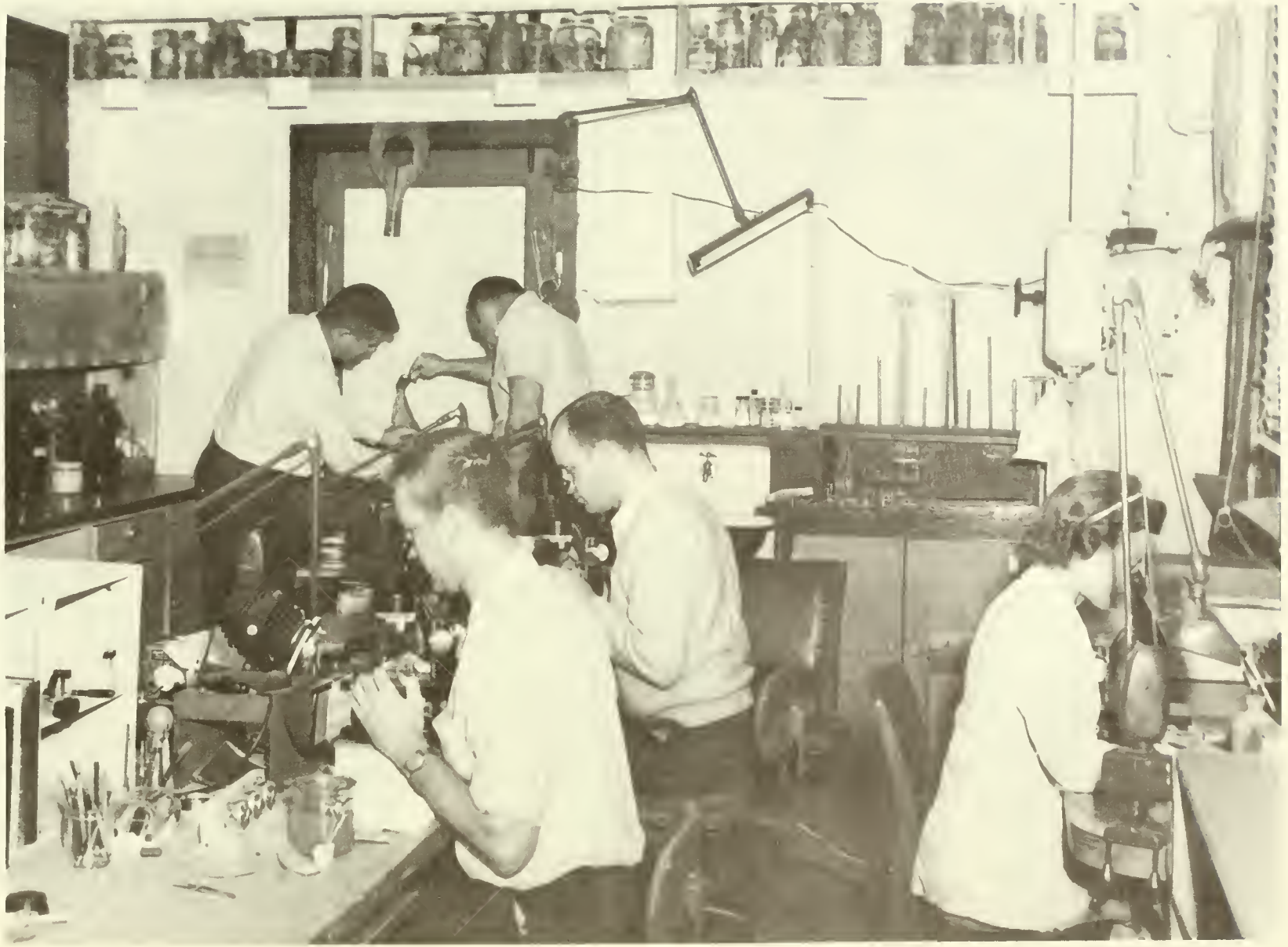

Figure 4.--Sorting and identifying plankton and fish.

sampler on all but two of the regular and special stations--heavy seas made use of a half-meter silk net advisable on these two stations. Thirty-three runs between stations were accomplished with the Gulf IA high-speed plankton sampler, and 25 runs were obtained with the continuous plankton sampler. Dip-net fishing was carried out at night (under lights) and during the day while on station--results were poor during the entire cruise although conditions for this operation were favorable on many occasions. Trolling with nylon and bone jigs between stations for larger fish was also poor.

Twelve drift bottles were released for the Woods Hole Oceanographic Institution on each of the inshore stations. The bottles used were 8-ounce, clear glass soda bottles approximately 22 cm. high and 6 cm. in diameter. To reduce wind drift the bottles were ballasted with clean dry sand, so as to float vertically at or near the surface. Strangely, there were no returns from these releases.

This cruise completed a 2-year field study phase of oceanographic and biological conditions along the south Atlantic coast of the United States.

Scientific personnel participating in the cruise were:

I. Southern Leg

U. S. Fish and Wildlife Service and Cooperators:

William W. Anderson	Chief Scientist
Frank T. Knapp	Biologist (Georgia Game and Fish Commission)
Edward Cohen	Chemist
Charles P. Goodwin	Chemical Aid
Clyde C. Bryant	Chemical Aid

Navy Hydrographic Office:

Melvin Light	Senior Oceanographer
Lloyd Wilson	Oceanographer
William Maloney	Oceanographer

II. Northern Leg

U. S. Fish and Wildlife Service:

William W. Anderson	Chief Scientist
Jack W. Gehringer	Fishery Research Biologist
Edward Cohen	Chemist
Charles P. Goodwin	Chemical Aid
Clyde C. Bryant	Chemical Aid

Navy Hydrographic Office:

Melvin Light	Senior Oceanographer
Lloyd Wilson	Oceanographer
William Maloney	Oceanographer

EXPLANATION OF DATA SHEETS AND TABLES

Oceanographic and Chemical

Each of the items appearing on the station data pages is explained below. All doubtful data are indicated and were not used in the construction of the curves from which the interpolated values (standard depth values) were derived. Observed values which were obviously false were omitted entirely. A dash in a table means that no value was available. Interpolations for standard depth values for temperature, salinity, sigma-t, and oxygen are IBM calculations; those for the chemical constituents were derived from straight lines between observed values.

The profiles of salinity, temperature, and density were prepared from these data, and appear as figures 5-17.

1. Cruise Number. The first cruise over the established station pattern (fig. 1) was numbered Gill 1, and subsequent cruises, Gill 2 through Gill 9 (only Gill 9 is covered by the present report).

2. Station Number. Stations are numbered consecutively, starting with one, at the beginning of each cruise. The station pattern and numbers as shown in figure 1 were maintained on each cruise. If a station or series of stations was not occupied, these station numbers are omitted. Regular stations have numbers only; standard and special stations are specifically indicated.

3. Date. Month, day, and year are given.

4. Latitude and Longitude. The position of the station is given in degrees and minutes.

5. Time. Given in Greenwich Mean Time and is that hour nearest to the start of the first cast.

6. Depth. Is the observed uncorrected sonic sounding for the station, recorded in meters.

7. Wind. Wind speed is given in meters per second. Direction from which the wind blows is coded in degrees true to the nearest ten degrees. The last zero is omitted. North is 36 on this scale and

calm is 00. See table 1, "Compass Direction Conversion Table for Wind, Sea, and Swell Directions."

8. Barometer. The barometric pressure is coded in millibars, neglecting the 900 or 1000. Thus 996 millibars is coded as 96 and 1008 millibars is coded as 08.

9. Air Temperature. Dry bulb and wet bulb temperatures are entered to the nearest tenth of a degree (centigrade).

10. Humidity. The percent of humidity is coded directly.

11. Weather. Weather is coded as indicated in table 2, "Numerical Weather Codes-Present Weather."

12. Clouds. Cloud type and amount are coded as indicated in table 3, "Cloud Type"; and table 4, "Cloud Amount."

13. Sea. Sea direction and amount are coded as indicated in table 5, "Sea Amount"; and table 1.

14. Swell. Swell directions and amount are coded as indicated in table 6, "Swell Amount"; and table 1.

15. Visibility. Visibility is coded as indicated in table 7, "Visibility."

16. Water Transparency. Given as meters to which a Secchi disc is visible.

Subsurface Observations

1. Sample Depth. Observed (actual) depth of each sample is given in meters. Interpolated values at standard depths are also given. The standard depths in meters are: 0, 10, 20, 30, 50, 75, 100, 150, 200, 250, 300, 400, 500, 600, 700, 800, 1000, 1200, 1500, 2000, 2500, 3000, and thence every 1000 meters.

2. Temperature. The centigrade temperature is given in degrees and hundredths.

3. Salinity. Salinity is given in parts per thousand to two decimal places.

4. Sigma-t. To convert to density divide by 1000 and add 1. Thus, a sigma-t value of 22.35 converts to a density of 1.02235.

5. Dissolved Oxygen. These values are given in milliliters per liter to two decimal places.

6. Total Phosphorus. Values are given in microgram atoms per liter to the nearest 0.1 of a unit.

7. Inorganic Phosphate. Values are given in microgram atoms per liter to the nearest 0.1 of a unit.

8. Nitrate-nitrite. These values are given in microgram atoms per liter to the nearest 0.5 of a unit.

9. Carbohydrates (Arabinose). These values are given in terms of milligrams per liter to the nearest 0.1 of a unit. Collier et al. (1953) presented a technique for estimating certain elements of the organic materials in sea water which react to the test for carbohydrates. The carbohydrate values are given as arabinose equivalents, and are not necessarily the actual concentrations of carbohydrate substances.

10. Proteins (Tyrosine). These values are given to the nearest 0.1 of a unit as milligrams per liter of protein material in sea water, which reacts to the test for tyrosine.

Biological

1. Plankton volumes (Gulf III and silk half-meter nets), table 8. The position given is that at beginning of the tow. The depth of the haul is given from 0 to the greatest depth reached. The volumes as given are "wet volumes" (procedures for determination were given under methods in report for cruise 1). Very few samples contained large organisms such as jellyfish (which were removed), so that the volumes represent smaller organisms.

2. Plankton volumes (Gulf IA High-speed sampler), table 9. The position given is that at the center of the tow. All tows were made at the surface. The volumes as given are "wet volumes" (procedures for determination were

given under methods in report for cruise 1). Very few samples contained large organisms such as jellyfish (which were removed), so that the volumes represent smaller organisms.

3. Numbers of plankton organisms per cubic meter of water (half-meter net), table 10. The procedures for plankton tows, methods for sorting and counting, and calculations of numbers of organisms were described under methods in report for cruise 1. Counts are given for major groups as indicated.

4. Numbers of plankton organisms per cubic meter of water (high-speed sampler), table 11. The procedures for plankton tows, methods for sorting and counting, and calculations of numbers of organisms were described under methods for cruise 3. Counts are given for major groups as indicated.

5. Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), table 12. Description of this sampler, its use, and methods of calculating numbers of organisms were given under methods in report for cruise 1. Counts are given by compartment for major groups as indicated.

6. List of the species of fish in dip-net, trolling, and stomach contents collections (D-dip net; T-trolling; S-stomach contents), table 13. The species are listed in alphabetical order, followed by symbols indicating method of capture.

7. Numbers and species of fish taken by trolling, table 14. The stage of gonad development is based on International Council classifications of gonad maturity for the herring (International Councils Rapports et Proces-Verbaux des Reunions, Vol. LXXIV, pp. 117, March 1931). The scale is only a guide to general classifications and must be treated as such.

This scale follows:

Stage I. Virgin individuals. Very small sexual organs close under vertebral column. Wind-coloured torpedo-shaped ovaries about 2-3 cm. long and 2-3 mm. thick. Eggs invisible to naked eye. Whitish or grayish brown knife-shaped testes 2-3 cm. long and 2-3 mm. broad.

Stage II. Maturing virgins or recovering spents. Ovaries somewhat longer than half the length of ventral cavity, about 1 cm. diameter. Eggs small but visible to naked eye. Milt whitish, somewhat bloodshot, same size as ovaries, but still thin and knife-shaped.

Stage III. Sexual organs more swollen, occupying about half of ventral cavity.

Stage IV. Ovaries and testes nearly filling 2/3 of ventral cavity. Eggs not transparent, milt whitish, swollen.

Stage V. Sexual organs filling ventral cavity. Ovaries with some large transparent eggs. Milt white, not yet running.

Stage VI. Roe and milt running (spawning).

Stage VII. Spents. Ovaries slack with residual eggs. Testes baggy, bloodshot. Doubtful cases are indicated by quoting two stages e.g. "St. I-II, St. VII-II," etc.

8. Numbers and species of fish taken by dip net, table 15. There is shown, by family, the genera and species taken. Numbers of specimens from each station are given in parentheses, followed by the approximate size or size range of standard length, in millimeters.

9. During the course of identifying and counting the major plankton organisms as shown in tables 10, 11, and 12 of all nine Gill cruises, certain criteria were established and several limitations of the system were recognized. There follow the classification used with remarks pertinent to each group.

"Protozoa" - Dissodium was included with "Misc. Organisms" for cruises 1 through 3. No protozoa were counted in samples in which radiolaria were so numerous as to make a reasonable estimate impossible, and are so noted in tables in such instances.

"Coelenterata" - separation of nectophores on some siphonophores made it impractical to attempt to match pieces and caused some variation in numbers. Colonial hydroids were not considered plankton.

"Chaetognatha" - only whole chaetognaths or major fragments (such as head with portion of body attached) were counted.

"Misc. Worms" - difficulty in estimating individuals from fragments of Polychaeta may be reflected in an overestimation of total numbers. Rotifers and sipunculoids, if present, were included in "Misc. Organisms."

"Copepoda" - nauplii included with "Misc. Crustaceans."

"Ostracoda, Mysidacea, Amphipoda, Isopoda, Stomatopoda" - no irregularities noted.

"Euphausiacea" - nauplii included with "Misc. Crustaceans."

"Shrimp" - Natantia according to Pratt (1935), including Peneidea, Caridea, plus Stenopidea. Counts include larvae beyond nauplius stage, nauplii were included with "Misc. Crustaceans." Gurney (1942) was generally followed in identification of larvae.

"Crabs" - Reptantia according to Pratt (1935), including Palinura, Astacura, Anomura, and Brachyura. Gurney (1942) was generally followed in identification of larvae.

"Misc. Crustaceans" - all crustacean groups not listed above, plus unidentified crustaceans, and nauplii of copepods, euphausiids, and shrimp.

"Pteropoda" - all except those with spiral shells.

"Misc. Mollusca" - all mollusca except pteropods without spiral shells.

"Larvacea" - no irregularities noted.

"Misc. Tunicata" - probable inaccuracies due to fragmentation of specimens.

"Misc. Organisms" - all groups not listed above, plus invertebrate eggs and unidentified organisms. No "Misc. Organism" counts were made for samples in which echinoderm larvae were too thick and matted to make a reasonable estimate and are so noted in tables in such instances.

ACKNOWLEDGMENTS

Acknowledgment is made to the following agencies and individuals for contributions in securing and processing the material presented. To the Navy Hydrographic Office for their cooperation in planning and executing the field program and for processing the physical oceanographic data. To the Office of Naval Research, and Dr. Sidney R. Galler in particular, for help in planning and executing the field program. To the Georgia Game and Fish Commission for their cooperation in the biological studies; through Frank T. Knapp, biologist. To Dean F. Bumpus of the Woods Hole Oceanographic Institution for preparation of the salinity, temperature, and density profiles which appear as figures 5-17.

From our own staff special recognition is due: Frederick H. Berry for identification of dip-net and stomach content material; Hugh M. Fields, Donald Moore, Louis E. Vogele, and Melba C. Wilson for the plankton organism identifications and counts; Edward Cohen (formerly chemist) for chemical determinations; and Joseph E. Moore for assistance in assembling the physical and chemical data. We also appreciate the assistance of other members of the staff who aided in one way or another: Charles P. Goodwin, Herbert R. Gordy, Jayne E. Buchanan, Mabel Jo Gay, Mary E. Cobb, and E. Reid Poe. Acknowledgment is made of the excellent cooperation of crew members of the M/V Theodore N. Gill and Captain Mauritz C. Fredricksen in particular.

LITERATURE CITED

ANDERSON, WILLIAM W., JACK W. GEHRINGER, AND EDWARD COHEN
1956. Physical oceanographic, biological, and chemical data, south Atlantic coast of the United States, M/V Theodore N. Gill Cruise 1. U. S. Fish and Wildlife Service, Special Scientific Report--Fisheries No. 178, 160 pp., 15 figs.

ANDERSON, WILLIAM W., AND JACK W. GEHRINGER
1957. Physical oceanographic, biological, and chemical data, south Atlantic coast of the United States, M/V Theodore N. Gill Cruise 3. U. S. Fish and Wildlife Service, Special Scientific Report--Fisheries No. 210, 208 pp., 19 figs.

COLLIER, ALBERT, S. M. RAY, A. W. MAGNITZKY, AND JOE O. BELL
1953. Effect of dissolved organic substances on oysters. Fish Bull. Fish and Wildlife Service, 54 (84):167-185, 14 figs.

GURNEY, ROBERT
1942. Larvae of decapod crustacea. Ray Society, London. 287 pp., 122 figs.

PRATT, HENRY SHERRING
1935. A manual of the common invertebrate animals exclusive of insects. P. Blakiston's Son & Co., Inc., Phila., xviii + 854 pp., 974 figs.

Table 1.--Compass direction conversion table for wind, sea, and swell directions

Code	Direction
00	Calm
01	5° to 14°
02	15° to 24° NNE
03	25° to 34°
04	35° to 44°
05	45° to 54° NE
06	55° to 64°
07	65° to 74° ENE
08	75° to 84°
09	85° to 94° E
10	95° to 104°
11	105° to 114° ESE
12	115° to 124°
13	125° to 134°
14	135° to 144° SE
15	145° to 154°
16	155° to 164° SSE
17	165° to 174°
18	175° to 184° S
19	185° to 194°
20	195° to 204° SSW
21	205° to 214°
22	215° to 224°
23	225° to 234° SW
24	235° to 244°
25	245° to 254° WSW
26	255° to 264°
27	265° to 274° W
28	275° to 284°
29	285° to 294° WNW
30	295° to 304°
31	305° to 314°
32	315° to 324° NW
33	325° to 334°
34	335° to 344° NNW
35	345° to 354°
36	355° to 4° N

00 Cloud development NOT observed or NOT observable during past hour	01 Clouds generally dissolving or becoming less developed during past hour	02 State of sky on the whole unchanged during past hour	03 Clouds generally forming or developing during past hour	04 Visibility reduced by smoke	05 Haze	06 Widespread dust in suspension in the air, NOT raised by wind at time of observation	07 Dust or sand raised by wind, at time of observation	08 Well developed dust devil(s) within past hour	09 Duststorm or sandstorm within sight of or at station during past hour
10 Light fog	11 Patches of shallow fog at station, NOT deeper than 6 feet on land	12 More or less continuous shallow fog at station, NOT deeper than 6 feet on land	13 Lightning visible no thunder heard	14 Precipitation within sight, but NOT reaching the ground	15 Precipitation within sight, reaching the ground, but distant from station	16 Precipitation within sight, reaching the ground, near to but NOT at station	17 Thunder heard, but no precipitation at the station	18 Squall(s) within sight during past hour	19 Funnel cloud(s) within sight during past hour
20 Drizzle (NOT freezing and NOT falling as showers) during past hour, but NOT at time of ob	21 Rain (NOT freezing and NOT falling as showers) during past hour, but NOT at time of ob	22 Snow (NOT falling as showers) during past hour, but NOT at time of observation	23 Rain and snow (NOT falling as showers) during past hour, but NOT at time of observation.	24 Freezing drizzle or freezing rain (NOT falling as showars) during past hour, but NOT at time of observation	25 Showars of rain during past hour, but NOT at time of observation	26 Showers of snow, or of rain and snow during past hour but NOT at time of observation	27 Showers of hail, or of hail and rain, during past hour but NOT at time of observation	28 Fog during past hour but NOT at time of observation	29 Thunderstorm (with or without precipitation) during past hour but NOT at time of observation
30 Slight or moderate duststorm or sandstorm has decreased during past hour	31 Slight or moderate duststorm or sandstorm no appreciable change during past hour	32 Slight or moderate duststorm or sandstorm has increased during past hour.	33 Severe duststorm or sandstorm, has decreased during past hour	34 Severe duststorm or sandstorm, no appreciable change during past hour	35 Severe duststorm or sandstorm, has increased during past hour	36 Slight or moderate drifting snow, generally low	37 Heavy drifting snow, generally low	38 Slight or moderate drifting snow generally high	39 Heavy drifting snow generally high
40 Fog at distance at time of observation, but NOT at station during past hour.	41 Fog in patches	42 Fog, sky discernible, has become thinner during past hour	43 Fog, sky NOT discernible, has become thinner during past hour	44 Fog, sky discernible, no appreciable change during past hour	45 Fog sky NOT discernible no appreciable change during past hour	46 Fog, sky discernible, has begun or become thicker during past hour.	47 Fog, sky NOT discernible, has begun or become thicker during past hour.	48 Fog depositing rime sky discernible	49 Fog depositing rime sky not discernible
50 Intermittant drizzle (NOT freezing) slight at time of observation.	51 Continuous drizzle (NOT freezing) slight at time of observation.	52 Intermittent drizzle (NOT freezing) moderate at time of ob.	53 Continuous drizzle (NOT freezing), moderate at time of ob.	54 Intermittent drizzle (NOT freezing), thick at time of observation	55 Continuous drizzle (NOT freezing), thick at time of observation	56 Slight freezing drizzle	57 Moderate or thick freezing drizzle	58 Drizzle and rain, slight	59 Drizzle and rain moderate or heavy
60 Intermittent rain (NOT freezing), slight at time of observation.	61 Continuous rain (NOT freezing), slight at time of observation	62 Intermittent rain (NOT freezing), moderate at time of ob.	63 Continuous rain (NOT freezing), moderate at time of observation	64 Intermittent rain (NOT freezing), heavy at time of observation.	65 Continuous rain (NOT freezing), heavy at time of observation.	66 Slight freezing rain	67 Moderate or heavy freezing rain	68 Rain or drizzle and snow slight	69 Rain or drizzle and snow moderate or heavy
70 Intermittent fall of snowflakes, slight at time of observation.	71 Continuous fall of snowflakes, slight at time of observation	72 Intermittent fall of snowflakes, moderate at time of observation.	73 Continuous fall of snowflakes moderate at time of observation.	74 Intermittent fall of snowflakes, heavy at time of observation.	75 Continuous fall of snowflakes, heavy at time of observation.	76 Ice needles (with or without fog).	77 Granular snow (with or without fog)	78 Isolated starlike snow crystals (with or without fog)	79 Ice pellets (sleet U S definition)
80 Slight rain showar(s).	81 Moderate or heavy rain shower(s).	82 Violent rain shower(s)	83 Slight shower(s) of rain and snow mixed	84 Moderate or heavy shower(s) of rain and snow mixed.	85 Slight snow shower(s).	86 Moderate or heavy snow shower(s)	87 Slight shower(s) of soft or small hail with or without rain or rain and snow mixed	88 Moderate or heavy shower(s) of soft or small hail with or without rain or rain and snow mixed.	89 Slight shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder
90 Moderate or heavy shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder	91 Slight rain at time of ob., thunderstorm during past hour, but NOT at time of observation.	92 Moderate or heavy rain at time of ob., thunderstorm during past hour, but NOT at time of observation.	93 Slight snow or rain and snow mixed or hail at time of observation., thunderstorm during past hour, but not at time of observations.	94 Mod. or heavy snow, or rain and snow mixed or hail at time of ob., thunderstorm during past hour, but NOT at time of observation.	95 Slight or mod thunderstorm without hail, but with rain and/or snow at time of observation.	96 Slight or moderate thunderstorm, with hail at time of observation.	97 Heavy thunderstorm, without hail, but with rain and/or snow at time of observation	98 Thunderstorm combined with duststorm or sandstorm at time of observation.	99 Heavy thunderstorm with hail at time of observation

Table 2.--Numerical weather codes--present weather

Table 3.--Cloud type

Code	
0	Stratus or Fractostratus
1	Cirrus
2	Cirrostratus
3	Cirrocumulus
4	Altocumulus
5	Altostratus
6	Stratuscumulus
7	Nimbostratus
8	Cumulus or Fractocumulus
9	Cumulonumbus

Table 4.--Cloud amount

Code	
0	No clouds
1	Less than 1/10 or 1/10
2	2/10 and 3/10
3	4/10
4	5/10
5	6/10
6	7/10 and 8/10
7	9/10 and 9/10 plus
8	10/10
9	Sky obscured

Table 5.--Sea amount

Code	Approximate Height (feet)	Description
0	------	Calm
1	Less than 1	Smooth
2	1 to 3	Slight
3	3 to 5	Moderate
4	5 to 8	Rough
5	8 to 12	Very rough
6	12 to 20	High
7	20 to 40	Very high
8	40 and over	Mountainous
9	------	Very rough confused sea

Table 6.--Swell amount

Code	Approximate Height (feet)	Description		Approximate Length (feet)
0	----	No swell		----
1	1 to 6	Low swell	Short or Average	0 to 600
2			Long	Above 600
3	6 to 12	Moderate	Short	0 to 300
4			Average	300 to 600
5			Long	Above 600
6	Greater than 12	High	Short	0 to 300
7			Average	300 to 600
8			Long	Above 600
9	----	Confused		----

Table 7. Visibility

Code

0	Dense fog	50 yards
1	Thick fog	200 yards
2	Fog	400 yards
3	Moderate fog	1000 yards
4	Thin fog or mist	1 mile
5	Visibility poor	2 miles
6	Visibility moderate	5 miles
7	Visibility good	10 miles
8	Visibility very good	30 miles
9	Visibility excellent	Over 30 miles

Table 8.--Plankton volumes (Gulf III and silk half-meter nets)

Sta.	Position N. Lat.	Position W. Long.	(1954) Date	Time (EST) Start	Time (EST) End	Vol. water strained (m^3)	Depth of haul in meters	Vol. per m^3 strained (ml)
1	27°00'	79°18'	Nov. 16	0216	0248	295.6	0-65	0.101
2	27°02'	79°41'	Nov. 16	0552	0623	298.9	0-60	0.017
3	27°00'	80°04'	Nov. 16	0850	0911	197.3	Surface	0.152
4	27°20'	80°03'	Nov. 16	1114	1135	191.0	Surface	0.078
5	27°40'	80°03'	Nov. 16	1333	1355	193.5	0-16	0.052
6	27°40'	79°40'	Nov. 16	1650	1722	317.1	0-60	0.016
7	27°40'	79°19'	Nov. 16	2008	2039	303.1	0-60	0.066
8	28°15'	79°27'	Nov. 17	0428	0502	278.5	0-60	0.036
9	28°20'	79°48'	Nov. 17	0759	0832	167.2	0-65	0.048
10	28°20'	80°10'	Nov. 17	1052	1115	218.9	0-15	0.114
11	28°20'	80°33'	Nov. 17	1339	1359	227.0	Surface	0.110
12	28°41'	80°25'	Nov. 17	1632	1653	179.4	Surface	0.028
13	29°00'	80°32'	Nov. 17	1851	1920	245.8	Surface	0.020
14	29°00'	80°09'	Nov. 17	2139	2203	231.7	0-27	0.151
15	29°00'	79°48'	Nov. 18	0113	0144	314.3	0-60	0.111
16	29°00'	79°26'	Nov. 18	0438	0511	278.3	0-65	0.090
17	29°40'	79°37'	Nov. 18	0928	0959	309.2	0-60	0.081
18	29°40'	80°00'	Nov. 18	1311	1343	259.0	0-60	0.077
19	29°40'	80°22'	Nov. 18	1540	1602	110.8	0-16	0.316
20	29°40'	80°45'	Nov. 18	1826	1847	45.3	0-8	0.883
21	29°40'	81°08'	Nov. 18	2103	2125	151.0	0-5	0.530
22	30°00'	81°14'	Nov. 18	2351	0012	246.5	Surface	0.243
23	30°20'	81°20'	Nov. 19	0212	0233	170.3	Surface	0.264
24	30°20'	80°58'	Nov. 19	0440	0501	153.7	Surface	0.098
25	30°20'	80°35'	Nov. 19	0713	0734	123.4	Surface	0.243
26	30°19'	80°11'	Nov. 19	0940	1012	284.7	0-60	0.053
27	30°18'	79°50'	Nov. 19	1256	1327	327.3	0-60	0.061
28	30°20'	79°27'	Nov. 19	1616	1648	270.0	0-65	0.111
29	30°57'	79°14'	Nov. 19	2130	2203	258.9	0-69	0.058
30	30°58'	79°37'	Nov. 20	1340	1410	218.0	0-60	0.115
35	31°20'	80°53'	Nov. 29	1444	1505	204.7	Surface	0.293
36	31°41'	80°36'	Nov. 29	1748	1809	169.7	Surface	0.766
37	31°36'	80°14'	Nov. 29	2045	2107	74.8	0-9	0.401
38	31°35'	79°51'	Nov. 29	2317	2340	183.1	0-19	0.246
39	31°32'	79°28'	Nov. 30	0230	0304	289.0	0-65	0.173
40	31°30'	78°42'	Nov. 30	0650	0722	244.0	0-94	0.082
41*	31°40'	79°01'	Nov. 30	1130	1150	**	Surface	-
42*	31°57'	79°17'	Nov. 30	1455	1515	**	Surface	-
43	32°12'	79°33'	Nov. 30	1749	1809	140.2	Surface	0.357
44	32°26'	79°50'	Nov. 30	2100	2120	159.0	Surface	0.377
45	32°40'	79°33'	Dec. 1	2012	2032	113.9	Surface	0.790

* No. 1 silk half-meter net
** No water volume determined

Table 8.--Plankton volumes (Gulf III and silk half-meter nets), cont'd

Sta.	Position N. Lat.	Position W. Long.	(1954) Date	Time (EST) Start	Time (EST) End	Vol. water strained (m^3)	Depth of haul in meters	Vol. per m^3 strained (ml)
46	32°54'	79°16'	Dec. 1	2238	2258	172.9	Surface	0.174
47	32°40'	79°00'	Dec. 3	1739	1801	87.3	0-13	0.573
48	32°26'	78°43'	Dec. 3	2023	2054	236.5	0-60	0.254
49	32°10'	78°28'	Dec. 3-4	2344	0015	279.1	0-60	0.233
50	31°56'	78°08'	Dec. 4	0246	0318	262.4	0-65	0.152
51	32°20'	77°35'	Dec. 4	0642	0715	253.1	0-65	0.237
52	32°35'	77°47'	Dec. 4	0948	1019	240.2	0-65	0.208
53	32°49'	78°04'	Dec. 4	1241	1315	272.2	0-69	0.165
54	33°03'	78°22'	Dec. 4	1527	1549	92.0	0-16	0.543
55	33°18'	78°38'	Dec. 4	1804	1825	174.4	0-5	0.029
56	33°32'	78°55'	Dec. 4	2034	2055	138.8	Surface	0.108
57	33°34'	78°24'	Dec. 4	2341	0002	162.8	Surface	0.123
58	33°36'	77°55'	Dec. 5	0234	0256	201.0	0-8	0.100
59	33°22'	77°37'	Dec. 5	0508	0529	89.0	0-12	0.393
60	33°08'	77°20'	Dec. 5	0804	0835	260.7	0-65	0.192
61	32°51'	77°07'	Dec. 5	1127	1158	287.1	0-65	0.139
62	32°43'	76°47'	Dec. 5	1450	1521	319.5	0-60	0.110
63	33°12'	76°24'	Dec. 5	1912	1932	190.5	Surface	0.131
65	33°43'	76°56'	Dec. 10	1949	2013	175.0	0-30	0.171
66	33°57'	77°13'	Dec. 10	1706	1728	209.8	0-13	0.310
67	34°11'	77°29'	Dec. 10	1442	1502	197.4	Surface	0.152
68	34°22'	77°09'	Dec. 10	1207	1227	183.4	Surface	0.082
69	34°31'	76°49'	Dec. 8	0929	0949	215.0	Surface	0.046
70	34°18'	76°32'	Dec. 8	1203	1225	181.0	0-13	0.276
71	34°03'	76°15'	Dec. 8	1450	1520	271.7	0-61	0.184
Spc.5	30°00'	77°00'	Nov. 4	1836	1910	325.2	0-65	0.046
Spc.6	29°00'	77°00'	Nov. 5	0252	0326	422.7	0-60	0.047
Spc.7	28°00'	77°00'	Nov. 5	1110	1143	311.0	0-69	0.032
Spc.8	28°00'	78°00'	Nov. 5	1823	1854	367.4	0-60	0.041
Spc.9	28°00'	79°00'	Nov. 17	0005	0037	307.8	0-65	0.016

Table 9.--Plankton volumes (Gulf IA High-speed sampler)

Tow No.	Position of ship at center of tow: N. Lat.	W. Long.	(1954) Date	Time (EST) Start	End	Vol. water strained (m^3)	Vol. per m^3 strained (ml)
1	27°01'	79°31'	Nov. 16	0251	0425	23.0	0.043
2	27°04'	79°55'	Nov. 16	0627	0823	23.0	0.130
3	27°10'	80°04'	Nov. 16	0912	1042	56.8	0.070
4	27°30'	80°04'	Nov. 16	1136	1240	33.6	0.030
5	27°42'	79°50'	Nov. 16	1400	1550	25.1	0.040
6	27°41'	79°28'	Nov. 16	1725	1855	20.2	0.198
7	27°50'	79°09'	Nov. 16	2042	2235	24.1	0.083
8	28°07'	79°12'	Nov. 17	0040	0300	24.0	0.083
9	28°19'	79°37'	Nov. 17	0505	0630	34.7	0.029
10	28°24'	79°56'	Nov. 17	0835	1000	23.1	0.043
11	28°20'	80°20'	Nov. 17	1117	1246	21.2	0.047
12	28°29'	80°23'	Nov. 17	1402	1555	19.8	0.050
13	28°51'	80°30'	Nov. 17	1658	1812	23.0	0.043
14	29°00'	80°23'	Nov. 17	1922	2057	23.0	0.130
15	29°01'	80°00'	Nov. 17	2205	2335	36.3	0.055
16	29°02'	79°36'	Nov. 18	0147	0333	21.3	0.047
17	29°40'	79°49'	Nov. 18	1001	1105	30.6	0.033
18	29°43'	80°11'	Nov. 18	1345	1451	34.1	0.059
19	29°40'	80°31'	Nov. 18	1602	1715	18.6	0.108
20	29°40'	80°56'	Nov. 18	1849	2020	22.0	0.091
21	29°51'	81°11'	Nov. 18	2127	2300	21.5	0.186
22	30°10'	81°16'	Nov. 19	0015	0122	32.4	0.092
23	30°20'	81°09'	Nov. 19	0235	0408	21.2	0.094
24	30°20'	80°46'	Nov. 19	0502	0639	38.9	0.103
25	30°19'	80°22'	Nov. 19	0740	0850	22.8	0.132
26	30°19'	80°01'	Nov. 19	1014	1130	22.5	0.133
27	30°20'	79°39'	Nov. 19	1331	1440	16.3	0.061
28	30°39'	79°20'	Nov. 19	1650	1958	41.5	0.072
29	30°59'	79°23'	Nov. 19	2207	2337	38.0	0.079
30	31°30'	80°45'	Nov. 29	1507	1703	32.7	0.245
31	31°39'	80°30'	Nov. 29	1812	1958	21.3	0.376
32	32°47'	79°26'	Dec. 1	2034	2204	21.9	0.365
33	32°31'	78°52'	Dec. 3	1805	1940	17.6	0.227

Table 10.--Numbers of plankton organisms per cubic meter of water (half-meter net)

Station Number	Reg. 1	Reg. 2	Reg. 3	Reg. 4	Reg. 5	Reg. 6	Reg. 7	Reg. 9
Protozoa	66.7	69.5	593.1	509.5	429.5	79.6	59.4	176.2
Coelenterata	8.2	6.0	3.0	1.7	3.0	7.0	5.7	9.3
Chaetognatha	16.5	5.4	11.9	9.7	20.6	7.1	5.9	12.6
Misc. Worms	1.0	0.7	0.7	0.8	0.7	0.6	1.5	1.3
Copepoda	122.6	65.2	87.0	88.8	109.6	84.9	74.1	173.7
Ostracoda	2.0	1.6	1.4	-	0.3	3.3	5.4	2.0
Mysidacea	-	0.3	-	0.2	0.4	-	-	0.1
Amphipoda	0.5	0.9	4.0	1.4	2.4	0.6	0.4	1.6
Isopoda	-	-	-	-	-	-	-	-
Stomatopoda	0.1	-	-	-	0.3	0.1	0.1	0.2
Euphausiacea	12.2	5.3	0.9	0.2	1.9	4.6	9.0	7.5
Shrimp	0.3	0.6	1.8	0.2	2.9	0.9	0.5	1.1
Crabs	-	0.3	2.9	2.2	1.6	0.7	0.4	0.6
Misc. Crustaceans	-	0.2	1.0	-	0.5	0.3	0.4	0.5
Pteropoda	0.3	0.5	0.8	-	0.5	0.2	0.5	2.8
Misc. Mollusca	1.8	1.4	2.0	0.3	2.5	2.4	2.1	7.0
Larvacea	57.4	22.0	7.3	30.3	39.4	46.1	46.9	96.4
Misc. Tunicata	3.3	1.6	1.4	2.8	1.4	3.3	2.0	1.8
Leptocardia	0.02	0.01	-	-	-	0.01	0.02	0.02
Misc. Organisms	0.8	1.3	38.7	40.0	12.6	12.7	2.0	35.5
Subtotal	293.7	182.8	757.9	688.1	630.1	254.4	216.3	530.2
Fish Eggs	0.03	0.01	0.50	18.43	5.93	-	<0.01	-
Fish Larvae	0.56	0.59	0.53	0.19	1.14	0.87	0.75	0.90
Total	294.3	183.4	758.9	706.7	637.2	255.3	217.1	531.1

Table 10.--Numbers of plankton organisms per cubic meter of water (half-meter net), cont'd

Station Number	Reg. 10	Reg. 11	Reg. 12	Reg. 13	Reg. 14	Reg. 15	Reg. 16	Reg. 17
Protozoa	604.3	5.6	287.2	63.8	441.0	82.3	67.0	73.4
Coelenterata	7.8	-	0.8	1.8	18.4	11.4	9.1	5.0
Chaetognatha	44.6	170.0	11.1	64.7	53.1	6.2	6.6	8.0
Misc. Worms	1.4	-	0.2	0.4	1.3	0.6	0.9	1.6
Copepoda	116.2	745.3	9.6	414.0	137.2	98.5	129.5	94.6
Ostracoda	3.4	-	-	-	1.8	5.7	5.2	2.0
Mysidacea	-	-	-	0.9	0.1	0.1	-	-
Amphipoda	2.3	-	-	-	1.8	0.7	0.7	1.2
Isopoda	-	-	-	0.2	-	0.1	-	-
Stomatopoda	0.3	-	-	-	-	-	0.1	-
Euphausiacea	1.3	-	-	-	2.8	20.9	7.5	9.8
Shrimp	2.4	2.1	0.3	37.9	0.4	0.4	0.5	0.3
Crabs	7.0	0.4	0.6	5.8	2.1	0.2	0.1	0.5
Misc. Crustaceans	0.4	-	2.9	11.6	0.1	0.2	0.1	0.1
Pteropoda	0.5	-	0.1	-	1.7	1.8	1.8	0.9
Misc. Mollusca	5.1	-	-	0.1	26.5	6.4	3.2	2.8
Larvacea	31.0	-	0.9	0.2	37.5	40.5	65.5	47.3
Misc. Tunicata	0.3	-	-	-	4.4	2.4	2.5	1.1
Leptocardia	-	<0.01	0.03	0.08	0.01	0.03	0.03	-
Misc. Organisms	42.6	0.2	31.9	3.5	24.7	16.9	2.1	13.7
Subtotal	870.9	923.6	345.6	605.0	754.9	295.3	302.4	262.3
Fish Eggs	1.97	-	<0.01	0.26	0.12	0.01	0.03	0.07
Fish Larvae	3.48	2.09	0.02	0.02	0.72	0.67	0.83	0.58
Total	876.4	925.7	345.6	605.3	755.7	296.0	303.3	263.0

Table 10.--Numbers of plankton organisms per cubic meter of water (half-meter net), cont'd

Station Number	Reg. 18	Reg. 19	Reg. 20	Reg. 21	Reg. 22	Reg. 23	Reg. 24	Reg. 25
Protozoa	93.3	390.3	524.2	169.9	100.6	64.7	186.2	219.9
Coelenterata	8.5	9.9	4.8	0.1	3.7	32.4	2.3	7.6
Chaetognatha	7.1	24.7	383.8	87.0	45.6	3.5	126.9	67.0
Misc. Worms	1.2	2.0	2.2	0.4	1.0	1.0	0.8	1.0
Copepoda	118.7	474.5	744.1	2242.1	879.0	852.7	466.2	159.8
Ostracoda	1.5	9.4	2.2	-	-	-	2.1	3.2
Mysidacea	0.1	0.4	7.5	6.4	16.9	11.4	7.9	-
Amphipoda	1.5	4.5	9.7	0.1	0.1	0.8	4.2	0.8
Isopoda	0.4	-	-	-	-	-	0.1	-
Stomatopoda	-	-	-	-	-	-	-	-
Euphausiacea	7.7	2.3	-	-	-	-	-	0.3
Shrimp	1.2	51.7	42.4	3.8	1.9	3.0	12.1	1.0
Crabs	0.5	9.7	24.7	1.0	1.5	5.2	6.0	2.1
Misc. Crustaceans	0.3	74.6	10.6	66.0	55.9	12.1	4.9	-
Pteropoda	1.0	2.7	0.9	-	-	-	0.1	2.8
Misc. Mollusca	2.9	11.9	6.2	359.4	71.4	34.8	1.0	5.5
Larvacea	28.6	139.7	514.8	2.1	2.4	4.9	59.3	77.3
Misc. Tunicata	1.7	6.8	0.9	-	-	-	0.8	0.6
Leptocardia	0.02	0.08	0.13	0.01	<0.01	0.01	0.94	0.02
Misc. Organisms	3.2	93.8	341.6	54.8	37.8	2.1	37.2	63.6
Subtotal	279.4	1309.0	2620.7	2993.1	1217.8	1028.6	919.0	612.5
Fish Eggs	<0.01	0.66	6.25	0.04	0.01	0.02	1.24	0.53
Fish Larvae	0.50	1.90	0.42	0.01	0.01	-	0.08	0.32
Total	279.9	1311.6	2627.4	2993.2	1217.8	1028.6	920.3	613.4

Table 10.--Numbers of plankton organisms per cubic meter of water (half-meter net), cont'd

Station Number	Reg. 26	Reg. 27	Reg. 28	Reg. 29	Reg. 30	Reg. 35	Reg. 36	Reg. 37
Protozoa	193.6	52.5	76.2	45.8	83.6	*	*	201.2
Coelenterata	7.6	4.5	4.1	6.0	5.5	-	0.7	13.4
Chaetognatha	20.8	6.3	19.6	7.6	27.2	19.3	23.9	127.5
Misc. Worms	0.9	1.5	0.8	0.8	0.6	0.4	37.5	7.8
Copepoda	128.1	78.4	106.8	70.4	71.0	154.3	194.9	277.8
Ostracoda	2.2	2.0	3.2	4.2	4.0	0.1	15.2	44.4
Mysidacea	-	-	-	-	-	-	1.4	3.2
Amphipoda	1.5	0.7	0.5	0.4	0.6	-	2.1	9.6
Isopoda	-	-	-	-	-	-	-	-
Stomatopoda	-	-	-	-	0.1	-	-	-
Euphausiacea	4.2	4.7	5.0	6.1	9.3	-	-	0.3
Shrimp	0.8	0.4	0.1	0.1	1.0	0.3	15.8	10.2
Crabs	1.5	0.2	0.1	0.1	0.2	1.8	38.7	16.8
Misc. Crustaceans	0.4	0.1	0.5	-	-	8.0	1455.4	119.0
Pteropoda	1.3	1.0	0.4	0.8	1.6	-	0.1	0.8
Misc. Mollusca	3.5	3.2	1.7	1.8	3.6	6.2	52.5	5.3
Larvacea	36.5	27.8	33.8	21.4	14.5	1.8	4.5	136.0
Misc. Tunicata	1.5	0.7	1.6	1.2	0.2	-	0.4	31.3
Leptocardia	<0.01	0.01	0.06	0.01	0.01	0.03	0.01	0.01
Misc. Organisms	32.0	2.6	3.0	1.3	1.0	2.1	22.5	104.9
Subtotal	436.4	186.6	257.5	168.0	224.0	194.3*	1865.6*	1109.5
Fish Eggs	<0.01	0.04	0.07	0.05	-	0.46	0.76	1.14
Fish Larvae	0.68	0.74	0.91	0.66	0.63	0.03	0.62	2.62
Total	437.1	187.4	258.5	168.7	224.6	194.8*	1867.0*	1113.3

* Numerous radiolaria, numbers not determined

Table 10.--Numbers of plankton organisms per cubic meter of water (half-meter net), cont'd

Station Number	Reg. 38	Reg. 39	Reg. 40	Reg. 41*	Reg. 42*	Reg. 43	Reg. 44	Reg. 45
Protozoa	383.2	273.6	75.6	6572	600	388.6	**	**
Coelenterata	8.5	8.3	9.1	1920	120	51.4	2.1	0.5
Chaetognatha	10.7	27.9	9.7	1660	-	74.1	46.7	46.5
Misc. Worms	1.1	1.5	0.6	20	40	3.7	5.8	72.6
Copepoda	155.2	194.4	60.8	8904	240	234.4	88.0	327.6
Ostracoda	7.6	9.7	2.0	-	-	51.4	3.9	15.6
Mysidacea	34.7	0.3	-	-	-	1.1	1.6	1.0
Amphipoda	2.7	2.5	0.5	40	-	18.5	1.5	0.2
Isopoda	0.3	-	0.1	-	-	0.1	-	-
Stomatopoda	-	0.1	0.1	-	-	-	-	-
Euphausiacea	3.9	3.7	3.9	640	-	-	-	-
Shrimp	1.8	1.7	0.5	220	-	2.8	1.5	0.5
Crabs	2.1	1.0	0.3	-	-	4.4	3.0	12.5
Misc. Crustaceans	2.1	0.6	0.2	80	-	2.1	73.3	61.4
Pteropoda	1.8	2.1	0.9	100	-	4.0	0.1	-
Misc. Mollusca	3.4	5.3	3.8	420	-	8.8	34.7	100.5
Larvacea	62.5	52.8	63.4	4540	340	83.2	0.9	76.3
Misc. Tunicata	2.5	1.0	1.2	100	120	4.8	-	-
Leptocardia	<0.01	-	<0.01	-	-	0.01	0.01	0.02
Misc. Organisms	31.3	23.5	25.2	1640	40	43.8	40.0	61.4
Subtotal	715.4	610.0	257.9	26856	1500	977.2	303.1**	776.6**
Fish Eggs	0.96	0.04	0.02	1	1	2.15	0.09	0.17
Fish Larvae	0.63	1.40	0.79	35	1	0.91	0.02	0.03
Total	717.0	611.4	258.7	26892	1502	980.3	303.2**	776.8**

* Total number of organisms in sample, water volume not determined
** Numerous radiolaria, numbers not determined

Table 10.--Numbers of plankton organisms per cubic meter of water (half-meter net), cont'd

Station Number	Reg. 46	Reg. 47	Reg. 48	Reg. 49	Reg. 50	Reg. 51	Reg. 52	Reg. 53
Protozoa	653.5	592.5	224.1	247.6	199.6	320.8	97.1	85.7
Coelenterata	0.3	4.6	7.2	7.1	8.5	10.2	17.2	8.8
Chaetognatha	17.2	72.8	46.6	34.2	21.8	34.3	47.7	40.5
Misc. Worms	18.7	1.1	1.3	1.5	1.4	0.9	4.7	2.9
Copepoda	85.8	415.2	274.3	252.9	122.8	276.4	194.2	151.1
Ostracoda	2.5	19.0	17.0	10.5	6.1	18.6	18.2	9.8
Mysidacea	0.3	0.7	0.2	0.1	0.1	-	0.1	-
Amphipoda	0.5	12.4	3.1	2.4	0.4	3.5	5.6	3.8
Isopoda	-	-	-	-	-	-	-	-
Stomatopoda	-	-	-	-	-	0.1	0.1	-
Euphausiacea	0.1	1.4	1.4	4.0	10.6	2.4	3.9	1.1
Shrimp	0.5	24.3	4.4	3.9	1.0	4.3	1.3	1.0
Crabs	3.4	2.1	1.4	0.9	0.4	3.6	1.1	0.8
Misc. Crustaceans	12.4	3.4	0.9	0.7	0.7	1.1	0.6	0.3
Pteropoda	-	3.9	2.4	4.4	1.1	0.9	1.2	1.2
Misc. Mollusca	3.4	23.4	5.8	11.8	6.2	4.1	5.6	3.7
Larvacea	3.7	162.7	49.3	34.9	64.6	49.4	58.2	32.7
Misc. Tunicata	-	2.1	0.6	0.9	1.0	1.2	1.9	1.2
Leptocardia	-	0.01	<0.01	0.01	<0.01	-	0.01	<0.01
Misc. Organisms	5.4	63.1	55.6	26.6	18.6	59.5	88.2	40.5
Subtotal	807.7	1404.7	695.6	644.4	464.9	791.3	546.9	385.1
Fish Eggs	0.24	7.17	0.14	0.02	0.01	0.18	0.01	0.14
Fish Larvae	0.03	2.35	2.62	2.04	0.67	2.82	0.51	0.58
Total	808.0	1414.2	698.4	646.5	465.6	794.3	547.4	385.8

Table 10.--Numbers of plankton organisms per cubic meter of water (half-meter net), cont'd

Station Number	Reg. 54	Reg. 55	Reg. 56	Reg. 57	Reg. 58	Reg. 59	Reg. 60	Reg. 61
Protozoa	723.6	207.9	177.2	339.9	582.2	586.0	215.5	194.2
Coelenterata	8.5	1.7	8.2	6.4	2.0	9.9	19.5	17.0
Chaetognatha	101.4	38.9	39.7	28.6	31.6	36.4	49.6	39.1
Misc. Worms	4.1	2.4	97.8	11.5	3.9	4.0	3.9	2.4
Copepoda	465.5	77.8	436.8	329.4	104.4	402.6	266.7	149.9
Ostracoda	1.1	3.1	7.2	8.5	11.6	11.5	13.4	4.0
Mysidacea	-	2.9	3.7	5.0	1.5	3.1	0.1	-
Amphipoda	3.0	0.6	0.1	2.1	1.1	4.7	4.8	4.0
Isopoda	-	0.1	-	0.1	-	-	0.2	-
Stomatopoda	0.2	-	-	-	-	-	-	0.1
Euphausiacea	2.6	-	-	-	-	3.1	2.8	5.2
Shrimp	38.3	2.1	1.2	7.6	2.9	16.8	3.1	1.2
Crabs	5.4	2.3	5.9	6.5	5.1	2.5	0.8	0.8
Misc. Crustaceans	0.9	2.4	3.3	3.3	14.7	1.6	0.5	0.5
Pteropoda	12.6	-	-	-	0.3	11.0	3.1	1.4
Misc. Mollusca	15.2	1.0	12.4	5.2	25.3	24.5	5.2	3.5
Larvacea	216.6	49.8	74.8	102.9	53.8	283.5	57.7	49.5
Misc. Tunicata	2.4	0.2	0.3	-	0.3	4.3	22.8	1.2
Leptocardia	-	0.14	-	-	-	0.02	-	<0.01
Misc. Organisms	96.8	31.6	39.7	49.5	31.6	97.7	56.1	25.1
Subtotal	1698.2	424.9	908.3	906.5	872.3	1503.2	725.8	499.1
Fish Eggs	1.92	0.15	0.14	0.20	0.36	2.48	0.06	0.02
Fish Larvae	4.12	0.02	0.01	0.27	0.06	3.53	1.01	0.92
Total	1704.2	425.1	908.4	907.0	872.7	1509.2	726.9	500.0

Table 10.--Numbers of plankton organisms per cubic meter of water (half-meter net), cont'd

Station Number	Reg. 62	Reg. 63	Reg. 65	Reg. 66	Reg. 67	Reg. 68	Reg. 69	Reg. 70
Protozoa	140.7	188.1	63.0	143.5	300.7	122.5	317.5	82.0
Coelenterata	5.5	10.8	7.2	11.5	8.2	7.1	3.5	14.9
Chaetognatha	12.4	12.1	29.5	65.1	132.1	38.1	19.6	42.2
Misc. Worms	1.7	1.9	0.4	11.9	4.4	11.6	1.8	2.9
Copepoda	106.8	97.9	116.3	558.8	438.2	319.0	32.6	302.2
Ostracoda	2.3	2.0	14.0	10.2	5.1	7.0	-	6.6
Mysidacea	-	0.4	0.7	0.5	0.1	-	-	0.1
Amphipoda	1.5	1.7	6.4	4.4	0.5	0.3	0.1	2.2
Isopoda	-	-	-	0.2	-	-	-	0.2
Stomatopoda	-	0.1	-	-	-	0.1	-	0.1
Euphausiacea	5.7	10.2	2.8	1.8	-	-	-	2.3
Shrimp	0.6	0.7	3.6	15.1	3.0	2.4	-	9.9
Crabs	0.1	0.1	1.4	1.3	4.9	1.2	-	1.1
Misc. Crustaceans	0.1	0.2	0.8	1.7	5.2	4.0	1.7	1.4
Pteropoda	0.5	1.2	0.9	3.7	0.9	0.3	0.2	0.6
Misc. Mollusca	3.1	8.0	2.0	25.5	14.4	32.4	3.5	8.8
Larvacea	45.8	67.9	8.4	9.4	51.6	26.6	19.8	66.8
Misc. Tunicata	1.6	1.2	0.9	0.5	0.7	0.5	0.1	1.6
Leptocardia	0.01	0.01	<0.01	-	-	-	-	-
Misc. Organisms	5.6	3.9	30.3	42.4	226.6	354.9	12.6	8.4
Subtotal	334.0	408.4	288.6	907.5	1196.6	928.0	413.0	554.3
Fish Eggs	0.01	-	0.28	1.31	0.29	0.23	0.52	1.12
Fish Larvae	0.85	0.57	1.23	2.95	1.50	0.81	0.02	126.94
Total	334.9	409.0	290.1	911.8	1198.4	929.0	413.5	682.4

Table 10.--Numbers of plankton organisms per cubic meter of water (half-meter net), cont'd

Station Number	Reg. 71	Spec. 5	Spec. 6	Spec. 7	Spec. 8	Spec. 9
Protozoa	123.3	126.5	68.2	60.7	76.7	56.5
Coelenterata	15.6	4.2	6.8	4.6	5.2	8.7
Chaetognatha	50.7	4.0	4.5	3.7	16.2	4.2
Misc. Worms	2.3	0.7	0.9	0.4	1.1	0.6
Copepoda	254.4	80.8	47.1	48.4	53.7	64.0
Ostracoda	7.7	4.7	3.6	3.1	5.8	6.7
Mysidacea	-	-	<0.1	-	0.1	-
Amphipoda	3.8	0.5	0.5	0.2	0.4	0.3
Isopoda	-	-	-	-	<0.1	-
Stomatopoda	-	0.1	-	-	-	-
Euphausiacea	1.8	4.1	2.8	1.0	3.5	4.7
Shrimp	4.1	0.6	0.6	1.1	0.5	0.4
Crabs	2.8	0.1	<0.1	-	-	-
Misc. Crustaceans	0.3	0.2	0.1	0.1	-	0.3
Pteropoda	2.2	0.4	1.0	0.4	0.8	0.6
Misc. Mollusca	7.1	3.4	2.7	1.5	2.9	2.9
Larvacea	52.3	37.2	19.6	45.7	27.1	44.8
Misc. Tunicata	1.6	0.3	0.8	0.7	0.2	0.5
Leptocardia	-	0.09	0.05	0.01	0.21	0.04
Misc. Organisms	23.4	4.2	13.5	7.8	3.6	4.2
Subtotal	553.4	272.1	173.0	179.4	198.1	199.4
Fish Eggs	0.15	0.03	0.02	0.02	0.01	0.06
Fish Larvae	9.47	1.04	1.31	0.74	0.59	0.67
Total	563.0	273.2	174.3	180.2	198.7	200.1

Table 11.--Numbers of plankton organisms per cubic meter of water (high-speed sampler)

Tow Number	1	2	3	4	5	6	7	8
Protozoa	38.7	589.9	220.2	364.4	166.8	123.3	118.8	128.1
Coelenterata	12.0	14.8	3.6	3.0	7.4	16.8	8.9	11.2
Chaetognatha	5.0	7.2	4.3	1.9	8.6	9.4	4.4	4.8
Misc. Worms	0.4	0.9	0.1	0.3	0.8	1.7	1.4	1.9
Copepoda	126.7	165.9	19.2	47.5	67.6	196.8	112.2	106.0
Ostracoda	0.9	1.7	0.2	-	-	1.0	1.6	2.5
Mysidacea	-	0.2	-	-	-	-	-	0.2
Amphipoda	0.9	2.2	1.8	0.4	2.0	2.0	1.0	0.4
Isopoda	-	-	-	-	-	-	-	-
Stomatopoda	-	0.2	0.2	-	-	0.5	0.2	-
Euphausiacea	2.2	12.6	0.4	-	2.0	9.6	8.5	6.7
Shrimp	0.9	2.0	1.2	0.7	0.6	1.0	1.6	1.4
Crabs	0.2	1.1	1.8	1.3	-	0.7	0.6	1.2
Misc. Crustaceans	0.2	-	0.2	-	0.4	0.7	0.2	0.4
Pteropoda	1.5	3.5	0.6	0.3	0.4	3.0	3.3	2.7
Misc. Mollusca	5.0	5.4	1.1	0.9	3.6	5.9	4.6	5.8
Larvacea	17.6	22.8	3.2	1.8	19.9	89.2	85.8	81.7
Misc. Tunicata	3.3	5.0	0.4	1.0	3.2	2.7	2.5	2.5
Leptocardia	-	-	-	-	-	-	0.04	0.04
Misc. Organisms	2.8	48.4	4.8	2.4	3.2	7.2	13.7	6.7
Subtotal	218.3	883.8	263.3	425.9	286.5	471.5	369.3	364.2
Fish Eggs	-	0.09	0.60	0.68	2.71	0.10	-	0.25
Fish Larvae	0.26	0.22	0.23	0.42	0.28	0.30	0.12	0.21
Total	218.6	884.1	264.1	427.0	289.5	471.9	369.4	364.7

Table 11.--Numbers of plankton organisms per cubic meter of water (high-speed sampler), cont'd

Tow Number	9	10	11	12	13	14	15	16
Protozoa	74.8	419.9	247.5	160.6	244.3	486.2	191.3	23.2
Coelenterata	7.9	13.6	2.4	1.5	3.9	2.2	9.4	6.8
Chaetognatha	2.2	13.8	11.1	5.6	9.3	5.0	7.2	3.0
Misc. Worms	0.1	1.5	1.2	1.0	1.5	1.3	1.1	-
Copepoda	47.3	87.2	127.5	174.0	59.9	278.8	77.4	33.1
Ostracoda	0.6	0.2	-	-	-	5.9	1.8	1.6
Mysidacea	-	-	-	0.2	-	3.7	-	-
Amphipoda	0.4	2.2	-	-	-	1.5	0.7	0.2
Isopoda	-	-	-	-	-	-	0.1	-
Stomatopoda	-	-	-	-	-	-	-	-
Euphausiacea	3.2	5.6	-	-	-	-	3.2	4.7
Shrimp	0.6	0.4	9.4	13.9	5.4	92.2	8.7	2.8
Crabs	-	0.4	17.7	6.6	1.3	7.8	1.5	0.5
Misc. Crustaceans	-	1.1	0.7	2.0	3.9	16.5	1.2	0.5
Pteropoda	0.9	3.7	0.7	-	-	2.8	1.8	1.6
Misc. Mollusca	2.3	2.6	0.9	5.3	1.1	5.9	4.0	4.2
Larvacea	15.3	47.6	12.3	-	0.4	64.5	45.3	13.4
Misc. Tunicata	1.6	6.1	0.7	-	-	1.3	3.6	2.3
Leptocardia	-	-	-	-	-	-	0.03	-
Misc. Organisms	4.8	12.6	17.4	9.6	15.0	25.9	12.1	2.8
Subtotal	162.0	618.5	449.5	380.3	346.0	1001.5	370.4	100.7
Fish Eggs	-	0.39	0.14	0.25	-	1.09	-	0.09
Fish Larvae	0.26	0.35	0.19	0.05	-	0.30	0.14	0.14
Total	162.3	619.2	449.8	380.6	346.0	1002.9	370.5	100.9

Table 11.--Numbers of plankton organisms per cubic meter of water (high-speed sampler), cont'd

Tow Number	17	18	19	20	21	22	23	24
Protozoa	43.5	286.0	347.6	200.0	207.1	44.2	202.5	212.5
Coelenterata	4.1	4.4	6.2	3.6	9.5	5.2	4.2	4.5
Chaetognatha	2.4	6.6	7.5	10.0	9.5	4.9	1.6	8.9
Misc. Worms	1.0	0.9	0.5	0.7	2.1	2.8	2.6	0.9
Copepoda	38.2	74.6	202.3	103.0	973.7	351.7	275.0	162.1
Ostracoda	0.2	0.1	-	0.4	-	-	2.4	0.6
Mysidacea	-	-	-	0.7	7.7	9.9	2.6	0.6
Amphipoda	0.3	0.6	2.7	0.7	-	-	0.5	0.8
Isopoda	-	-	-	-	-	0.2	0.5	0.2
Stomatopoda	-	-	0.5	-	-	-	-	-
Euphausiacea	0.5	1.2	-	-	0.2	-	-	-
Shrimp	-	1.2	3.0	5.0	4.0	3.4	1.9	3.0
Crabs	0.3	1.3	6.4	4.1	3.2	3.2	6.6	7.3
Misc. Crustaceans	0.3	0.1	3.5	25.0	157.8	27.0	19.3	5.6
Pteropoda	0.2	1.3	1.9	-	-	-	-	1.0
Misc. Mollusca	1.3	1.9	5.9	0.2	189.8	25.2	6.8	7.1
Larvacea	14.0	8.5	65.6	10.2	1.9	1.8	1.6	46.3
Misc. Tunicata	2.1	1.8	0.5	-	-	-	-	2.6
Leptocardia	-	-	-	-	-	-	-	-
Misc. Organisms	1.5	3.8	4.8	2.7	91.2	47.4	30.4	24.5
Subtotal	109.9	394.3	658.9	366.3	1657.7	526.9	558.5	488.5
Fish Eggs	0.03	-	1.13	0.64	-	-	0.47	0.28
Fish Larvae	0.10	0.32	0.38	0.23	0.09	-	-	0.13
Total	110.0	394.6	660.4	367.2	1657.8	526.9	559.0	488.9

Table 11.--Numbers of plankton organisms per cubic meter of water (high-speed sampler), cont'd

Tow Number	25	26	27	28	29	30	31	32
Protozoa	239.4	181.4	64.4	79.2	16.4	*	1637.3	1260.9
Coelenterata	12.7	7.6	9.8	9.2	4.7	0.8	9.6	1.1
Chaetognatha	2.8	6.2	6.7	3.7	2.4	4.0	19.0	6.8
Misc. Worms	0.4	0.2	0.3	1.2	0.9	8.7	9.2	58.1
Copepoda	111.6	53.6	68.4	99.6	28.6	134.5	520.0	196.0
Ostracoda	1.5	-	-	1.6	0.6	4.4	77.1	0.9
Mysidacea	0.2	0.2	-	-	-	-	4.0	-
Amphipoda	1.8	0.4	0.6	0.6	0.4	-	8.0	0.2
Isopoda	-	-	-	0.1	-	-	0.7	0.2
Stomatopoda	0.2	-	-	-	-	-	-	-
Euphausiacea	0.6	1.1	0.9	9.8	4.6	-	-	-
Shrimp	1.1	0.4	0.3	0.8	0.5	2.3	12.0	0.7
Crabs	4.8	0.2	-	0.1	0.1	10.7	24.9	2.5
Misc. Crustaceans	0.9	0.4	-	0.2	0.3	53.5	296.1	14.6
Pteropoda	3.1	1.6	1.8	1.8	1.2	-	-	-
Misc. Mollusca	10.3	4.2	1.8	2.2	2.1	51.9	3.8	53.2
Larvacea	16.9	30.9	28.8	15.8	5.5	30.8	82.1	2.0
Misc. Tunicata	2.2	1.3	1.2	0.7	0.6	-	12.7	-
Leptocardia	-	-	-	-	-	-	0.14	-
Misc. Organisms	8.1	4.7	2.4	4.7	2.2	55.1	35.9	2.5
Subtotal	418.6	294.4	187.4	231.3	71.1	356.7*	2752.5	1599.7
Fish Eggs	1.23	0.09	0.12	0.02	-	0.37	1.31	0.14
Fish Larvae	0.04	0.22	0.06	0.17	0.21	0.09	1.08	-
Total	419.9	294.7	187.6	231.5	71.3	357.2*	2754.9	1599.8

* Numerous radiolaria, numbers not determined

Table 11.--Numbers of plankton organisms per cubic meter of water (high-speed sampler), cont'd

Tow Number	33
Protozoa	295.1
Coelenterata	9.4
Chaetognatha	7.7
Misc. Worms	2.0
Copepoda	692.6
Ostracoda	256.0
Mysidacea	2.8
Amphipoda	25.6
Isopoda	-
Stomatopoda	-
Euphausiacea	1.1
Shrimp	16.5
Crabs	5.1
Misc. Crustaceans	2.0
Pteropoda	5.7
Misc. Mollusca	8.0
Larvacea	81.3
Misc. Tunicata	2.6
Leptocardia	0.06
Misc. Organisms	216.8
Subtotal	1630.4
Fish Eggs	2.27
Fish Larvae	0.40
Total	1633.1

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler)

Run No. 1 Date November 16, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	0231	0334	0437	0540	0643	0746	0849	0952
Position of Ship: (N. Lat.	27°01'	27°01'	27°02'	27°04'	27°06'	27°03'	27°02'	27°10'
(W. Long.	79°21'	79°31'	79°37'	79°40'	79°49'	79°57'	80°02'	80°05'
Protozoa	16.9	5.6	5.6	11.3	11.3	101.5	276.4	197.4
Coelenterata	-	-	-	-	5.6	5.6	-	11.3
Chaetognatha	-	5.6	-	-	5.6	-	-	5.6
Misc. Worms	-	5.6	-	-	-	-	-	-
Copepoda	22.6	107.2	11.3	112.8	22.6	73.3	50.8	45.1
Ostracoda	-	-	-	-	-	-	11.3	-
Amphipoda	-	-	-	5.6	-	-	-	-
Shrimp	-	-	-	-	-	-	-	-
Crabs	5.6	-	-	-	-	-	5.6	-
Misc. Crustaceans	-	-	-	-	-	5.6	5.6	5.6
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	39.5	-
Misc. Organisms	5.6	16.9	-	11.3	5.6	16.9	5.6	16.9
Subtotal	50.7	140.9	16.9	141.0	50.7	202.9	394.8	281.9
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	50.7	140.9	16.9	141.0	50.7	202.9	394.8	281.9

Run No. 2 Date November 16, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1107	1208	1309	1410	1511	1612	1713	1814
Position of Ship: (N. Lat.	27°21'	27°30'	27°38'	27°41'	27°42'	27°41'	27°42'	27°41'
(W. Long.	80°03'	80°04'	80°03'	80°00'	79°49'	79°41'	79°38'	79°28'
Protozoa	62.2	67.3	124.3	-	10.4	10.4	-	-
Coelenterata	5.2	-	-	-	-	5.2	-	-
Chaetognatha	5.2	5.2	5.2	-	20.7	5.2	-	-
Misc. Worms	-	-	-	-	-	15.5	-	10.4
Copepoda	57.0	51.8	57.0	15.5	77.7	46.6	31.1	88.1
Ostracoda	-	-	-	-	-	-	-	-
Amphipoda	-	-	5.2	-	-	-	-	-
Shrimp	-	-	-	-	-	-	5.2	-
Crabs	5.2	-	-	-	-	-	-	-
Misc. Crustaceans	10.4	-	-	-	15.5	-	-	-
Mollusca	-	-	-	-	-	-	-	5.2
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	25.9	10.4	15.5	10.4	25.9	-	20.7	31.1
Subtotal	171.1	134.7	207.2	25.9	150.2	82.9	57.0	134.8
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	171.1	134.7	207.2	25.9	150.2	82.9	57.0	134.8

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 3 Date November 16-17, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1924	2027	2131	2234	2338	0041	0145	0248
Position of Ship: (N. Lat.	27°40'	27°42'	27°49'	27°56'	28°00'	28°02'	28°06'	28°10'
(W. Long.	79°21'	79°17'	79°11'	79°03'	79°00'	79°04'	79°11'	79°21'
Protozoa	-	10.2	-	25.4	-	15.3	10.2	10.2
Coelenterata	5.1	5.1	-	-	5.1	-	5.1	5.1
Chaetognatha	5.1	10.2	10.2	10.2	-	5.1	10.2	-
Misc. Worms	-	-	-	5.1	-	-	-	-
Copepoda	30.5	45.8	20.4	66.2	20.4	20.4	25.4	35.6
Ostracoda	-	-	-	5.1	5.1	-	-	5.1
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	-	-	-	-	-	5.1
Crabs	-	-	-	-	-	-	-	-
Misc. Crustaceans	-	-	10.2	5.1	-	5.1	-	10.2
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	5.1	35.6	20.4	15.3	20.4	45.8	15.3	20.4
Subtotal	45.8	106.9	61.2	132.4	51.0	91.7	66.2	91.7
Fish Eggs	-	-	-	-	-	5.1	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	45.8	106.9	61.2	132.4	51.0	96.8	66.2	91.7

Run No. 4 Date November 17, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	0404	0506	0608	0710	0812	0914	1016	1118
Position of Ship: (N. Lat.	28°17'	28°18'	28°19'	28°20'	28°23'	28°24'	28°22'	28°20'
(W. Long.	79°27'	79°31'	79°40'	79°48'	79°49'	79°56'	80°06'	80°14'
Protozoa	5.0	5.0	-	-	5.0	40.2	170.7	20.1
Coelenterata	5.0	-	15.1	-	-	5.0	-	-
Chaetognatha	15.1	-	-	-	5.0	20.1	-	5.0
Misc. Worms	-	-	-	-	-	-	5.0	-
Copepoda	30.1	10.0	45.2	60.2	45.2	60.2	25.1	25.1
Ostracoda	-	-	-	-	-	-	-	-
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	-	-	-	-	-	-
Crabs	-	-	-	-	-	-	-	5.0
Misc. Crustaceans	5.0	5.0	-	-	-	-	-	-
Mollusca	-	-	5.0	5.0	5.0	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	5.0	-	5.0	25.1	5.0	10.0	10.0	5.0
Subtotal	65.2	20.0	70.3	90.3	65.2	135.5	210.8	60.2
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	65.2	20.0	70.3	90.3	65.2	135.5	210.8	60.2

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 5 Date November 17, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1226	1328	1431	1533	1636	1738	1841	1943
Position of Ship: (N. Lat.	28°20'	28°20'	28°25'	28°35'	28°42'	28°52'	28°59'	29°00'
(W. Long.	80°24'	80°30'	80°24'	80°22'	80°26'	80°29'	80°30'	80°27'
Protozoa	14.9	-	5.0	19.8	34.7	19.8	14.9	29.8
Coelenterata	5.0	5.0	-	-	-	-	-	-
Chaetognatha	-	-	5.0	29.8	5.0	5.0	-	19.8
Misc. Worms	-	-	-	-	-	-	5.0	-
Copepoda	74.4	54.6	109.1	49.6	-	19.8	133.9	79.4
Ostracoda	5.0	-	-	-	-	-	-	-
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	9.9	5.0	-	-	44.6	29.8
Crabs	5.0	-	-	9.9	-	-	14.9	14.9
Misc. Crustaceans	-	-	5.0	-	5.0	-	24.8	9.9
Mollusca	-	5.0	-	5.0	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	14.9	5.0	-	29.8	5.0	-	-	39.7
Subtotal	119.2	69.6	134.0	148.9	49.7	44.6	238.1	223.3
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	119.2	69.6	134.0	148.9	49.7	44.6	238.1	223.3

Run No. 6 Date November 17-18, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	2143	2244	2345	0046	0147	0248	0349	0450
Position of Ship: (N. Lat.	29°00'	29°01'	29°00'	29°03'	29°03'	29°02'	29°00'	29°03'
(W. Long.	80°07'	80°01'	79°50'	79°47'	79°44'	79°34'	79°27'	79°27'
Protozoa	47.8	8.7	-	4.4	13.0	-	4.4	4.4
Coelenterata	-	4.4	4.4	-	8.7	4.4	4.4	-
Chaetognatha	-	13.0	-	-	4.4	-	-	4.4
Misc. Worms	-	8.7	-	-	4.4	-	-	-
Copepoda	30.4	43.5	56.6	26.1	26.1	30.4	34.8	43.5
Ostracoda	4.4	-	4.4	-	-	-	-	-
Amphipoda	-	4.4	-	-	-	-	-	-
Shrimp	4.4	-	-	-	4.4	-	-	4.4
Crabs	-	-	-	-	-	-	-	4.4
Misc. Crustaceans	-	4.4	4.4	4.4	-	4.4	-	4.4
Mollusca	-	-	-	4.4	4.4	-	4.4	-
Invertebrate Eggs	4.4	-	-	4.4	-	-	-	-
Misc. Organisms	8.7	13.0	13.0	4.4	17.4	8.7	8.7	47.8
Subtotal	100.1	100.1	82.8	48.1	82.8	47.9	56.7	113.3
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	100.1	100.1	82.8	48.1	82.8	47.9	56.7	113.3

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 7 Date November 18, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	0602	0707	0812	0917	1022	1127	1232	1337
Position of Ship: (N. Lat.	29°13'	29°22'	29°32'	29°38'	29°40'	29°40'	29°43'	29°43'
(W. Long.	79°30'	79°33'	79°38'	79°40'	79°47'	79°56'	80°00'	80°05'
Protozoa	4.6	4.6	-	9.3	18.6	4.6	4.6	41.8
Coelenterata	4.6	-	4.6	-	-	-	-	4.6
Chaetognatha	-	-	-	-	4.6	4.6	-	-
Misc. Worms	-	-	-	-	-	-	-	-
Copepoda	13.9	55.7	13.9	32.5	60.3	18.6	18.6	41.8
Ostracoda	-	-	-	-	-	-	-	-
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	4.6	-	-	-	-	-	-	-
Crabs	-	4.6	-	-	-	-	-	-
Misc. Crustaceans	4.6	9.3	-	9.3	-	-	4.6	-
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	4.6	23.2	9.3	13.9	23.2	9.3	-	4.6
Subtotal	36.9	97.4	27.8	65.0	106.7	37.1	27.8	92.8
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	36.9	97.4	27.8	65.0	106.7	37.1	27.8	92.8

Run No. 8 Date November 18, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1456	1559	1702	1805	1908	2011	2114	2217
Position of Ship: (N. Lat.	29°41'	29°40'	29°40'	29°40'	29°40'	29°40'	29°42'	29°51'
(W. Long.	80°17'	80°25'	80°34'	80°45'	80°51'	81°03'	81°08'	81°11'
Protozoa	40.6	96.3	126.8	40.6	10.1	15.2	10.1	-
Coelenterata	10.1	5.1	15.2	5.1	5.1	-	5.1	-
Chaetognatha	25.4	10.1	15.2	30.4	10.1	25.4	5.1	10.1
Misc. Worms	-	-	-	10.1	-	5.1	-	-
Copepoda	111.5	91.3	106.5	106.5	40.6	101.4	816.3	491.8
Ostracoda	-	-	-	-	-	-	-	-
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	5.1	-	10.1	5.1	-	5.1	-
Crabs	-	-	10.1	10.1	-	5.1	-	5.1
Misc. Crustaceans	10.1	-	5.1	10.1	5.1	71.0	86.2	55.8
Mollusca	-	-	-	-	-	-	5.1	5.1
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	15.2	45.6	86.2	96.3	5.1	-	10.1	-
Subtotal	212.9	253.5	365.1	319.3	81.2	223.2	943.1	567.9
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	212.9	253.5	365.1	319.3	81.2	223.2	943.1	567.9

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 9 Date November 18-19, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	2329	0034	0139	0244	0349	0454	0559	0704
Position of Ship: (N. Lat.	29°59'	30°08'	30°17'	30°20'	30°20'	30°20'	30°20'	30°20'
(W. Long.	81°13'	81°16'	81°19'	81°15'	81°05'	80°57'	80°44'	80°34'
Protozoa	-	9.6	14.4	-	4.8	9.6	48.1	120.2
Coelenterata	4.8	4.8	-	-	-	4.8	4.8	14.4
Chaetognatha	14.4	14.4	4.8	-	9.6	67.3	24.0	9.6
Misc. Worms	4.8	-	9.6	-	-	-	-	9.6
Copepoda	240.5	413.7	226.1	178.0	72.2	149.1	245.3	158.7
Ostracoda	-	-	-	-	-	-	-	-
Amphipoda	-	-	-	-	-	4.8	4.8	-
Shrimp	-	-	-	-	4.8	4.8	4.8	-
Crabs	-	-	4.8	-	4.8	19.2	4.8	9.6
Misc. Crustaceans	24.0	4.8	9.6	24.0	9.6	14.4	-	-
Mollusca	-	4.8	-	-	-	-	14.4	-
Invertebrate Eggs	-	9.6	-	-	-	-	-	-
Misc. Organisms	33.7	4.8	14.4	24.0	9.6	48.1	168.4	77.0
Subtotal	322.2	466.5	283.7	226.0	115.4	322.1	519.4	399.1
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	322.2	466.5	283.7	226.0	115.4	322.1	519.4	399.1

Run No. 10 Date November 19, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	0816	0918	1020	1122	1224	1326	1428	1530
Position of Ship: (N. Lat.	30°20'	30°20'	30°20'	30°19'	30°18'	30°20'	30°20'	30°20'
(W. Long.	80°22'	80°11'	80°06'	79°57'	79°50'	79°46'	79°34'	79°27'
Protozoa	51.7	30.2	25.9	-	-	-	-	8.6
Coelenterata	4.3	8.6	-	-	4.3	4.3	8.6	12.9
Chaetognatha	4.3	-	4.3	-	-	-	-	4.3
Misc. Worms	-	-	-	-	-	-	-	-
Copepoda	99.1	125.0	189.6	30.2	69.0	34.5	99.1	99.1
Ostracoda	-	-	-	-	-	-	-	-
Amphipoda	-	-	-	-	-	-	-	4.3
Shrimp	-	-	-	-	-	-	-	4.3
Crabs	12.9	-	-	-	-	-	-	4.3
Misc. Crustaceans	4.3	8.6	4.3	-	-	-	12.9	-
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	38.8	12.9	4.3	-	4.3	-	17.2	12.9
Subtotal	215.4	185.3	228.4	30.2	77.6	38.8	137.8	150.7
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	215.4	185.3	228.4	30.2	77.6	38.8	137.8	150.7

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 11 Date November 19, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1645	1745	1845	1945	2045	2145	2245	2345
Position of (N. Lat.	30°24'	30°31'	30°41'	30°51'	30°57'	30°58'	30°58'	30°58'
Ship: (W. Long.	79°25'	79°22'	79°20'	79°17'	79°15'	79°16'	79°23'	79°31'
Protozoa	-	-	9.1	-	9.1	-	4.5	-
Coelenterata	4.5	9.1	13.6	-	4.5	9.1	4.5	9.1
Chaetognatha	13.6	-	9.1	-	-	-	9.1	-
Misc. Worms	4.5	-	-	-	-	-	-	-
Copepoda	77.2	68.1	31.8	22.7	36.3	22.7	49.9	27.2
Ostracoda	-	-	-	-	4.5	-	4.5	-
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	4.5	-	-	-	-	-
Crabs	-	-	-	-	-	-	-	4.5
Misc. Crustaceans	9.1	-	-	-	-	-	9.1	4.5
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	27.2	18.2	9.1	9.1	4.5	4.5	9.1	18.2
Subtotal	136.1	95.4	77.2	31.8	58.9	36.3	90.7	63.5
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	136.1	95.4	77.2	31.8	58.9	36.3	90.7	63.5

Run No. 12 Date November 20, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	0055	0201	0308	0414	0521	0627	0734	0840
Position of (N. Lat.	31°00'	31°02'	31°03'	31°02'	31°02'	31°02'	31°01'	31°01'
Ship: (W. Long.	79°36'	79°38'	79°42'	79°48'	79°55'	80°06'	80°15'	80°25'
Protozoa	5.4	10.7	5.4	5.4	16.0	32.1	5.4	32.1
Coelenterata	-	10.7	16.0	5.4	5.4	10.7	10.7	-
Chaetognatha	5.4	-	-	-	10.7	10.7	16.0	42.8
Misc. Worms	-	-	-	-	-	-	5.4	-
Copepoda	37.4	74.9	58.8	32.1	32.1	42.8	85.6	53.5
Ostracoda	5.4	-	-	-	5.4	-	-	5.4
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	5.4	-	-	-	5.4	-	-	-
Crabs	-	-	-	-	-	-	-	-
Misc. Crustaceans	-	10.7	-	5.4	-	-	-	-
Mollusca	-	-	-	-	5.4	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	16.0	21.4	-	5.4	10.7	10.7	85.6	48.2
Subtotal	75.0	128.4	80.2	53.7	91.1	107.0	208.7	182.0
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	75.0	128.4	80.2	53.7	91.1	107.0	208.7	182.0

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 14 Date November 30, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	0210	0311	0412	0513	0614	0715	0816	0917
Position of (N. Lat.	31°33'	31°35'	31°35'	31°31'	31°30'	31°32'	31°34'	31°36'
Ship: (W. Long.	79°26'	79°19'	79°07'	78°52'	78°41'	78°41'	78°45'	78°52'
Protozoa	-	15.9	-	-	8.0	-	15.9	15.9
Coelenterata	-	-	8.0	-	15.9	8.0	8.0	8.0
Chaetognatha	-	-	-	-	63.8	15.9	-	-
Misc. Worms	-	-	-	-	-	-	-	-
Copepoda	55.8	23.9	-	-	87.7	71.7	23.9	39.8
Ostracoda	-	-	15.9	-	-	-	-	-
Amphipoda	-	-	-	-	-	8.0	-	-
Shrimp	-	-	-	-	-	-	-	-
Crabs	-	-	-	-	-	-	-	-
Misc. Crustaceans	-	-	8.0	-	23.9	8.0	-	-
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	8.0	8.0	-	-	15.9	31.9	23.9	23.9
Subtotal	63.8	47.8	31.9	-	215.2	143.5	71.7	87.6
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	8.0	-	-	-
Total	63.8	47.8	31.9	-	223.2	143.5	71.7	87.6

Run No. 15 Date November 30, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1027	1130	1233	1336	1439	1542	1645	1748
Position of (N. Lat.	31°39'	31°41'	31°45'	31°50'	31°55'	32°00'	32°06'	32°11'
Ship: (W. Long.	78°58'	79°00'	79°04'	79°12'	79°17'	79°22'	79°30'	79°33'
Protozoa	13.4	6.7	26.8	13.4	13.4	33.6	-	6.7
Coelenterata	-	-	-	-	-	33.6	13.4	-
Chaetognatha	6.7	-	13.4	6.7	-	13.4	13.4	13.4
Misc. Worms	-	-	-	-	-	-	-	-
Copepoda	6.7	26.8	6.7	67.1	20.1	100.6	53.7	6.7
Ostracoda	-	-	-	-	-	6.7	6.7	6.7
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	-	-	-	6.7	-	-
Crabs	-	-	-	-	-	-	-	-
Misc. Crustaceans	13.4	-	6.7	-	-	6.7	-	-
Mollusca	-	-	-	-	-	13.4	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	-	-	6.7	67.1	20.1	33.6	33.6	40.3
Subtotal	40.2	33.5	60.3	154.3	53.6	248.3	120.8	73.8
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	40.2	33.5	60.3	154.3	53.6	248.3	120.8	73.8

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 16 Date November 30, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1920	2020	2120	*	*	*	*	*
Position of Ship: (N. Lat.	32°20'	32°25'	32°26'					
(W. Long.	79°45'	79°49'	79°50'					
Protozoa	-	-	-					
Coelenterata	-	-	-					
Chaetognatha	45.7	15.2	-					
Misc. Worms	-	-	-					
Copepoda	45.7	76.2	15.2					
Ostracoda	15.2	-	-					
Amphipoda	-	-	-					
Shrimp	-	-	-					
Crabs	-	-	-					
Misc. Crustaceans	-	30.5	121.9					
Mollusca	-	-	-					
Invertebrate Eggs	-	-	-					
Misc. Organisms	45.7	61.0	-					
Subtotal	152.3	182.9	137.1					
Fish Eggs	-	-	-					
Fish Larvae	-	-	-					
Total	152.3	182.9	137.1					

* No sample

Run No. 17 Date December 1, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	2039	2141	2243	*	*	*	*	*
Position of Ship: (N. Lat.	32°43'	32°50'	32°53'					
(W. Long.	79°29'	79°22'	79°16'					
Protozoa	1913.5	507.3	8.9					
Coelenterata	8.9	-	-					
Chaetognatha	26.7	-	8.9					
Misc. Worms	35.6	44.5	-					
Copepoda	382.7	249.2	8.9					
Ostracoda	8.9	-	-					
Amphipoda	8.9	-	-					
Shrimp	-	-	-					
Crabs	-	-	-					
Misc. Crustaceans	115.7	-	-					
Mollusca	35.6	8.9	-					
Invertebrate Eggs	106.8	-	-					
Misc. Organisms	71.2	-	-					
Subtotal	2714.5	809.9	26.7					
Fish Eggs	-	-						
Fish Larvae	-	-						
Total	2714.5	809.9	26.7					

* No sample

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 18 Date December 3-4, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1800	1901	2002	2103	2204	2305	0006	0107
Position of Ship: (N. Lat.	32°38'	32°30'	32°25'	32°22'	32°15'	32°09'	32°07'	32°00'
(W. Long.	78°59'	78°51'	78°43'	78°41'	78°35'	78°28'	78°24'	78°14'
Protozoa	51.6	32.8	70.4	9.4	9.4	79.7	37.5	145.4
Coelenterata	-	-	14.1	4.7	9.4	-	4.7	-
Chaetognatha	-	4.7	9.4	-	4.7	9.4	9.4	-
Misc. Worms	-	4.7	-	-	4.7	9.4	-	-
Copepoda	403.3	300.2	89.1	248.6	164.2	61.0	136.0	93.8
Ostracoda	14.1	32.8	14.1	4.7	65.7	9.4	4.7	9.4
Amphipoda	4.7	-	18.8	-	-	-	-	-
Shrimp	-	-	18.8	14.1	4.7	-	4.7	-
Crabs	-	-	-	4.7	4.7	-	-	-
Misc. Crustaceans	-	-	4.7	4.7	-	4.7	9.4	-
Mollusca	4.7	4.7	4.7	-	4.7	-	-	-
Invertebrate Eggs	-	32.8	4.7	-	112.6	4.7	-	-
Misc. Organisms	32.8	117.2	18.8	46.9	42.2	4.7	23.4	32.8
Subtotal	511.2	529.9	267.6	337.8	427.0	183.0	229.8	281.4
Fish Eggs	-	4.7	-	-	-	-	-	-
Fish Larvae	-	-	-	4.7	4.7	-	-	-
Total	511.2	534.6	267.6	342.5	431.7	183.0	229.8	281.4

Run No. 19 Date December 4, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	0241	0343	0445	0547	0649	0751	0853	0955
Position of Ship: (N. Lat.	31°57'	32°02'	32°10'	32°18'	32°23'	32°30'	32°34'	32°35'
(W. Long.	78°03'	77°55'	77°45'	77°35'	77°35'	77°39'	77°46'	77°49'
Protozoa	36.9	41.5	110.6	23.0	27.7	41.5	9.2	-
Coelenterata	4.6	-	-	-	4.6	-	4.6	9.2
Chaetognatha	4.6	4.6	4.6	-	4.6	27.7	9.2	13.8
Misc. Worms	4.6	-	-	-	-	-	-	9.2
Copepoda	50.7	92.2	46.1	83.0	46.1	179.8	96.8	106.0
Ostracoda	13.8	32.3	-	4.6	41.5	23.0	-	13.8
Amphipoda	18.4	9.2	-	-	4.6	-	-	-
Shrimp	-	-	-	-	9.2	-	-	-
Crabs	-	-	-	-	-	-	4.6	-
Misc. Crustaceans	-	4.6	4.6	-	4.6	-	4.6	-
Mollusca	-	-	4.6	-	-	-	4.6	-
Invertebrate Eggs	23.0	41.5	4.6	-	-	9.2	-	-
Misc. Organisms	-	4.6	4.6	18.4	9.2	13.8	23.0	32.3
Subtotal	156.6	230.5	179.7	129.0	152.1	295.0	156.6	184.3
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	4.6	-	4.6	-	-	-
Total	156.6	230.5	184.3	129.0	156.7	295.0	156.6	184.3

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 20 Date December 4, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1104	1204	1304	1404	1504	1604	1704	1804
Position of Ship: (N. Lat.	32°43'	32°48'	32°50'	32°55'	33°02'	33°05'	33°13'	33°18'
(W. Long.	77°54'	78°03'	78°07'	78°13'	78°21'	78°25'	78°31'	78°39'
Protozoa	18.4	-	13.8	4.6	18.4	59.7	27.5	9.2
Coelenterata	-	-	13.8	9.2	9.2	9.2	-	-
Chaetognatha	13.8	18.4	9.2	13.8	23.0	23.0	23.0	9.2
Misc. Worms	4.6	-	-	4.6	-	-	-	-
Copepoda	160.6	82.6	87.2	174.4	119.3	215.7	91.8	23.0
Ostracoda	13.8	-	-	4.6	-	23.0	13.8	13.8
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	-	-	4.6	-	9.2	-
Crabs	-	-	-	-	-	-	-	-
Misc. Crustaceans	-	-	4.6	-	4.6	-	-	-
Mollusca	4.6	-	-	-	4.6	4.6	-	-
Invertebrate Eggs	9.2	-	-	-	-	4.6	4.6	-
Misc. Organisms	105.6	41.3	50.5	169.8	146.9	50.5	45.9	4.6
Subtotal	330.6	142.3	179.1	381.0	330.6	390.3	215.8	59.8
Fish Eggs	-	-	-	-	-	-	4.6	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	330.6	142.3	179.1	381.0	330.6	390.3	220.4	59.8

Run No. 21 Date December 4-5, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1915	2016	2118	2219	2321	0022	0124	0225
Position of Ship: (N. Lat.	33°25'	33°30'	33°32'	33°34'	33°35'	33°35'	33°35'	33°35'
(W. Long.	78°45'	78°52'	78°49'	78°38'	78°27'	78°19'	78°07'	77°57'
Protozoa	14.1	14.1	-	106.0	21.2	28.3	14.1	14.1
Coelenterata	-	-	7.1	-	-	7.1	7.1	-
Chaetognatha	-	21.2	42.4	28.3	-	7.1	35.4	28.3
Misc. Worms	21.2	169.7	183.8	70.7	14.1	7.1	-	-
Copepoda	63.6	445.4	141.4	296.9	70.7	113.1	190.9	148.5
Ostracoda	-	14.1	7.1	7.1	-	-	-	21.2
Amphipoda	-	7.1	-	-	-	-	-	-
Shrimp	-	7.1	-	-	7.1	-	7.1	7.1
Crabs	-	7.1	-	7.1	-	-	-	7.1
Misc. Crustaceans	-	49.5	35.4	7.1	7.1	-	-	21.2
Mollusca	-	14.1	35.4	49.5	-	-	7.1	-
Invertebrate Eggs	-	-	-	-	-	-	7.1	-
Misc. Organisms	7.1	49.5	-	56.6	14.1	-	14.1	-
Subtotal	106.0	798.9	452.6	629.3	134.3	162.7	282.9	247.5
Fish Eggs	-	-	-	-	-	-	7.1	-
Fish Larvae	-	-	-	-	-	-	7.1	-
Total	106.0	798.9	452.6	629.3	134.3	162.7	297.1	247.5

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 22 Date December 5, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	0343	0444	0545	0646	0747	0848	0949	1050
Position of Ship: (N. Lat.	33°30'	33°23'	33°18'	33°11'	33°08'	33°04'	32°57'	32°53'
(W. Long.	77°47'	77°35'	77°30'	77°24'	77°21'	77°21'	77°15'	77°07'
Protozoa	48.6	48.6	27.8	-	7.0	27.8	7.0	97.3
Coelenterata	-	13.9	7.0	-	-	13.9	7.0	-
Chaetognatha	20.8	-	13.9	13.9	13.9	20.8	-	7.0
Misc. Worms	-	13.9	-	-	-	-	-	-
Copepoda	208.5	312.8	48.6	76.4	34.8	62.6	48.6	97.3
Ostracoda	7.0	-	-	20.8	13.9	-	-	-
Amphipoda	-	-	-	-	-	7.0	-	-
Shrimp	7.0	7.0	-	-	-	7.0	-	-
Crabs	13.9	-	-	-	7.0	-	-	-
Misc. Crustaceans	-	-	7.0	-	-	7.0	-	7.0
Mollusca	-	7.0	-	7.0	-	-	-	-
Invertebrate Eggs	-	-	7.0	-	-	-	-	-
Misc. Organisms	55.6	27.8	27.8	34.8	-	20.8	7.0	-
Subtotal	361.4	431.0	139.1	152.9	76.6	166.9	69.6	208.6
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	7.0	-	-	-	-	-
Total	361.4	431.0	146.1	152.9	76.6	166.9	69.6	208.6

Run No. 23 Date December 5, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1253	1354	1456	1557	1659	1800	1902	2003
Position of Ship: (N. Lat.	32°48'	32°43'	32°42'	32°53'	33°03'	33°10'	33°15'	33°21'
(W. Long.	76°56'	76°48'	76°46'	76°43'	76°38'	76°26'	76°22'	76°25'
Protozoa	5.2	15.5	5.2	-	5.2	5.2	41.4	51.7
Coelenterata	-	5.2	10.3	5.2	5.2	-	5.2	-
Chaetognatha	10.3	10.3	5.2	5.2	-	-	5.2	5.2
Misc. Worms	-	-	-	-	-	-	-	-
Copepoda	98.2	67.2	36.2	36.2	62.0	20.7	15.5	56.9
Ostracoda	-	10.3	-	-	5.2	-	-	77.6
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	-	-	-	-	-	-
Crabs	-	-	-	-	-	-	-	-
Misc. Crustaceans	-	-	5.2	-	5.2	-	-	-
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	5.2	5.2	-	-	-	-	-	-
Misc. Organisms	5.2	10.3	10.3	-	15.5	5.2	15.5	15.5
Subtotal	124.1	124.0	72.4	46.6	98.3	31.1	82.8	206.9
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	124.1	124.0	72.4	46.6	98.3	31.1	82.8	206.9

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 25 Date December 10, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	0952	1057	1202	1307	1412	1517	1622	1727
Position of Ship: (N. Lat.	34°31'	34°26'	34°22'	34°18'	34°12'	34°08'	34°01'	33°55'
(W. Long.	76°52'	77°01'	77°09'	77°17'	77°25'	77°25'	77°17'	77°11'
Protozoa	28.1	119.3	-	35.1	21.1	21.1	7.0	56.2
Coelenterata	-	7.0	-	7.0	-	-	7.0	14.0
Chaetognatha	28.1	7.0	-	14.0	42.1	21.1	28.1	7.0
Misc. Worms	14.0	-	-	35.1	-	7.0	-	42.1
Copepoda	252.7	414.2	84.2	351.0	154.4	84.2	112.3	358.0
Ostracoda	14.0	7.0	-	-	-	-	-	14.0
Amphipoda	-	-	7.0	-	-	-	-	7.0
Shrimp	-	-	-	14.0	7.0	-	7.0	21.1
Crabs	-	-	-	-	7.0	-	-	7.0
Misc. Crustaceans	7.0	35.1	-	-	-	-	7.0	21.1
Mollusca	7.0	-	-	-	7.0	-	-	14.0
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	84.2	84.2	21.1	35.1	28.1	21.1	7.0	7.0
Subtotal	435.1	673.8	112.3	491.3	266.7	154.5	175.4	568.5
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	435.1	673.8	112.3	491.3	266.7	154.5	175.4	568.5

Table 13.--List of the species of fish in dip-net, trolling, and stomach contents collections (D-dip net; T-trolling; S-stomach contents)

Acanthurus coeruleus Bloch & Schneider S
Acanthurus chirurgus (Bloch) S
Acanthurus sp. S
Agonostomus monticola (Bancroft) D
Aluteridae, unidentified S
Amanses pullus (Ranzani) S
Anchoa sp. D
Anguilla rostrata (Lesueur) D
Balistidae, unidentified S
Brotulidae, unidentified S
Caranx latus Agassiz S
Caranx ruber (Bloch) D
Coryphaena hippurus Linnaeus T
Cypselurus heterurus (Rafinesque) D
Decapterus punctatus (Agassiz) S
Decapterus punctatus ? S
Etrumeus sadina (Mitchill) S
Euthynnus alletteratus (Rafinesque) T
Gempylus serpens Cuvier S
Hemiramphus sp. S
Hemiramphus balao Lesueur D
Hemiramphus brasiliensis (Linnaeus) D
Hirundichthys affinis (Günther) D
Histrio histrio (Linnaeus) D
Holocentrus sp. S
Holocentrus rufus (Walbaum) ? S
Holocentrus vexillarius Poey D
Hyporhamphus unifasciatus (Ranzani) D
Katsuwonus pelamis (Linnaeus) T S
Kyphosus incisor (Cuvier) D
Kyphosus sectatrix (Linnaeus) D
Leptostomias sp. ? S
Membras martinica (Valenciennes) D
Monacanthus ciliatus (Mitchill) S
Myctophum affine (Lütken) D
Myctophum nitidulum (Garman) D
Myctophum obtusirostris Taning D
Opisthonema oglinum (Lesueur) D
Parexocoetus brachypterus (Richardson) D
Pterycombus goodei (Jordan) S
Pterycombus goodei ? S
Pterolamiops longimanus (Poey) T
Sardinella anchovia Valenciennes D
Scomberomorus cavalla (Cuvier) T
Scombridae, unidentified S
Sphyraena barracuda (Walbaum) T
Strongylura ardeola (Valenciennes) D
Syngnathidae, unidentified S
Thunnus albacares (Bonnaterre) T
Thunnus atlanticus (Lesson) T
Thyrsites atun (Euphrasen) ? S

Table 14.--Numbers and species of fish taken by trolling

Species	Date (1954)	Time (EST)	Location N.lat.	Location W.long.	Sex	Stage Gonad Devel.	Fork Length (mm.)	Weight (lbs.)	Stomach Contents
Pterolamiops longimanus /1	Nov. 6	1300	26°21'	76°46'	M	I	2000 /2	--	none
Sphyraena barracuda	--	1255	--	--	M	III	847 /2	6.0	none
"	Nov. 16	0830	27°02'	80°01'	M	--	941	11.0	none
Katsuwonus pelamis	Nov. 15	1600	26°04'	78°08'	F	I	608	10.0	Gempylus serpens (2); Holocentrus rufus ? (4); Acanthurus coeruleus (1); Acanthurus chirurgus (3); Acanthurus sp. (8); Amanses pullus (1); fish remains, unidentified (15); squid (8); copepod (1); decapod (1); isopod (1)
"	Dec. 4	0830	32°33'	77°43'	M	I	620	7.0	none
"	Dec. 5	1150	32°53'	77°03'	F	I	560	7.5	none
"	Dec. 5	1200	32°53'	77°02'	F	I	571	8.5	none
"	Dec. 5	1535	32°50'	76°44'	M	I	633	12.5	Katsuwonus pelamis (7); Thyrsites atun ? (3); Gempylus serpens (2); Decapterus punctatus (1); Decapterus punctatus ? (1); Leptostomias sp. ? (1); Scombridae, unidentified (5); Brotulidae, unidentified (1); fish remains unidentified (2); octopuses (2); paper nautilus (2); pteropod (1); polychaete annelids (7); copepod (1)

/1 Hook and line

/2 Total length

Table 14.--Numbers and species of fish taken by trolling (cont'd)

Species	Date (1954)	Time (EST)	Location N.lat.	Location W.long.	Sex	Stage Gonad Devel.	Fork Length (mm.)	Weight (lbs.)	Stomach Contents
Katsuwonus pelamis (cont'd)									
"	Dec. 5	1628	32°59'	76°40'	F	I	510	5.5	Katsuwonus pelamis (10); Gempylus serpens (4); Pterycombus goodei (2); Decapterus punctatus (3); fish remains, unidentified (24); amphipods (4)
"	Dec. 5	1629	32°59'	76°40'	F	VII	515	5.5	Katsuwonus pelamis (1); Pterycombus goodei (1); fish remains, unidentified (3)
Euthynnus alletteratus	Nov. 20	1055	31°01'	80°47'	F	I	584	7.0	Decapterus punctatus ? (1); Syngnathidae, unidentified (1); Balistidae, unidentified (1); Aluteridae, unidentified (1); fish remains, unidentified (6)
Thunnus atlanticus	Nov. 16	0752	27°03'	79°58'	M	I	517	6.0	Etrumeus sadina (1); sergestid shrimp (1)
"	Nov. 16	0755	27°03'	79°58'	F	I	543	7.5	none
Thunnus albacares	Nov. 5	0750	28°16'	77°01'	F	I	856	35.0	Gempylus serpens (4); Caranx latus (1); Acanthurus sp. (1); fish remains, unidentified (3); fish vertebrae; squid (3); squid remains; gastropod (1); stomatopods (9); decapods (2)

Table 14.--Numbers and species of fish taken by trolling (cont'd)

Species	Date (1954)	Time (EST)	Location N.lat.	Location W.long.	Sex	Stage Gonad Devel.	Fork Length (mm.)	Weight (lbs.)	Stomach Contents
Thunnus albacares (cont'd)									
"	Nov. 5	0800	28°15'	77°01'	F	I	744	17.0	Pterycombus goodei ? (1); Acanthurus coeruleus (1); Monacanthus ciliatus (1); Hemiramphus sp. (1); Holocentrus sp. (1); Balistidae, unidentified (1); fish remains, unidentified (4); squid (9); amphipods (8); stomatopods (4); shrimp (1)
Scomberomorus cavalla	Nov. 17	1550	28°38'	80°22'	F	I	683	6.0	none
Coryphaena hippurus	Nov. 19	1330	30°20'	79°45'	F	III	586	4.0	none

Table 15.--Numbers and species of fish taken by dip net

Species	Location of capture, number and size range (in standard length) of specimens
CLUPEIDAE	
Sardinella anchovia	-Reg. 44, (2) 58-100 mm.
Opisthonema oglinum	-Reg. 44, (1) 51 mm.
ENGRAULIDAE	
Anchoa sp.	-Reg. 44, (28) 28.5-51 mm.
ANGUILLIDAE	
Anguilla rostrata	-Reg. 44, (1) 347 mm.
MYCTOPHIDAE	
Myctophum nitidulum	-Std., 26°21'N., 76°46'W., 11/6-7/54, 1600-0600, (2) 20.5-29 mm. TO, 23°40'N., 77°00'W., 11/11-12/54, 1355-0925, (2) 23-34 mm. Spc. 6, (1) 28 mm. Spc. 9, (5) 24-70.5 mm. Reg. 29, (4) 25-32.5 mm.
Myctophum affine	-Reg. 15, (1) 20 mm.
Myctophum obtusirostris	-Reg. 15, (1) 19.5 mm.
BELONIDAE	
Strongylura ardeola	-Spc. 9, (1) 160 mm.
HEMIRAMPHIDAE	
Hemiramphus brasiliensis	-TO, (1) 89 mm.
Hemiramphus balao	-Spc. 5, (1) 122 mm.
Hyporhamphus unifasciatus	-Reg. 13, (2) 88-89 mm. Reg. 23, (1) 130 mm.
EXOCOETIDAE	
Parexocoetus brachypterus	-TO, (4) 35-100 mm. Spc. 9, (2) 65-77 mm. Reg. 2, (1) 59.5 mm. Reg. 29, (1) 69 mm.
Cypselurus heterurus	-Spc. 9, (1) 208 mm. Reg. 39, (1) 131 mm.
Hirundichthys affinis	-Reg. 15, (2) 36.5-61.5 mm. Reg. 18, (1) 12 mm.
HOLOCENTRIDAE	
Holocentrus vexillarius	-Std., (1) 35.5 mm. Spc. 6, (1) 37.5 mm.

Table 15.--Numbers and species of fish taken by dip net (cont'd)

Species	Location of capture, number and size range (in standard length) of specimens
ATHERINIDAE	
Membras martinica	-Reg. 56, (9) 59-76 mm. Winyah Bay Anchorage, 33°12'N., 79°07'W., 12/2/54, 0500, (12) 65.5-75.5 mm.
MUGILIDAE	
Agonostomus monticola	-Spc. 9, (1) 25.5 mm. Reg. 13, (1) 30.6 mm. Reg. 15, (2) 26.4-27 mm. Reg. 29, (1) 27.3 mm.
CARANGIDAE	
Caranx ruber	-Reg. 29, (2) 41-74.5 mm.
KYPHOSIDAE	
Kyphosus sectatrix	-TO, (1) 26.9 mm.
Kyphosus incisor	-TO, (1) 19.2 mm.
ANTENNARIIDAE	
Histrio histrio	-Std., (1) 12 mm. Reg. 28, (1) 9.5 mm.

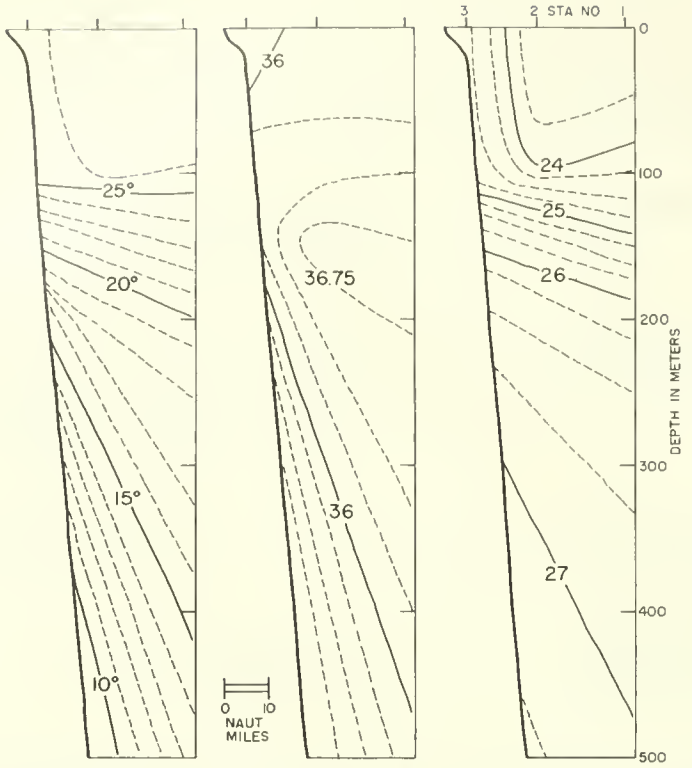

Figure 5.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 1, 2, and 3 (Jupiter Section).

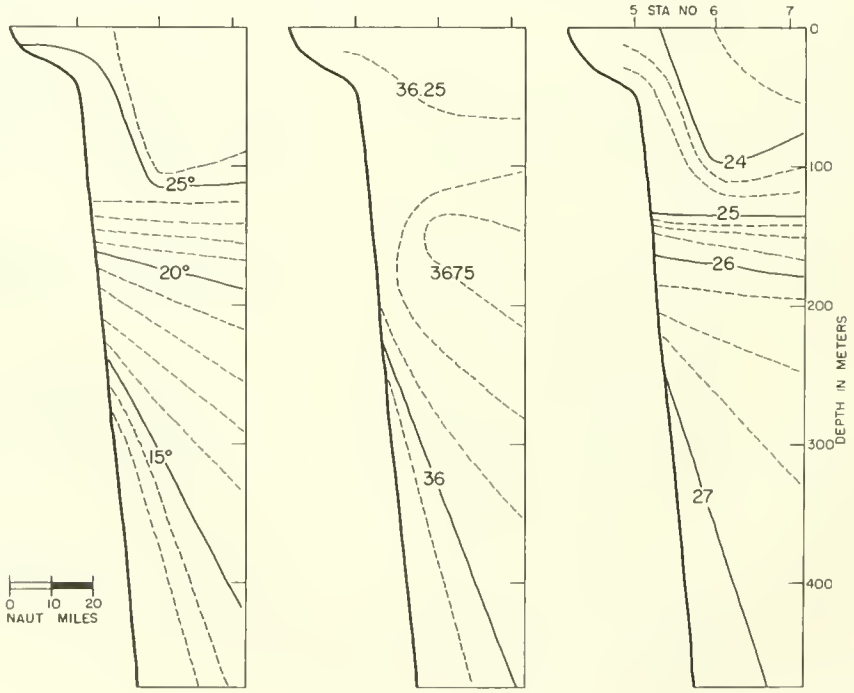

Figure 6.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 5, 6, and 7 (Vero Section).

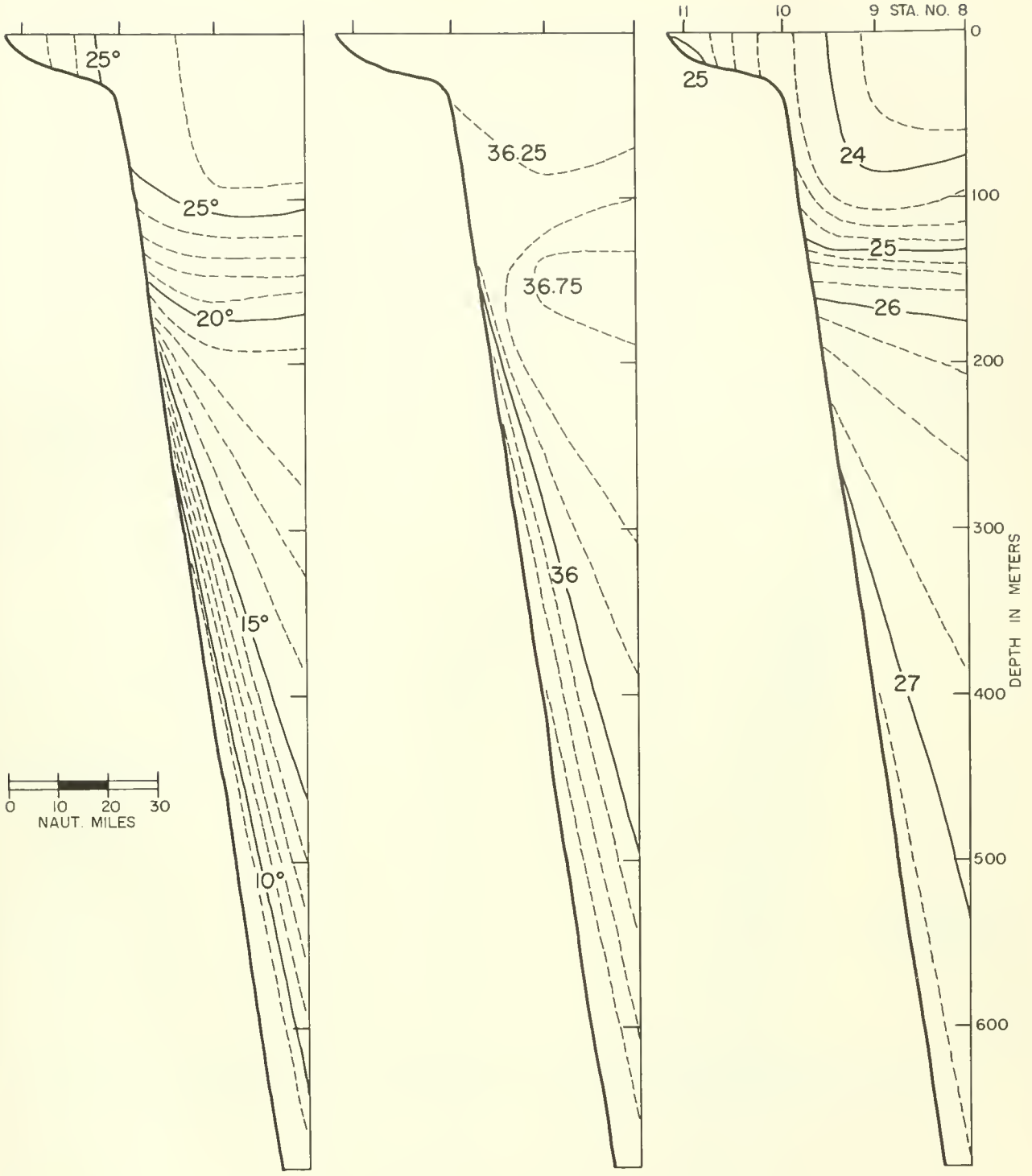

Figure 7.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 8, 9, 10, and 11 (Canaveral Section).

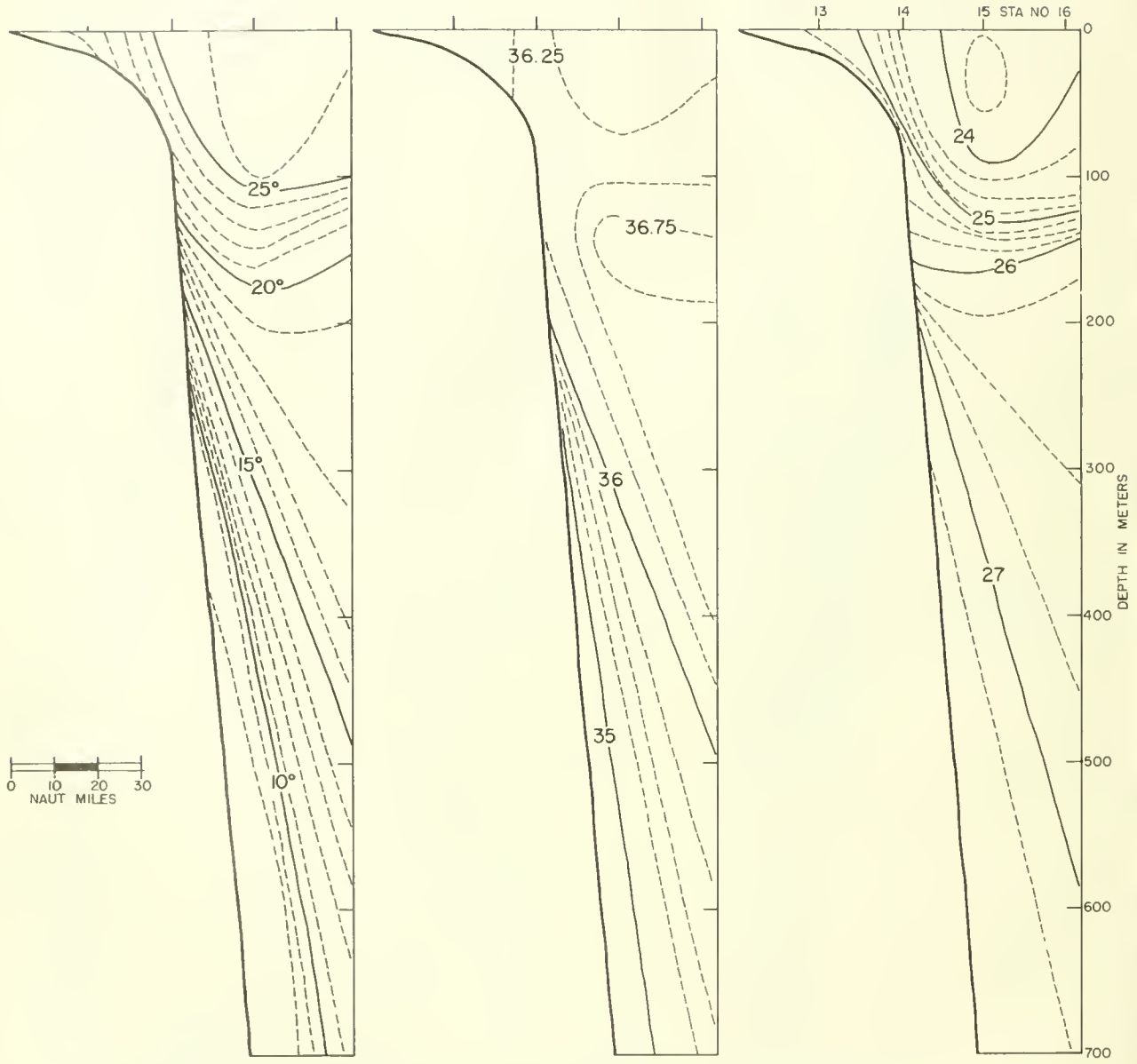

Figure 8.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 13, 14, 15, and 16 (Ponce de Leon Section).

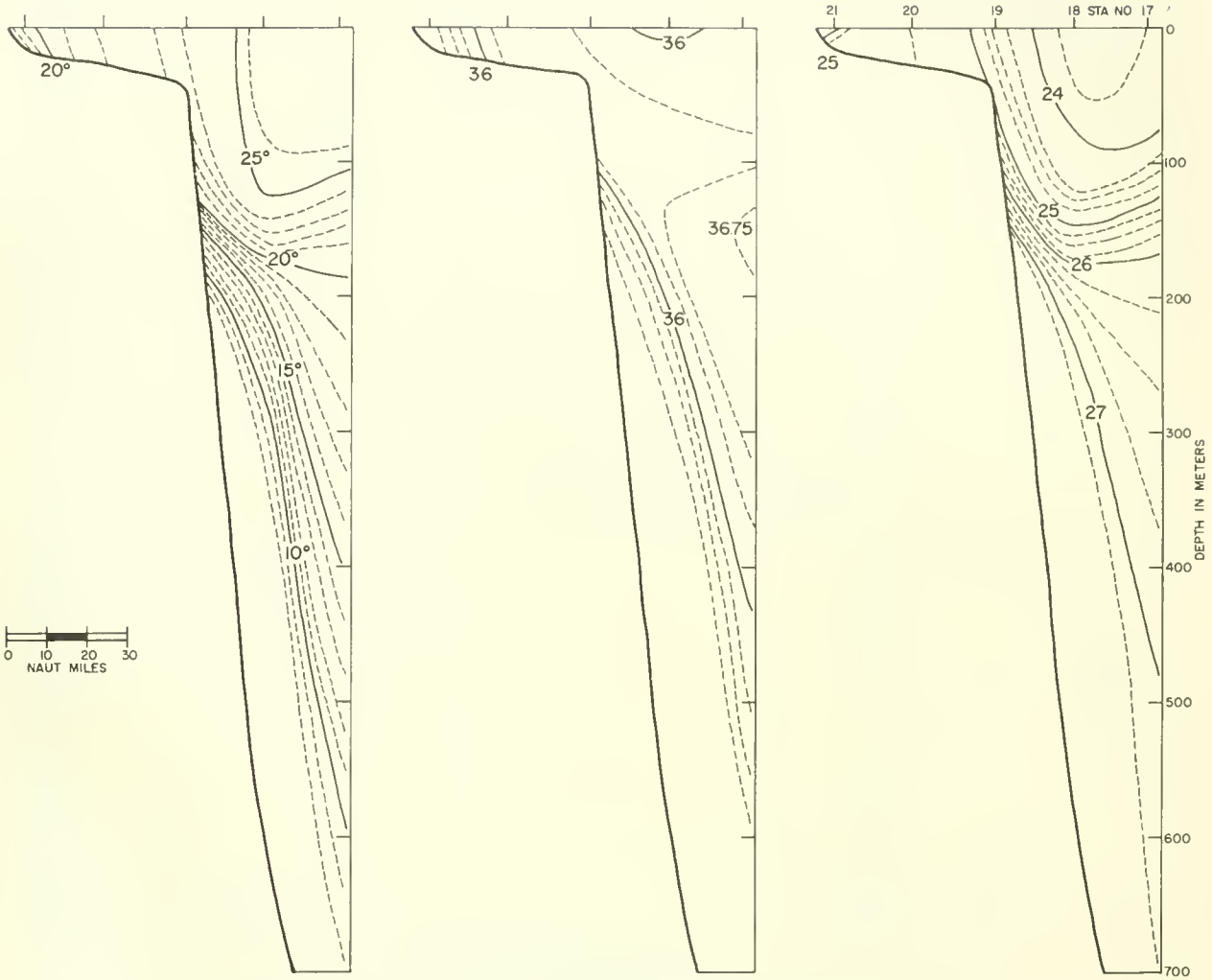

Figure 9.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 17, 18, 19, 20, and 21 (Matanzas Section).

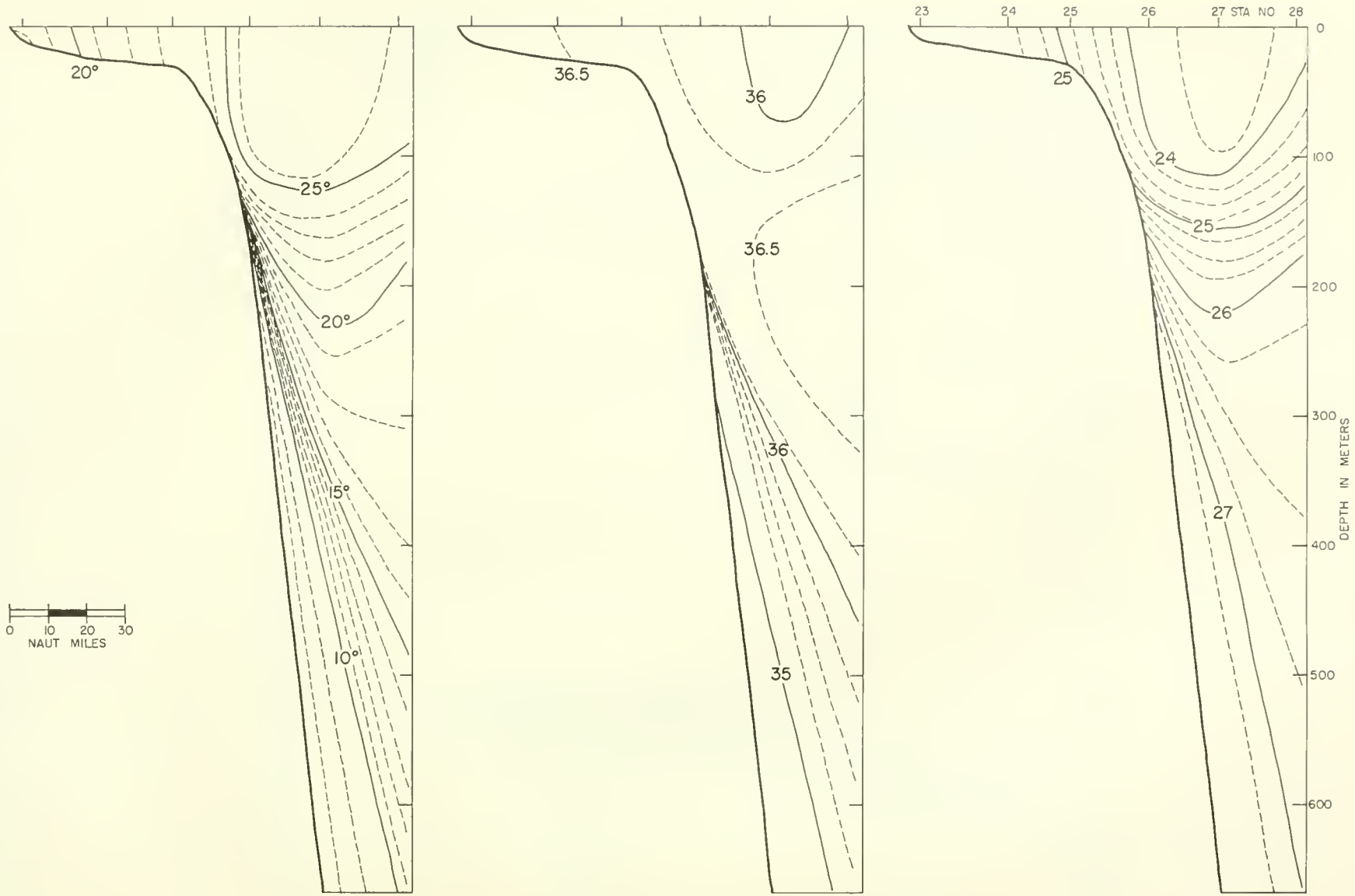

Figure 10.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 23, 24, 25, 26, 27, and 28 (Jacksonville Section).

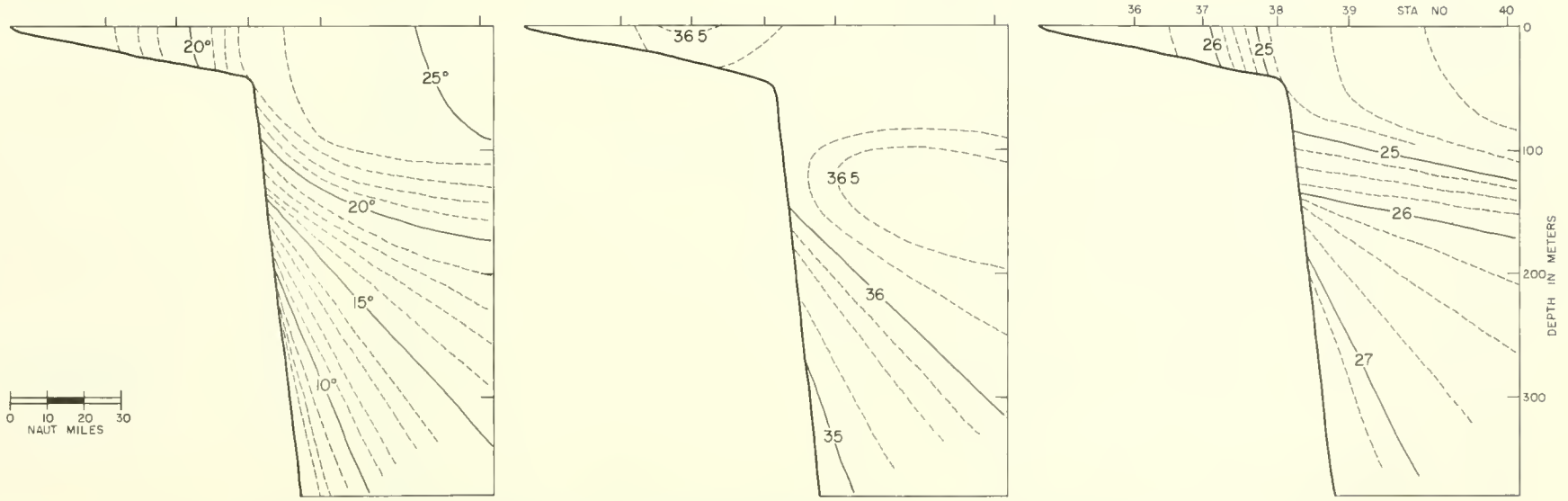

Figure 11.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 36, 37, 38, 39, and 40 (Savannah Section).

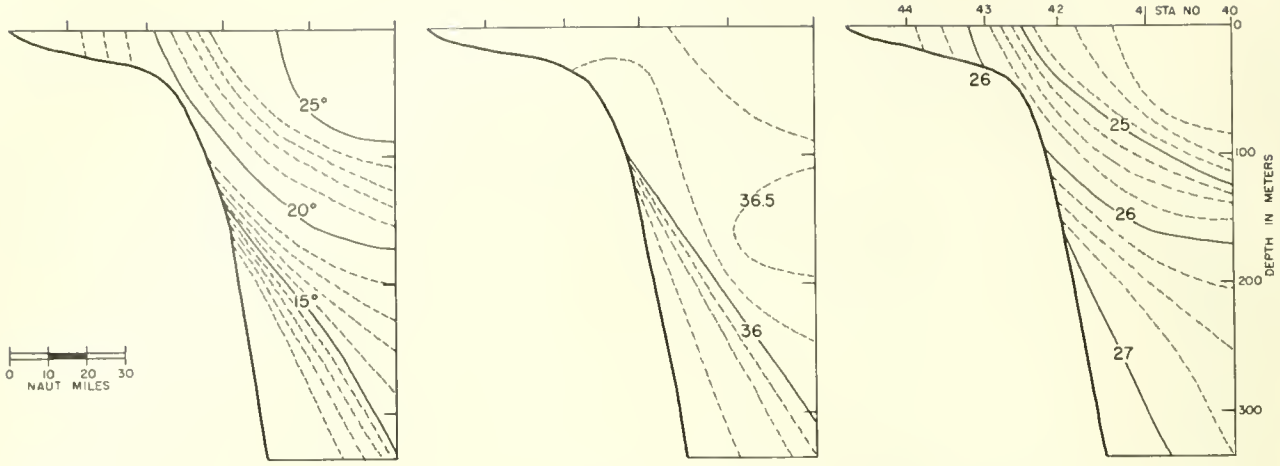

Figure 12.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 40, 41, 42, 43, and 44 (Charleston Section).

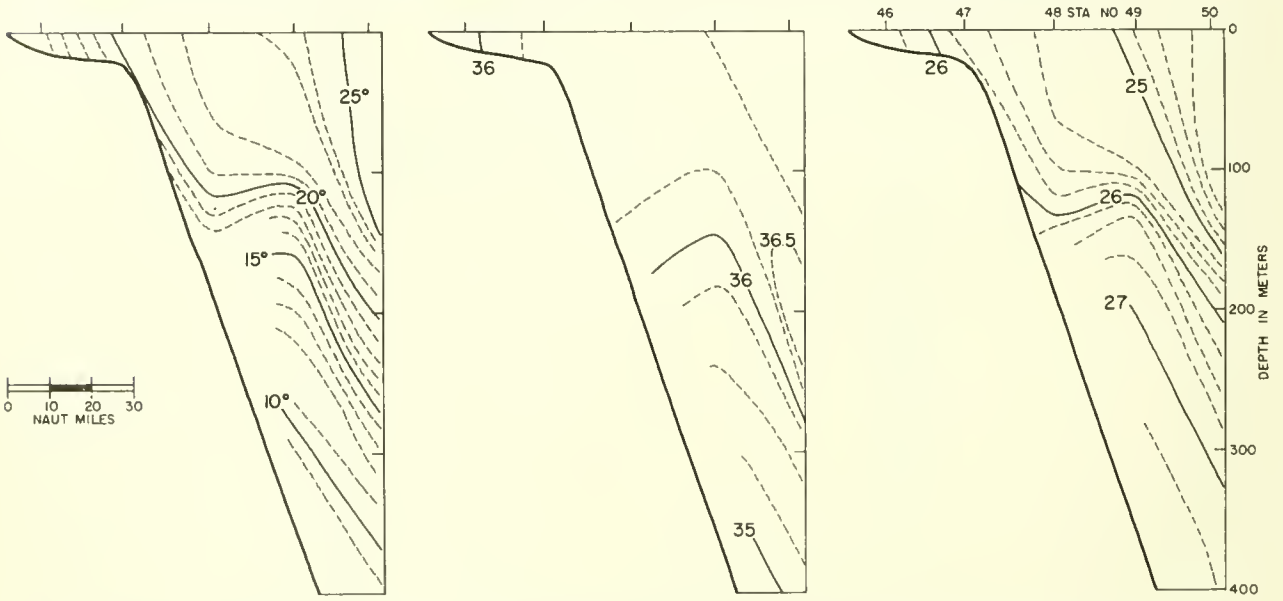

Figure 13.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 46, 47, 48, 49, and 50 (Cape Romain Section).

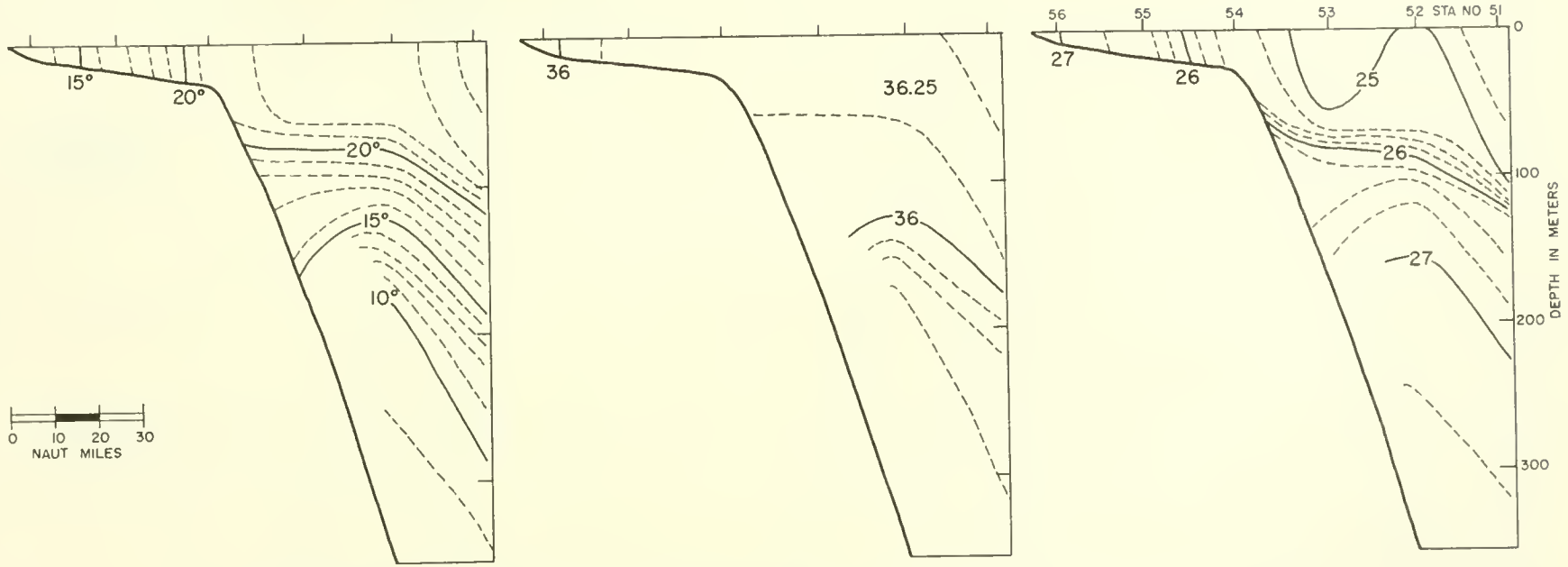

Figure 14.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 51, 52, 53, 54, 55, and 56 (Long Bay Section).

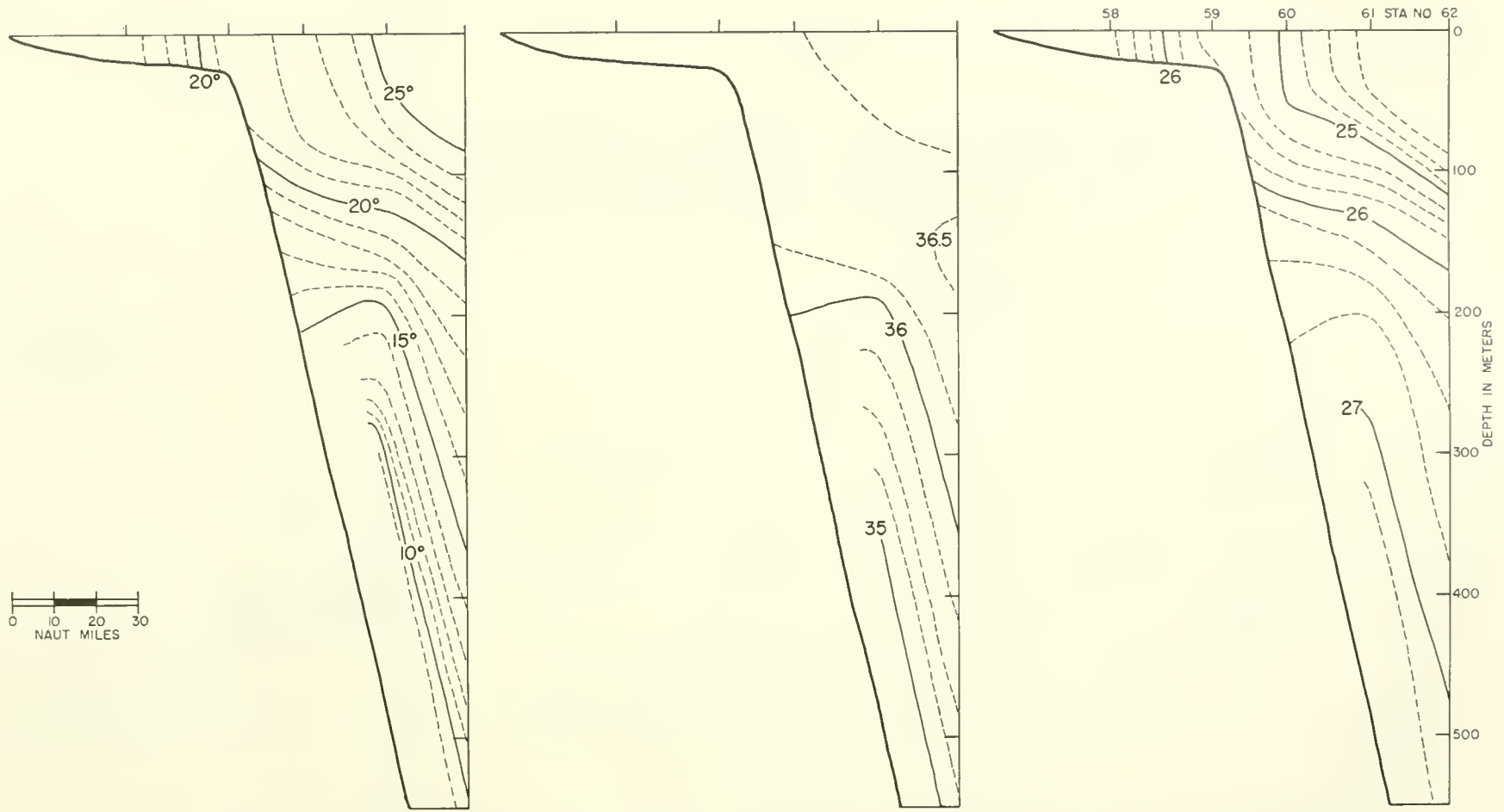

Figure 15.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 58, 59, 60, 61, and 62 (Cape Fear Section).

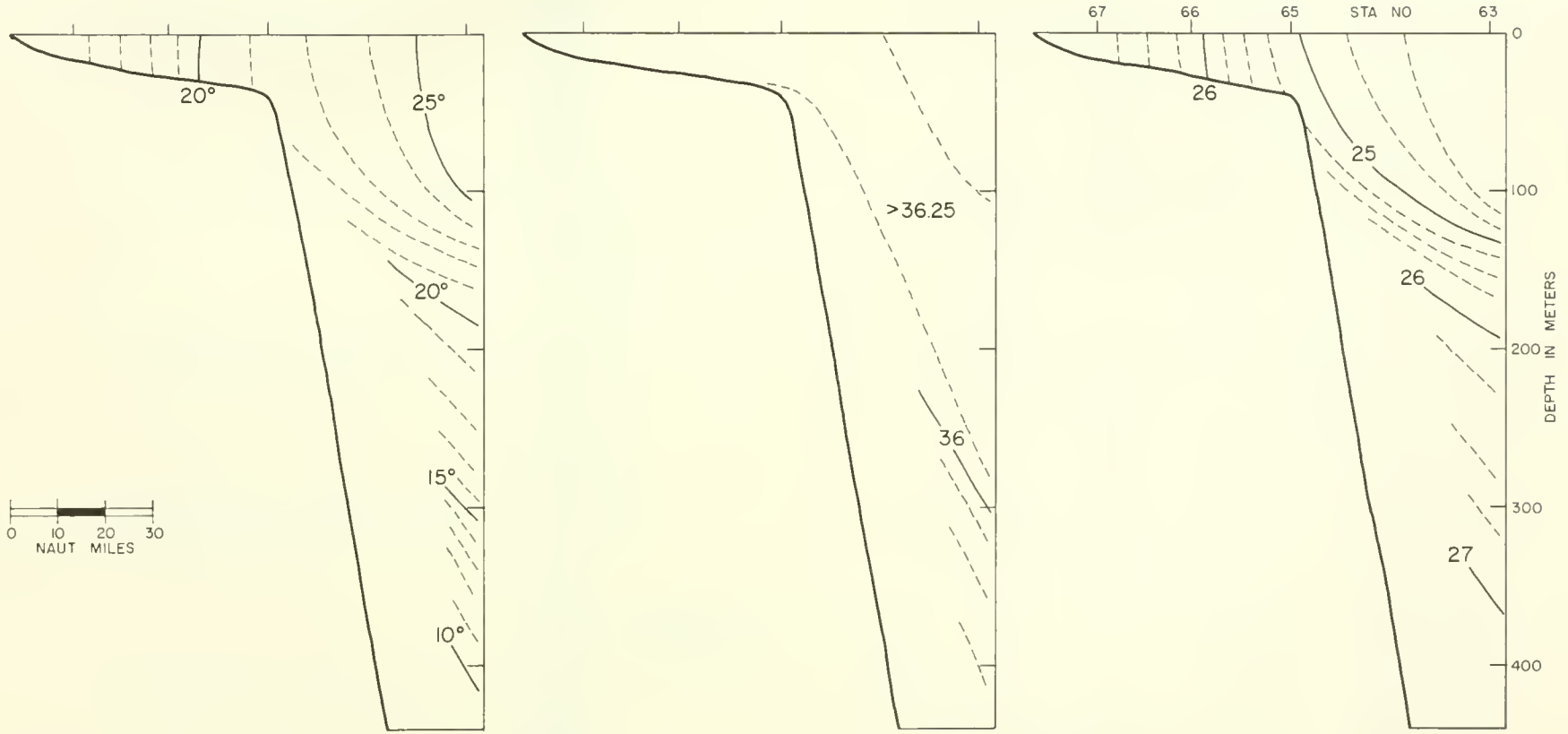

Figure 16.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 63, 65, 66, and 67 (Onslow Bay Section).

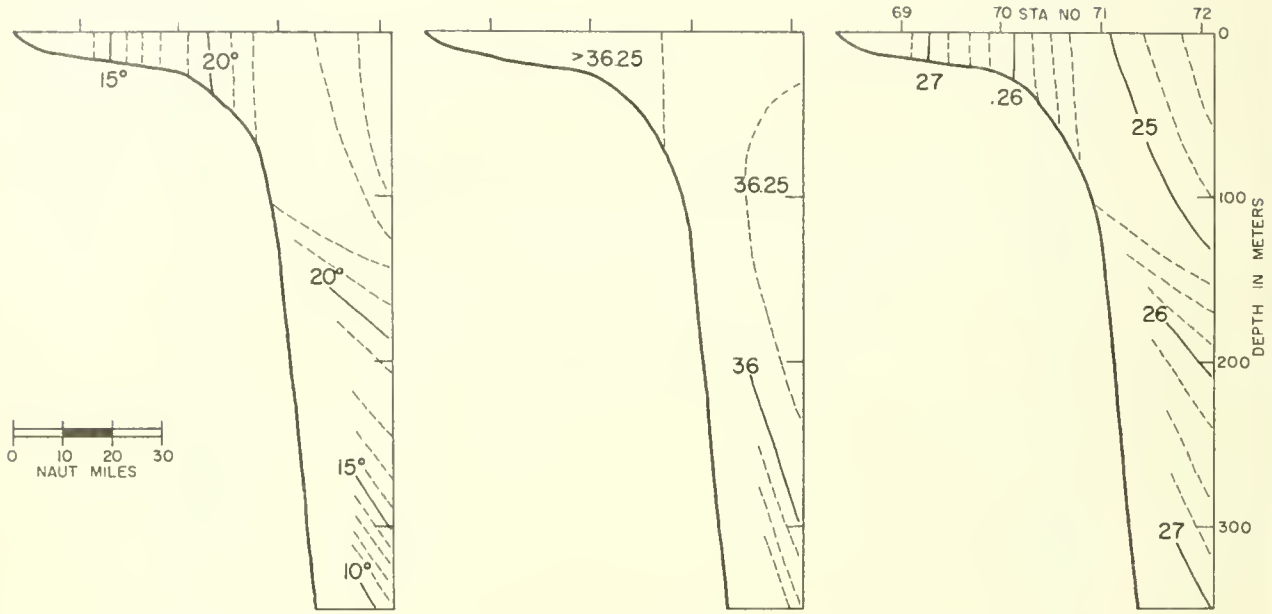

Figure 17.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 69, 70, 71, and 72 (Cape Lookout Section).

STATION 1

DATE November 16, 1954 LAT. 27°00'N. LONG. 79°18'W. TIME 07
DEPTH 658 WIND 5 , 17 BAR. 13 AIR TEMP: dry 25.6°C, wet 23.3°C
HUMIDITY 83% WEATHER 03 CLOUDS: type 4 , amt. 3 SEA: dir. 17 , amt. 1
SWELL: dir. - , amt. - VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	26.48	36.09	23.73	4.80
20	26.62	36.16	23.73	-
50	26.63	36.18	23.75	4.76
100	25.85	36.50	24.23	4.20
150	23.04	36.76	25.28	4.73
200	19.87	36.77	26.16	4.58
250	17.92	36.58	26.52	4.55
300	17.24	36.56	26.67	4.43
400	15.16	36.21	26.89	4.07
500	13.05	35.83	27.04	3.73

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	26.48	36.09	23.73	4.80
10	26.56	36.13	23.73	4.79
20	26.62	36.16	23.73	4.78
30	26.62	36.17	23.74	4.78
50	26.63	36.18	23.75	4.76
75	26.22	36.35	24.00	4.34
100	25.85	36.50	24.23	4.20
150	23.04	36.76	25.28	4.73
200	19.87	36.77	26.16	4.58
250	17.92	36.58	26.52	4.55
300	17.24	36.56	26.67	4.43
400	15.16	36.21	26.89	4.07
500	13.05	35.83	27.04	3.73

STATION 1

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.0	0.2	0.0	-	-
20	1.6	0.0	<0.5	-	0.7
50	0.5	0.0	0.0	4.0	0.6
100	0.9	0.4	0.5	1.6	0.4
150	0.6	0.4	0.5	-	0.8
200	0.8	0.2	1.0	0.5	0.5
250	0.5	-	4.5	1.3	0.4
300	-	-	2.5	0.7	-
400	1.2	0.6	8.5	3.8	1.5
500	2.1	1.0	7.0	1.5	0.9

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.0	0.2	0.0	-	-
10	1.3	0.1	<0.5	-	-
20	1.6	0.0	<0.5	-	0.7
30	1.2	0.0	<0.5	-	0.7
50	0.5	0.0	0.0	4.0	0.6
75	0.7	0.2	<0.5	2.8	0.5
100	0.9	0.4	0.5	1.6	0.4
150	0.6	0.4	0.5	1.0	0.8
200	0.8	0.2	1.0	0.5	0.5
250	0.5	0.3	4.5	1.3	0.4
300	0.7	0.4	2.5	0.7	0.8
400	1.2	0.6	8.5	3.8	1.5
500	2.1	1.0	7.0	1.5	0.9

STATION 2

DATE November 16, 1954 LAT. 27°02'N. LONG. 79°41'W. TIME 10
DEPTH 576 WIND 4 , 22 BAR. 13 AIR TEMP: dry 25.0°C, wet 23.3°C
HUMIDITY 87% WEATHER 02 CLOUDS: type 4 , amt. 2 SEA: dir. 22 , amt. 1
SWELL: dir. - , amt. - VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	26.67	36.15	23.71	4.74
19	26.73	36.13	23.68	4.83
48	26.57	36.19	23.77	4.74
95	26.27	36.41	24.03	4.36
143	22.20	36.89	25.62	3.80
190	18.75	36.61	26.33	3.54
238	16.49	36.31	26.66	3.61
286	14.78	36.03	26.83	3.39
383	11.48	35.50	27.09	3.07
481	9.09	35.16	27.25	2.99

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	26.67	36.15	23.71	4.74
10	26.72	36.14	23.69	4.80
20	26.72	36.13	23.68	4.83
30	26.67	36.15	23.71	4.81
50	26.56	36.20	23.78	4.73
75	26.40	36.29	23.90	4.54
100	25.82	36.50	24.24	4.29
150	21.61	36.85	25.75	3.74
200	18.23	36.55	26.42	3.58
250	16.06	36.24	26.70	3.55
300	14.25	35.94	26.88	3.33
400	11.00	35.43	27.13	3.04

STATION 2

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.9	0.0	0.0	2.1	0.5
19	1.0	0.0	0.5	-	0.6
48	1.4	0.0	0.0	0.7	0.5
95	1.0	0.2	<0.5	0.0	0.0
143	0.8	0.2	0.0	0.5	0.0
190	1.1	0.7	5.0	0.2	-
238	1.7	0.8	7.0	0.6	0.3
286	1.7	1.6	11.0	0.0	0.6
383	2.6	1.6	11.5	-	1.4
481	3.0	2.3	1.5*	-	0.7

* Value questionable

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.9	0.0	0.0	2.1	0.5
10	1.0	0.0	<0.5	-	0.6
20	1.0	0.0	0.5	-	0.6
30	1.1	0.0	<0.5	-	0.6
50	1.4	0.0	0.0	0.7	0.5
75	1.2	0.1	<0.5	0.4	0.3
100	1.0	0.2	<0.5	0.0	0.0
150	0.8	0.2	0.0	0.5	0.0
200	1.1	0.7	5.0	0.2	0.2
250	1.7	1.0	8.0	0.4	0.4
300	1.8	1.6	11.0	-	0.8
400	2.7	1.7	10.0	-	1.3

STATION 3

DATE November 16, 1954 LAT. 27°00'N. LONG. 80°04'W. TIME 14
DEPTH 22 WIND 3 , 25 BAR. 15 AIR TEMP: dry 22.2°C, wet 21.1°C
HUMIDITY 91% WEATHER 03 CLOUDS: type 0 , amt. 8 SEA: dir. 25 , amt. 1
SWELL: dir. 09 , amt. 1 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.70	35.89	23.82	4.77
10	25.70	35.81	23.76	4.77

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.70	35.89	23.82	4.77
10	25.70	35.81	23.76	4.77

STATION 3

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.5	0.2	0.0	0.0	0.4
10	1.1	0.2	0.0	0.9	0.7

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.5	0.2	0.0	0.0	0.4
10	1.1	0.2	0.0	0.9	0.7

STATION 4

DATE November 16, 1954 LAT. 27°20'N. LONG. 80°03'W. TIME 16
DEPTH 27 WIND 4 , 25 BAR. 15 AIR TEMP: dry 23.3°C, wet 21.7°C
HUMIDITY 86% WEATHER 01 CLOUDS: type 4 , amt. 6 SEA: dir. 25 , amt. 1
SWELL: dir. 09 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.33	36.13	24.11	4.88
20	24.29	36.28	24.54	4.62

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.33	36.13	24.11	4.88
10	24.79	36.20	24.33	4.82
20	24.29	36.28	24.54	4.62

STATION 4

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.3	0.6	0.0	1.7	0.2
20	0.9	0.6	0.5	1.5	0.2

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.3	0.6	0.0	1.7	0.2
10	0.9	0.6	0.5	1.5	0.2

STATION 5

DATE November 16, 1954 LAT. 27°40'N. LONG. 80°03'W. TIME 18
DEPTH 46 WIND 4 , 17 BAR. 13 AIR TEMP: dry 24.4°C, wet 22.8°C
HUMIDITY 87% WEATHER 01 CLOUDS: type 4 , amt. 2 SEA: dir. 17 , amt. 1
SWELL: dir. 06 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.58	36.16	24.06	4.88
10	25.46	36.11	24.06	4.90
20	24.90	36.26	24.34	4.75
40	24.39	36.33	24.55	4.63

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.58	36.16	24.06	4.88
10	25.46	36.11	24.06	4.90
20	24.90	36.26	24.34	4.75
30	24.54	36.30	24.48	4.66

STATION 5

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.7	0.0	1.5	-	0.0
10	0.7	0.1	0.5	0.0	0.5
20	0.7	0.5	0.0	2.2	0.0
40	0.5	0.4	0.5	2.3	0.9

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.7	0.0	1.5	-	0.0
10	0.7	0.1	0.5	0.0	0.5
20	0.7	0.5	0.0	2.2	0.0
30	0.6	0.4	<0.5	2.3	0.5

STATION 6

DATE November 16, 1954 LAT. 27°40'N. LONG. 79°40'W. TIME 21
DEPTH 640 WIND 5 , 24 BAR. 12 AIR TEMP: dry 25.0°C, wet 23.3°C
HUMIDITY 87% WEATHER 03 CLOUDS: type 4 , amt. 4 SEA: dir. 24 , amt. 1
SWELL: dir. 34 , amt. 3 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	26.51	36.08	23.71	4.80
20	26.56	36.23	23.81	4.77
50	26.54	36.22	23.80	4.74
100	26.24	36.38	24.02	4.42
150	22.08	36.89	25.65	3.80
200	18.69	36.59	26.33	3.56
250	16.74	36.42	26.68	3.64
300	15.00	36.15	26.88	3.47*
400	12.41	35.69	27.06	3.07

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	26.51	36.08	23.71	4.80
10	26.54	36.17	23.77	4.78
20	26.56	36.23	23.81	4.77
30	26.55	36.23	23.81	4.76
50	26.54	36.22	23.80	4.74
75	26.39	36.26	23.88	4.62
100	26.24	36.38	24.02	4.42
150	22.08	36.89	25.65	3.80
200	18.69	36.59	26.33	3.56
250	16.74	36.42	26.68	3.64
300	15.00	36.15	26.88	3.52
400	12.41	35.69	27.06	3.07

STATION 6

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	-	0.3	0.0	0.4	0.2
20	0.9	0.3	1.0	1.7	0.0
50	0.6	0.0	0.0	0.4	-
100	0.4	-	0.5	0.6	0.2
150	1.2	0.5	2.0	0.0	1.0
200	2.0	0.7	3.0	3.7	0.2
250	1.4	0.9	9.0	0.4	0.7
300	-	1.5	8.0	0.0	0.0
400	2.0	1.7	16.5	-	1.1

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	-	0.3	0.0	0.4	0.2
10	-	0.3	0.5	1.0	0.1
20	0.9	0.3	1.0	1.7	0.0
30	0.8	0.2	0.5	1.3	0.0
50	0.6	0.0	0.0	0.4	0.1
75	0.5	0.2	<0.5	0.5	0.2
100	0.4	0.3	0.5	0.6	0.2
150	1.2	0.5	2.0	0.0	1.0
200	2.0	0.7	3.0	3.7	0.2
250	1.4	0.9	9.0	0.4	0.7
300	1.6	1.5	8.0	0.0	0.0
400	2.0	1.7	16.5	-	1.1

STATION 7

DATE November 17, 1954 LAT. 27°40'N. LONG. 79°19'W. TIME 00
DEPTH 503 WIND 3 , 15 BAR. 13 AIR TEMP: dry 25.0°C, wet 22.8°C
HUMIDITY 83% WEATHER 00 CLOUDS: type -, amt. 0 SEA: dir. 15 , amt. 1
SWELL: dir. 31 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	26.66	36.17	23.73	4.73
20	26.69	36.21	23.75	4.75
50	26.69	36.21	23.75	4.74
100	25.75	36.45	24.23	4.74
150	22.33	36.78	25.49	4.69
200	19.43	36.80	26.30	4.62
250	18.00	36.60	26.51	4.50
300	16.60	36.40	26.70	4.38
400	15.05	36.15	26.86	4.08
475	14.64	36.09	26.91	4.06

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	26.66	36.17	23.73	4.73
10	26.68	36.19	23.74	4.74
20	26.69	36.21	23.75	4.75
30	26.69	36.21	23.75	4.75
50	26.69	36.21	23.75	4.74
75	26.30	36.32	23.96	4.74
100	25.75	36.45	24.23	4.74
150	22.33	36.78	25.49	4.69
200	19.43	36.80	26.30	4.62
250	18.00	36.60	26.51	4.50
300	16.60	36.40	26.70	4.38
400	15.05	36.15	26.86	4.08

STATION 7

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.3	0.3	<0.5	0.0	0.4
20	1.1	0.7	0.0	1.9	1.2
50	0.9	0.3	0.0	1.2	0.4
100	0.8	0.1	0.5	0.7	0.0
150	1.0	-	<0.5	0.0	0.0
200	1.6	0.8	1.0	1.5	0.3
250	0.7	0.4	4.5	1.0	0.6
300	0.7	0.5	5.0	1.7	<0.1
400	1.3	0.9	11.0	1.9	0.2
475	-	1.5	2.5	1.0	-

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.3	0.3	<0.5	0.0	0.4
10	1.2	0.5	<0.5	1.0	0.8
20	1.1	0.7	0.0	1.9	1.2
30	1.0	0.6	0.0	1.7	0.9
50	0.9	0.3	0.0	1.2	0.4
75	0.9	0.2	<0.5	1.0	0.2
100	0.8	0.1	0.5	0.7	0.0
150	1.0	0.4	<0.5	0.0	0.0
200	1.6	0.8	1.0	1.5	0.3
250	0.7	0.4	4.5	1.0	0.6
300	0.7	0.5	5.0	1.7	<0.1
400	1.3	0.9	11.0	1.9	0.2

STATION 8

DATE November 17, 1954 LAT. 28°15'N. LONG. 79°27'W. TIME 09
DEPTH 768 WIND 3 , 27 BAR. 12 AIR TEMP: dry 24.4°C, wet 21.7°C
HUMIDITY 78% WEATHER 13 CLOUDS: type 8 , amt. - SEA: dir. 27 , amt. 1
SWELL: dir. 31 , amt. 1 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	26.54	36.09	23.71	4.73
19	26.57	36.09	23.70	4.64
48	26.62	36.11	23.70	4.80
96	25.72	36.46	24.24	4.26
145	22.23	36.80	25.54	4.74
193	19.81	36.74	26.16	4.66
242	18.40	36.67	26.47	4.68
290	17.76	36.58	26.56	4.69
388	16.11	36.27	26.72	4.29
487	14.54	36.06	26.91	4.03
686	8.75	35.12	27.27	3.01

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	26.54	36.09	23.71	4.73
10	26.55	36.09	23.70	4.67
20	26.57	36.09	23.70	4.65
30	26.59	36.10	23.70	4.74
50	26.58	36.12	23.72	4.76
75	26.15	36.31	24.00	4.37
100	25.40	36.50	24.37	4.32
150	21.93	36.79	25.62	4.73
200	19.56	36.73	26.21	4.66
250	18.30	36.66	26.49	4.68
300	17.59	36.54	26.57	4.64
400	15.97	36.25	26.73	4.27
500	14.27	36.02	26.93	3.98
600	11.68	35.61	27.14	3.53

STATION 8

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.2	0.8	0.0	1.6	1.0
19	1.4	0.2	0.0	1.6	-
48	1.2	0.7	0.0	1.9	1.4
96	0.6	0.4	0.0	0.2	1.5
145	0.9	0.3	0.0	1.4	0.3
193	1.0	-	0.5	0.9	0.0
242	1.3	1.0	11.0	0.3	0.7
290	1.1	0.5	2.0	1.8	1.8
388	0.9	0.9	4.0	-	1.5
487	1.5	0.9	5.0	3.0	0.6
686	3.4	2.3	6.0	0.7	0.0

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.2	0.8	0.0	1.6	1.0
10	1.3	0.5	0.0	1.6	1.1
20	1.4	0.2	0.0	1.6	1.2
30	1.4	0.4	0.0	1.7	1.3
50	1.2	0.7	0.0	1.9	1.4
75	0.9	0.6	0.0	1.1	1.5
100	0.6	0.4	0.0	0.2	1.5
150	0.9	0.3	0.0	1.4	0.3
200	1.0	0.7	0.5	0.9	0.0
250	1.3	1.0	11.0	0.3	0.7
300	1.1	0.5	2.0	1.8	1.8
400	1.0	0.9	4.0	2.3	1.4
500	1.7	1.0	5.0	2.8	0.6
600	2.6	1.8	5.5	1.7	0.3

STATION 9

DATE November 17, 1954 LAT. 28°20'N. LONG. 79°48'W. TIME 12
DEPTH 439 WIND 5 , 21 BAR. 13 AIR TEMP: dry 23.9°C, wet 22.2°C
HUMIDITY 86% WEATHER 01 CLOUDS: type 9 , amt. 4 SEA: dir. 21 , amt. 2
SWELL: dir. 25 , amt. 2 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	26.51	36.08	23.71	4.74
19	26.55	36.04	23.67	4.74
47	26.64	36.17	23.73	4.82
94	25.84	36.28	24.07	4.72
142	22.48	36.82	25.48	3.92
189	19.03	36.64	26.28	3.65
237	17.11	36.42	26.59	3.64
286	15.12	36.04	26.76	3.45
384	9.88	35.30	27.23	3.17

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	26.51	36.08	23.71	4.74
10	26.53	36.05	23.68	4.74
20	26.56	36.05	23.67	4.74
30	26.59	36.10	23.70	4.78
50	26.59	36.18	23.76	4.81
75	26.46	36.19	23.81	4.76
100	25.43	36.34	24.24	4.59
150	21.78	36.79	25.66	3.86
200	18.59	36.60	26.37	3.65
250	16.62	36.32	26.63	3.59
300	14.47	35.93	26.82	3.40

STATION 9

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	-	0.7	0.0	-	0.0
19	0.4	0.4	0.0	1.2	0.1
47	0.2	0.0	0.0	1.4	0.2
94	0.4	-	0.5	0.9	0.3
142	0.9	0.5	1.5	3.3	0.0
189	1.2	0.6	0.5	2.2	1.1
237	1.0	0.7	1.5	1.1	0.6
286	1.9	1.2	12.5	1.8	0.3
384	3.2	1.6	13.0	2.5	1.1

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	-	0.7	0.0	-	0.0
10	-	0.6	0.0	-	0.1
20	0.4	0.4	0.0	1.2	0.1
30	0.3	0.3	0.0	1.3	0.2
50	0.2	0.0	0.0	1.4	0.2
75	0.3	0.2	<0.5	1.1	0.3
100	0.5	0.3	0.5	1.3	0.3
150	1.0	0.5	1.5	3.1	0.2
200	1.2	0.6	1.0	2.0	1.0
250	1.3	0.9	4.5	1.3	0.6
300	2.1	1.3	12.5	1.9	0.4

STATION 10

DATE November 17, 1954 LAT. 28°20'N. LONG. 80°10'W. TIME 16
DEPTH 42 WIND 4 , 23 BAR. 14 AIR TEMP: dry 23.3°C, wet 21.7°C
HUMIDITY 86% WEATHER 03 CLOUDS: type 4 , amt. 7 SEA: dir. 23 , amt. 1
SWELL: dir. - , amt. - VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.27	36.24	24.22	4.85
10	25.29	36.19	24.17	4.82
20	25.31	36.24	24.20	4.80

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.27	36.24	24.22	4.85
10	25.29	36.19	24.17	4.82
20	25.31	36.24	24.20	4.80

STATION 10

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.5	0.7	0.0	2.9	0.3
10	-	0.6	0.5	2.2	0.2
20	0.6	0.4	0.5	0.5	0.2

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.5	0.7	0.0	2.9	0.3
10	0.6	0.6	0.5	2.2	0.2
20	0.6	0.4	0.5	0.5	0.2

STATION 11

DATE November 17, 1954 LAT. 28°20'N. LONG. 80°33'W. TIME 18
DEPTH 14 WIND 1 , 11 BAR. 12 AIR TEMP: dry 24.4°C, wet 22.2°C
HUMIDITY 82% WEATHER 01 CLOUDS: type 4 , amt. 5 SEA: dir. 11 , amt. 1
SWELL: dir. - , amt. - VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	22.64	36.15	24.93	5.40*
10	22.47	36.22	25.03	5.22

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	22.64	36.15	24.93	-
10	22.47	36.22	25.03	5.22

STATION 11

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.7	0.5	0.0	-	1.5
10	1.7	0.2	0.5	-	1.3

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.7	0.5	0.0	-	1.5
10	1.7	0.2	0.5	-	1.3

STATION 12

DATE November 17, 1954 LAT. 28°41'N. LONG. 80°32'W. TIME 21
DEPTH 18 WIND - , - BAR. 12 AIR TEMP: dry 24.4°C, wet 22.2°C
HUMIDITY 82% WEATHER 02 CLOUDS: type 4 , amt. 5 SEA: dir. 15 , amt. 1
SWELL: dir. - , amt. - VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	22.85	36.22	24.92	5.29
10	22.52	36.21	25.01	5.13

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	22.85	36.22	24.92	5.29
10	22.52	36.21	25.01	5.13

STATION 12

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.4	0.3	3.0	1.0	1.4
10	0.6	0.2	0.5	1.5	1.4

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.4	0.3	3.0	1.0	1.4
10	0.6	0.2	0.5	1.5	1.4

STATION 13

DATE November 17, 1954 LAT. 29°00'N. LONG. 80°32'W. TIME 24
DEPTH 15 WIND 3 , 04 BAR. 12 AIR TEMP: dry 20.6°C, wet 20.0°C
HUMIDITY 95% WEATHER 25 CLOUDS: type 4 , amt. 2 SEA: dir. 00 , amt. 0
SWELL: dir. - , amt. - VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	21.39	36.00	25.17	5.45
10	20.92	36.01	25.30	4.89*

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	21.39	36.00	25.17	5.45
10	20.92	36.01	25.30	-

STATION 13

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.7	0.4	0.0	2.0	1.3
10	0.7	0.5	0.5	1.0	0.6

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.7	0.4	0.0	2.0	1.3
10	0.7	0.5	0.5	1.0	0.6

STATION 14

DATE November 18, 1954 LAT. 29°00'N. LONG. 80°09'W. TIME 02
DEPTH 82 WIND - , - BAR. 13 AIR TEMP: dry 22.8°C, wet 20.6°C
HUMIDITY 82% WEATHER 00 CLOUDS: type - , amt. - SEA: dir. 00 , amt. 0
SWELL: dir. - , amt. - VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.31	36.27	24.23	4.88
10	25.32	36.24	24.20	4.88
20	25.33	36.28	24.23	4.84
50	24.49	36.26	24.47	4.74

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.31	36.27	24.23	4.88
10	25.32	36.24	24.20	4.88
20	25.33	36.28	24.23	4.84
30	25.06	36.27	24.30	4.80
50	24.49	36.26	24.47	4.74

STATION 14

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.5	-	0.0	0.1	0.4
10	0.6	0.2	0.0	0.9	0.0
20	0.6	0.2	<0.5	0.0	0.2
50	0.6	0.7	2.5	-	0.0

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.5	-	0.0	0.1	0.4
10	0.6	0.2	0.0	0.9	0.0
20	0.6	0.2	<0.5	0.0	0.2
30	0.6	0.4	1.0	-	0.1
50	0.6	0.7	2.5	-	0.0

STATION 15

DATE November 18, 1954 LAT. 29°00'N. LONG. 79°48'W. TIME 05
DEPTH 768 WIND 2 , 22 BAR. 12 AIR TEMP: dry 22.8°C, wet 20.6°C
HUMIDITY 82% WEATHER 02 CLOUDS: type - , amt. 1 SEA: dir. 00 , amt. 0
SWELL: dir. - , amt. - VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	26.67	36.23	23.77	4.76
20	26.68	36.17	23.72	4.74
49	26.73	36.15	23.69	4.78
98	26.04	36.43	24.12	4.31
146	22.23	36.89	25.61	3.80
195	19.08	36.62	26.26	3.54
291	15.74	36.23	26.77	3.58
386	12.06	35.66	27.11	3.09
479	8.58	35.16	27.33	3.11
563	7.03	34.99	27.43	3.22

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	26.67	36.23	23.77	4.76
10	26.67	36.20	23.75	4.75
20	26.68	36.17	23.72	4.74
30	26.70	36.16	23.71	4.75
50	26.72	36.16	23.70	4.77
75	26.36	36.27	23.90	4.54
100	25.87	36.46	24.20	4.28
150	21.94	36.87	25.67	3.77
200	18.92	36.60	26.28	3.54
250	17.21	36.42	26.57	3.56
300	15.39	36.17	26.80	3.55
400	11.42	35.56	27.15	3.09
500	8.05	35.09	27.36	3.13

STATION 15

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.9	0.5	1.0	0.9	0.5
20	0.9	0.2	0.0	1.1	0.0
49	0.8	0.1	<0.5	0.7	1.6
98	0.7	0.4	0.5	0.8	0.1
146	0.6	0.4	4.0	0.3	1.5
195	1.7	0.4	7.0	-	0.2
291	1.8	0.9	2.5	1.5	0.8
386	2.4	1.4	14.5	0.0	0.9
479	2.9	1.7	17.5	1.0	0.9
563	2.8	2.1	20.5	1.9	1.5

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.9	0.5	1.0	0.9	0.5
10	0.9	0.4	0.5	1.0	0.3
20	0.9	0.2	0.0	1.1	0.0
30	0.9	0.2	<0.5	1.0	0.5
50	0.8	0.1	<0.5	0.7	1.6
75	0.8	0.3	0.5	0.8	0.9
100	0.7	0.4	0.5	0.8	0.1
150	0.6	0.4	4.0	0.3	1.5
200	1.7	0.4	7.0	0.7	0.2
250	1.8	0.7	4.5	1.1	0.5
300	1.8	0.9	2.5	1.5	0.8
400	2.5	1.5	15.0	0.2	0.9
500	2.9	1.8	18.5	1.2	1.1

STATION 16

DATE November 18, 1954 LAT. 29°00'N. LONG. 79°26'W. TIME 09
DEPTH 777 WIND 8 , 17 BAR. 12 AIR TEMP: dry 23.3°C, wet 20.0°C
HUMIDITY 74% WEATHER 03 CLOUDS: type 4 , amt. 6 SEA: dir. 17 , amt. 2
SWELL: dir. 09 , amt. 1 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	26.42	36.17	23.80	4.76
20	26.46	36.11	23.75	4.79
50	25.84	36.35	24.12	4.77
100	25.63	36.49	24.29	4.63
150	20.27	36.79	26.07	4.69
200	18.99	36.72	26.36	4.71
300	18.08	36.60	26.49	4.75
400	16.87	36.47	26.69	4.44
500	14.13	35.91	26.88	3.48
600	13.37	35.86	27.00	3.71
700	10.24	35.39	27.23	3.65

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	26.42	36.17	23.80	4.76
10	26.44	36.12	23.76	4.78
20	26.46	36.11	23.75	4.79
30	26.21	36.20	23.89	4.78
50	25.84	36.35	24.12	4.77
75	25.73	36.40	24.19	4.68
100	25.63	36.49	24.29	4.63
150	20.27	36.79	26.07	4.69
200	18.99	36.72	26.36	4.71
250	18.57	36.66	26.42	4.73
300	18.08	36.60	26.49	4.75
400	16.87	36.47	26.69	4.44
500	14.13	35.91	26.88	3.48
600	13.37	35.86	27.00	3.71

STATION 16

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.7	0.3	0.0	1.6	0.2
20	0.9	0.1	3.5	1.1	0.9
50	0.6	0.2	0.0	0.4	0.1
100	0.9	0.5	0.0	0.7	0.1
150	0.8	0.6	0.0	3.7	0.3
200	1.0	-	4.0	2.1	0.5
300	1.1	0.7	1.5	2.3	1.1
400	1.2	-	10.0	1.6	0.1
500	1.8	1.6	11.0	-	<0.1
600	2.0	1.3	7.0	1.5	<0.1
700	-	1.9	13.0	-	0.1

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.7	0.3	0.0	1.6	0.2
10	0.8	0.2	2.0	1.4	0.6
20	0.9	0.1	3.5	1.1	0.9
30	0.8	0.1	2.0	0.9	0.6
50	0.6	0.2	0.0	0.4	0.1
75	0.8	0.4	0.0	0.6	0.1
100	0.9	0.5	0.0	0.7	0.1
150	0.8	0.6	0.0	3.7	0.3
200	1.0	0.6	4.0	2.1	0.5
250	1.1	0.7	2.5	2.2	0.8
300	1.1	0.7	1.5	2.3	1.1
400	1.2	1.2	10.0	1.6	0.1
500	1.8	1.6	11.0	1.6	<0.1
600	2.0	1.3	7.0	1.5	<0.1
700	-	1.9	13.0	-	0.1

STATION 17

DATE November 18, 1954 LAT. 29°40'N. LONG. 79°37'W. TIME 14
DEPTH 805 WIND 5 , 13 BAR. 14 AIR TEMP: dry 24.4°C, wet 21.1°C
HUMIDITY 74% WEATHER 02 CLOUDS: type 4 , amt. 2 SEA: dir. 13 , amt. 2
SWELL: dir. 17 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	26.56	36.16	23.75	4.62
20	26.58	36.15	23.74	4.80
49	26.61	36.14	23.72	4.80
99	25.73	36.44	24.22	4.76
148	22.07	36.77	25.56	4.58
198	19.60	36.71	26.19	3.74
297	17.47	36.55	26.61	4.41
396	14.80	36.02	26.82	3.80
495	12.09	35.71	27.14	3.10
594	9.13	35.13	27.22	3.15
694	7.41	35.01	27.39	3.33

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	26.56	36.16	23.75	4.62
10	26.57	36.16	23.75	4.72
20	26.58	36.15	23.74	4.80
30	26.59	36.15	23.74	4.80
50	26.59	36.15	23.74	4.80
75	26.51	36.29	23.87	4.78
100	25.64	36.45	24.26	4.76
150	21.95	36.77	25.60	4.53
200	19.56	36.71	26.20	3.77
250	18.55	36.64	26.41	4.25
300	17.39	36.53	26.61	4.39
400	14.70	36.01	26.83	3.76
500	11.91	35.67	27.14	3.10
600	8.99	35.11	27.23	3.16

STATION 17

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.7	0.4	0.0	-	0.7
20	0.9	-	0.5	1.3	0.1
49	0.6	0.5	<0.5	1.3	0.7
99	1.3	0.3	0.5	0.0	0.3
148	0.8	0.4	0.0	1.5	1.6
198	1.0	0.5	2.5	0.7	0.1
297	0.6	0.4	5.0	0.4	0.1
396	1.6	1.1	9.0	2.7	0.4
495	2.5	1.0	6.0	0.7	0.1
594	3.8	1.7	10.5	-	0.5
694	2.8	2.0	8.0	2.7	1.7

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.7	0.4	0.0	-	0.7
10	0.8	0.4	<0.5	-	0.4
20	0.9	0.4	0.5	1.3	0.1
30	0.8	0.5	0.5	1.3	0.3
50	0.6	0.5	<0.5	1.3	0.7
75	1.0	0.4	<0.5	0.7	0.5
100	1.3	0.3	0.5	0.0	0.3
150	0.8	0.4	0.0	1.5	1.6
200	1.0	0.5	2.5	0.7	0.1
250	0.8	0.4	3.5	0.6	0.1
300	0.6	0.4	5.0	0.4	0.1
400	1.6	1.1	9.0	2.7	0.4
500	2.5	1.0	6.0	0.7	0.1
600	3.8	1.7	10.5	1.7	0.5
700	2.8	2.0	8.0	2.7	1.7

STATION 18

DATE November 18, 1954 LAT. 29°40'N. LONG. 80°00'W. TIME 17
DEPTH 576 WIND 5 , 25 BAR. 13 AIR TEMP: dry 23.9°C, wet 21.1°C
HUMIDITY 78% WEATHER 25 CLOUDS: type 8 , amt. 2 SEA: dir. 25 , amt. 1
SWELL: dir. 25 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	26.36	35.92	23.64	4.67
15	26.60	36.03	23.64	4.70
37	26.66	36.11	23.68	4.69
72	26.04	36.30	24.02	4.67
107	25.57	36.34	24.20	4.70
141	23.80	36.55	24.89	4.39
172	19.78	36.43	25.93	3.84
202	15.36	36.05	26.72	3.21
266	10.19	35.34	27.20	3.10
337	7.52	35.08	27.43	3.20

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	26.36	35.92	23.64	4.67
10	26.53	36.00	23.64	4.69
20	26.64	36.05	23.64	4.70
30	26.64	36.08	23.67	4.69
50	26.41	36.20	23.83	4.68
75	26.00	36.30	24.03	4.69
100	25.77	36.32	24.12	4.69
150	22.69	36.54	25.21	4.24
200	15.62	36.07	26.67	3.24
250	11.24	35.48	27.12	3.11
300	8.51	35.18	27.36	3.12

STATION 18

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.5	0.6	0.5	-	1.2
15	0.4	0.5	0.0	1.8	0.1
37	0.8	0.2	0.5	0.8	1.0
72	1.8	0.3	0.0	1.8	0.2
107	0.9	-	0.5	1.2	0.3
141	-	0.5	0.5	1.4	0.5
172	1.3	0.5	3.5	0.2	0.4
202	1.8	1.3	2.0	-	0.0
266	3.2	1.9	14.0	-	0.6
337	3.0	2.0	18.0	-	0.8

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.5	0.6	0.5	-	1.2
10	0.8	0.5	<0.5	-	0.5
20	0.5	0.4	<0.5	1.5	0.3
30	0.7	0.3	<0.5	1.1	0.7
50	1.2	0.2	<0.5	1.2	0.7
75	1.8	0.3	0.0	1.8	0.2
100	1.1	0.3	0.5	1.3	0.3
150	1.2	0.5	1.5	1.0	0.5
200	1.8	1.3	2.0	-	0.0
250	2.9	1.8	11.0	-	0.5
300	3.1	2.0	16.0	-	0.7

STATION 19

DATE November 18, 1954 LAT. 29°40'N. LONG. 80°22'W. TIME 20
DEPTH 46 WIND 5 , 27 BAR. 11 AIR TEMP: dry 23.9°C, wet 21.1°C
HUMIDITY 78% WEATHER 01 CLOUDS: type 4 , amt. 1 SEA: dir. 27 , amt. 1
SWELL: dir. 08 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.74	36.18	24.33	4.82
10	24.52	36.22	24.43	4.84
20	23.88	36.22	24.62	4.87
30	23.01	36.27	24.91	4.64

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.74	36.18	24.33	4.82
10	24.52	36.22	24.43	4.84
20	23.88	36.22	24.62	4.87
30	23.01	36.27	24.91	4.64

STATION 19

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.0	0.1	3.5	1.0	0.4
10	0.6	0.2	0.5	-	0.0
20	1.0	0.2	0.0	1.5	0.0
30	1.0	0.5	<0.5	0.0	0.3

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.0	0.1	3.5	1.0	0.4
10	0.6	0.2	0.5	1.3	0.0
20	1.0	0.2	0.0	1.5	0.0
30	1.0	0.5	<0.5	0.0	0.3

STATION 20

DATE November 18, 1954 LAT. 29°40'N. LONG. 80°45'W. TIME 23
DEPTH 27 WIND 3 , 36 BAR. 12 AIR TEMP: dry 22.2°C, wet 20.0°C
HUMIDITY 82% WEATHER 00 CLOUDS: type - , amt. 2 SEA: dir. 36 , amt. 1
SWELL: dir. - , amt. - VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	22.22	36.43	25.26	5.24
10	22.15	36.38	25.24	5.28
20	21.99	36.30	25.23	5.23

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	22.22	36.43	25.26	5.24
10	22.15	36.38	25.24	5.28
20	21.99	36.30	25.23	5.23

STATION 20

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.0	<0.1	0.5	1.0	0.8
10	0.8	0.1	0.5	1.6	0.2
20	1.1	0.0	<0.5	1.1	1.0

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.0	<0.1	0.5	1.0	0.8
10	0.8	0.1	0.5	1.6	0.2
20	1.1	0.0	<0.5	1.1	1.0

STATION 21

DATE November 19, 1954 LAT. 29°40'N. LONG. 81°08'W. TIME 02
DEPTH 16 WIND 4 , 02 BAR. 13 AIR TEMP: dry 25.6°C, wet 25.0°C
HUMIDITY 96% WEATHER 00 CLOUDS: type - , amt. 0 SEA: dir. 02 , amt. 1
SWELL: dir. 02 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	19.63	35.04	24.91	5.63
10	18.00	35.12	25.38	5.25

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	19.63	35.04	24.91	5.63
10	18.00	35.12	25.38	5.25

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.6	0.4	1.0	-	0.6
10	1.5	0.4	0.0	1.8	1.8

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.6	0.4	1.0	-	0.6
10	1.5	0.4	0.0	1.8	1.8

STATION 22

DATE November 19, 1954 LAT. 30°00'N. LONG. 81°14'W. TIME 05
DEPTH 13 WIND 1 , 01 BAR. 13 AIR TEMP: dry 18.9°C, wet 18.3°C
HUMIDITY 95% WEATHER 00 CLOUDS: type - , amt. 0 SEA: dir. 01 , amt. 1
SWELL: dir. - , amt. - VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	19.26	35.44	25.31	5.63
10	18.35	35.55	25.62	4.90

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	19.26	35.44	25.31	5.63
10	18.35	35.55	25.62	4.90

STATION 22

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.7	0.3	0.0	0.6	0.4
10	3.2	0.2	0.0	1.8	0.6

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.7	0.3	0.0	0.6	0.4
10	3.2	0.2	0.0	1.8	0.6

STATION 23

DATE November 19, 1954 LAT. 30°20'N. LONG. 81°20'W. TIME 07
DEPTH 14 WIND -, - BAR. 12 AIR TEMP: dry 17.8°C, wet 17.2°C
HUMIDITY 95% WEATHER 47 CLOUDS: type -, amt. 9 SEA: dir. 00, amt. 0
SWELL: dir. 00, amt. 0 VIS. 1 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	18.08	35.91	25.97	5.54
10	17.88	35.41	25.63	4.91

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	18.08	35.91	25.97	5.54
10	17.88	35.41	25.63	4.91

STATION 23

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	2.0	0.6	<0.5	1.6	1.0
10	1.2	0.1	0.0	2.2	0.6

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	2.0	0.6	<0.5	1.6	1.0
10	1.2	0.1	0.0	2.2	0.6

STATION 24

DATE November 19, 1954 LAT. 30°20'N. LONG. 80°58'W. TIME 09
DEPTH 26 WIND - , - BAR. 12 AIR TEMP: dry 18.9°C, wet 18.9°C
HUMIDITY 99% WEATHER 28 CLOUDS: type - , amt. - SEA: dir. 00 , amt. 0
SWELL: dir. 00 , amt. 0 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	21.21	36.48	25.58	5.19
10	21.22	36.55	25.63	5.31

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	21.21	36.48	25.58	5.19
10	21.22	36.55	25.63	5.31

STATION 24

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.4	0.1	0.0	1.4	1.1
10	1.1	0.4	0.0	1.5	-

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.4	0.1	0.0	1.4	1.1
10	1.1	0.4	0.0	1.5	-

STATION 25

DATE November 19, 1954 LAT. 30°20'N. LONG. 80°35'W. TIME 12
DEPTH 33 WIND 4 , 22 BAR. 12 AIR TEMP: dry 19.4°C, wet 18.9°C
HUMIDITY 95% WEATHER 00 CLOUDS: type 6 , amt. 5 SEA: dir. 22 , amt. 1
SWELL: dir. 06 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	23.65	36.32	24.76	4.83
10	23.66	36.29	24.74	4.95
20	23.53	36.31	24.79	4.97

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	23.65	36.32	24.76	4.83
10	23.66	36.29	24.74	4.95
20	23.53	36.31	24.79	4.97

STATION 25

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.4	0.2	0.0	1.6	0.6
10	0.4	0.3	0.5	1.9	0.8
20	1.1	0.2	<0.5	0.0	0.3

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.4	0.2	0.0	1.6	0.6
10	0.4	0.3	0.5	1.9	0.8
20	1.1	0.2	<0.5	0.0	0.3

STATION 26

DATE November 19, 1954 LAT. 30°19'N. LONG. 80°11'W. TIME 14
DEPTH 174 WIND 4 , 30 BAR. 12 AIR TEMP: dry 20.6°C, wet 19.4°C
HUMIDITY 90% WEATHER 02 CLOUDS: type 4 , amt. 1 SEA: dir. 30 , amt. 1
SWELL: dir. 06 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	26.17	36.10	23.83	4.71
10	26.17	36.10	23.83	4.77
20	26.20	36.08	23.81	4.77
50	26.13	36.12	23.86	4.79
100	25.95	36.38	24.11	4.57

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	26.17	36.10	23.83	4.71
10	26.17	36.10	23.83	4.77
20	26.20	36.08	23.81	4.77
30	26.18	36.09	23.82	4.78
50	26.13	36.12	23.86	4.79
75	26.05	36.22	23.96	4.72
100	25.95	36.38	24.11	4.57

STATION 26

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.3	0.2	0.0	0.5	0.7
10	0.4	0.4	0.0	0.0	0.0
20	0.2	0.0	0.5	0.0	1.2
50	0.6	0.1	0.0	0.9	1.2
100	0.6	0.2	0.0	1.2	0.4

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.3	0.2	0.0	0.5	0.7
10	0.4	0.4	0.0	0.0	0.0
20	0.2	0.0	0.5	0.0	1.2
30	0.3	<0.1	<0.5	0.3	1.2
50	0.6	0.1	0.0	0.9	1.2
75	0.6	0.2	0.0	1.1	0.8
100	0.6	0.2	0.0	1.2	0.4

STATION 27

DATE November 19, 1954 LAT. 30°18'N. LONG. 79°50'W. TIME 17
DEPTH 640 WIND 3 , 34 BAR. 11 AIR TEMP: dry 21.7°C, wet 20.0°C
HUMIDITY 86% WEATHER 03 CLOUDS: type 4 , amt. 2 SEA: dir. 34 , amt. 1
SWELL: dir. 08 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	26.51	35.96	23.62	4.72
19	26.51	35.95	23.61	4.74
48	26.55	35.94	23.59	4.75
96	26.55	36.16	23.76	4.43
144	24.06	36.47	24.76	4.37
192	21.40	36.73	25.72	3.69
239	19.27	36.51	26.12	3.61
287	17.66	36.36	26.41	3.58
381	10.76	35.34	27.10	3.12
475	7.91	34.96	27.28	3.10
566	6.79	34.88	27.37	3.44

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	26.51	35.96	23.62	4.72
10	26.51	35.95	23.61	4.73
20	26.51	35.95	23.61	4.74
30	26.53	35.95	23.60	4.74
50	26.55	35.95	23.60	4.73
75	26.55	36.05	23.67	4.54
100	26.35	36.19	23.84	4.43
150	23.70	36.50	24.91	4.25
200	21.00	36.69	25.80	3.67
250	19.02	36.48	26.18	3.60
300	16.46	36.18	26.57	3.49
400	10.05	35.24	27.15	3.12
500	7.44	34.91	27.31	3.16

STATION 27

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.6	0.0	0.5	0.2	0.4
19	0.3	0.1	0.5	1.4	0.2
48	0.3	0.1	0.5	-	0.0
96	0.4	0.2	0.5	0.4	0.5
144	0.6	0.6	1.0	-	0.7
192	0.5	0.4	0.0	0.3	0.2
239	0.7	0.5	1.5	1.8	1.0
287	1.1	1.0	6.0	0.8	0.4
381	2.5	1.8	2.0	2.3	0.2
475	3.2	2.0	14.5	-	0.7
566	2.5	2.3	13.5	-	1.4

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.6	0.0	0.5	0.2	0.4
10	0.5	<0.1	0.5	0.8	0.3
20	0.3	0.1	0.5	1.4	0.2
30	0.3	0.1	0.5	1.3	0.1
50	0.3	0.1	0.5	1.2	0.0
75	0.4	0.2	0.5	0.8	0.3
100	0.4	0.2	0.5	0.4	0.5
150	0.6	0.6	1.0	0.4	0.7
200	0.5	0.4	0.0	0.3	0.2
250	0.8	0.6	2.5	1.6	0.9
300	1.3	1.1	5.5	1.0	0.4
400	2.7	1.9	4.5	2.3	0.3
500	3.0	2.1	14.5	-	0.9

STATION 28

DATE November 19, 1954 LAT. 30°20'N. LONG. 79°27'W. TIME 20
DEPTH 786 WIND 2 , 26 BAR. 08 AIR TEMP: dry 22.8°C, wet 20.6°C
HUMIDITY 82% WEATHER 03 CLOUDS: type 4 , amt. 3 SEA: dir. 26 , amt. 1
SWELL: dir. 08 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.94	36.00	23.83	4.69
19	25.93	36.15	23.94	4.74
47	25.79	36.21	24.03	4.72
94	24.90	36.34	24.40	4.82
142	22.79	36.67	25.28	4.59
190	19.99	36.67	26.06	4.59
286	18.21	36.55	26.42	4.88
384	17.15	36.32	26.51	4.45
482	14.55	35.82	26.72	3.66
581	12.40	35.44	26.87	3.09
681	9.68	35.08	27.09	2.94

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.94	36.00	23.83	4.69
10	25.93	36.09	23.90	4.72
20	25.93	36.15	23.94	4.74
30	25.91	36.17	23.96	4.73
50	25.77	36.22	24.05	4.74
75	25.40	36.26	24.19	4.78
100	24.67	36.38	24.50	4.78
150	22.23	36.67	25.44	4.59
200	19.77	36.66	26.11	4.61
250	18.79	36.61	26.32	4.80
300	18.15	36.53	26.42	4.87
400	16.69	36.23	26.55	4.31
500	14.20	35.75	26.74	3.53
600	11.93	35.37	26.91	3.03

STATION 28

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.1	0.9	0.5	1.2	0.1
19	0.4	0.5	<0.5	2.7	-
47	-	0.5	0.0	0.8	0.5
94	0.5	-	0.0	1.7	1.7
142	0.7	0.4	0.5	-	1.4
190	1.2	0.3	0.0	1.3	0.1
286	1.1	0.4	3.5	2.6	0.2
384	-	0.9	3.0	3.3	0.2
482	2.1	1.9	8.5	-	1.1
581	2.3	1.5	18.5	3.1	0.4
681	-	2.0	20.0	3.6	0.4

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.1	0.9	0.5	1.2	0.1
10	0.8	0.7	0.5	2.0	-
20	0.4	0.5	<0.5	2.7	-
30	-	0.5	<0.5	2.1	-
50	-	0.5	0.0	0.8	0.5
75	-	-	0.0	1.3	1.1
100	0.5	-	0.0	1.7	1.7
150	0.7	0.4	0.5	1.5	1.4
200	1.2	0.3	0.0	1.3	0.1
250	1.2	0.4	2.0	2.0	0.2
300	1.2	0.5	3.5	2.8	0.2
400	1.7	1.1	4.0	3.3	0.4
500	2.1	1.9	10.5	3.2	1.0
600	-	1.6	19.0	3.2	0.4

STATION 29

DATE November 20, 1954 LAT. 30°57'N. LONG. 79°14'W. TIME 01
DEPTH 768 WIND 10 , 21 BAR. 08 AIR TEMP: dry 22.8°C, wet 20.0°C
HUMIDITY 78% WEATHER 00 CLOUDS: type - , amt. - SEA: dir. 21 , amt. 3
SWELL: dir. - , amt. - VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	26.57	35.96	23.60	4.56
20	26.61	35.97	23.59	4.61
49	26.64	35.88	23.52	4.67
99	25.16	36.40	24.37	4.11
148	22.18	36.62	25.42	3.66
198	20.07	36.62	26.00	3.59
297	18.03	36.46	26.40	4.59
396	15.55	36.04	26.67	3.53
495	13.18	35.61	26.85	3.17
595	10.56	35.23	27.05	3.04
695	7.49	34.99	27.36	3.43

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	26.57	35.96	23.60	4.56
10	26.59	35.96	23.59	4.58
20	26.61	35.97	23.59	4.61
30	26.62	35.91	23.55	4.66
50	26.63	35.89	23.53	4.66
75	25.85	36.15	23.97	4.37
100	25.09	36.41	24.40	4.10
150	22.08	36.62	25.44	3.65
200	20.03	36.62	26.01	3.63
250	19.05	36.57	26.23	4.15
300	17.95	36.45	26.41	4.55
400	15.46	36.02	26.67	3.51
500	13.06	35.59	26.86	3.15
600	10.42	35.21	27.06	3.05

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.8	0.0	0.0	1.1	0.7
20	1.2	0.0	0.0	2.6	0.7
49	0.6	0.3	<0.5	0.2	0.3
99	0.8	0.3	<0.5	-	0.0
148	0.7	0.3	9.0	0.6	0.0
198	1.2	0.4	18.0	3.1	0.4
297	1.4	0.1*	0.0*	0.6	0.3
396	1.6	0.8	6.0	1.9	0.7
495	2.4	1.3	10.5	0.1	0.6
595	4.0	1.9	4.5	2.3	0.5
695	4.2	2.0	16.0	-	0.8

* Value questionable

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.8	0.0	0.0	1.1	0.7
10	1.0	0.0	0.0	1.8	0.7
20	1.2	0.0	0.0	2.6	0.7
30	1.0	0.1	<0.5	1.8	0.6
50	0.6	0.3	<0.5	0.2	0.3
75	0.7	0.3	<0.5	0.3	0.2
100	0.8	0.3	<0.5	0.4	0.0
150	0.7	0.3	9.0	0.6	0.0
200	1.2	0.4	18.0	3.1	0.4
250	1.3	0.5	15.0	1.8	0.4
300	1.4	0.6	12.0	0.6	0.3
400	1.6	0.8	6.0	1.9	0.7
500	2.4	1.3	10.5	0.1	0.6
600	4.0	1.9	4.5	2.3	0.5
700	4.2	2.0	16.0	-	0.8

STATION 30

DATE November 20, 1954 LAT. 30°58'N. LONG. 79°37'W. TIME 06
DEPTH 585 WIND 10, 22 BAR. 05 AIR TEMP: dry 22.8°C, wet 20.0°C
HUMIDITY 78% WEATHER 02 CLOUDS: type -, amt. 0 SEA: dir. 22, amt. 3
SWELL: dir. -, amt. - VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	26.50	36.01	23.66	4.61
15	26.53	36.00	23.64	4.69
39	26.57	36.00	23.63	4.67
78	26.52	35.99	23.64	4.68
117	26.30	36.35	23.98	4.39
157	22.20	36.73	25.49	3.78
197	20.36	36.63	25.93	3.57
238	18.74	36.44	26.21	3.43
322	15.84	36.05	26.61	3.34
411	8.99	35.23	27.32	3.10

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	26.50	36.01	23.66	4.61
10	26.52	36.00	23.64	4.67
20	26.54	36.00	23.64	4.68
30	26.56	36.00	23.63	4.68
50	26.56	36.00	23.63	4.67
75	26.53	35.99	23.63	4.68
100	26.40	36.19	23.83	4.55
150	22.75	36.70	25.31	3.86
200	20.24	36.62	25.95	3.56
250	18.54	36.41	26.23	3.42
300	16.93	36.19	26.46	3.38
400	10.05	35.35	27.24	3.14

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.9	0.3	0.0	1.7	1.8
15	1.3	0.2	0.0	1.9	-
39	0.7	0.3	-	-	0.2
78	0.7	0.4	0.0	0.2	1.4
117	1.2	0.2	0.5	1.6	0.8
157	1.2	0.6	2.0	1.0	0.4
197	2.4	1.2	0.5	-	1.6
238	2.0	0.8	0.5	2.4	1.4
322	1.9	1.2	2.5	0.4	0.5
411	3.3	1.8	3.5	-	0.5

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.9	0.3	0.0	1.7	1.8
10	1.2	0.2	0.0	1.8	1.4
20	1.2	0.2	0.0	1.8	1.0
30	0.9	0.3	0.0	1.5	0.6
50	0.7	0.4	0.0	1.0	0.6
75	0.7	0.4	0.0	0.2	1.4
100	1.0	0.3	<0.5	1.0	1.1
150	1.2	0.6	2.0	1.1	0.4
200	2.4	1.2	0.5	1.8	1.6
250	2.0	0.9	1.0	2.1	1.3
300	1.9	1.1	2.0	1.0	0.7
400	3.2	1.7	3.5	-	0.5

STATION 35

DATE November 29, 1954 LAT. 31°20'N. LONG. 80°53'W. TIME 19
DEPTH 13 WIND 3 , 21 BAR. 21 AIR TEMP: dry 17.2°C, wet 14.4°C
HUMIDITY 74% WEATHER 00 CLOUDS: type - , amt. 0 SEA: dir. 31 , amt. 1
SWELL: dir. 15 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	16.98	35.98	26.29	5.67
10	16.86	35.96	26.30	5.61

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	16.98	35.98	26.29	5.67
10	16.86	35.96	26.30	5.61

STATION 35

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	2.9	0.8	0.0	0.3	1.8
10	3.5	0.0	0.0	0.0	0.0

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	2.9	0.8	0.0	0.3	1.8
10	3.5	0.0	0.0	0.0	0.0

STATION 36

DATE November 29, 1954 LAT. 31°41'N. LONG. 80°36'W. TIME 23
DEPTH 16 WIND 6 , 29 BAR. 22 AIR TEMP: dry 17.2°C, wet 11.7°C
HUMIDITY 50% WEATHER 00 CLOUDS: type - , amt. 0 SEA: dir. 31 , amt. 2
SWELL: dir. 15 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	16.83	36.16	26.46	5.66
10	16.85	36.09	26.40	5.70

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	16.83	36.16	26.46	5.66
10	16.85	36.09	26.40	5.70

STATION 36

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.3	0.2	0.0	1.9	0.7
10	1.6	1.1	<0.5	-	-

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.3	0.2	0.0	1.9	0.7
10	1.6	1.1	<0.5	-	-

STATION 37

DATE November 30, 1954 LAT. 31°36'N. LONG. 80°14'W. TIME 01
DEPTH 31 WIND 10 , 32 BAR. 25 AIR TEMP: dry 17.2°C, wet 12.2°C
HUMIDITY 55% WEATHER 00 CLOUDS: type - , amt. 0 SEA: dir. 32 , amt. 3
SWELL: dir. - , amt. - VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	19.34	36.51	26.10	5.35
10	19.35	36.48	26.08	5.35
20	19.38	36.46	26.06	5.37

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	19.34	36.51	26.10	5.35
10	19.35	36.48	26.08	5.35
20	19.38	36.46	26.06	5.37

STATION 37

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.7	0.5	0.0	6.9	1.8
10	1.5	0.2	0.5	0.8	0.4
20	1.9	0.4	0.0	1.1	0.6

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.7	0.5	0.0	6.9	1.8
10	1.5	0.2	0.5	0.8	0.4
20	1.9	0.4	0.0	1.1	0.6

STATION 38

DATE November 30, 1954 LAT. 31°35'N. LONG. 79°51'W. TIME 04
DEPTH 42 WIND 12 , 32 BAR. 26 AIR TEMP: dry 16.7°C, wet 12.8°C
HUMIDITY 64% WEATHER 00 CLOUDS: type - , amt. - SEA: dir. 32 , amt. 3
SWELL: dir. - , amt. - VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	23.68	36.27	24.72	4.88
10	23.72	36.27	24.71	4.89
20	23.74	36.24	24.68	4.83
30	23.70	36.20	24.66	4.83

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	23.68	36.27	24.72	4.88
10	23.72	36.27	24.71	4.89
20	23.74	36.24	24.68	4.83
30	23.70	36.20	24.66	4.83

STATION 38

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	-	0.4	0.0	1.0	0.5
10	2.4	0.0	0.0	10.9	-
20	1.6	0.0	0.0	0.2	0.0
30	0.5	0.9	0.5	-	1.2

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	-	0.4	0.0	1.0	0.5
10	2.4	0.0	0.0	10.9	0.3
20	1.6	0.0	0.0	0.2	0.0
30	0.5	0.9	0.5	-	1.2

STATION 39

DATE November 30, 1954 LAT. 31°32'N. LONG. 79°28'W. TIME 07
DEPTH 536 WIND 10 , 32 BAR. 27 AIR TEMP: dry 16.7°C, wet 12.2°C
HUMIDITY 59% WEATHER 00 CLOUDS: type - , amt. - SEA: dir. 32 , amt. 3
SWELL: dir. - , amt. - VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.30	36.18	24.46	4.88
14	24.41	36.16	24.42	4.91
39	24.38	36.15	24.42	4.90
79	23.39	36.16	24.72	4.88*
117	21.81	36.50	25.43	3.96
156	17.99	36.35	26.33	3.47
195	14.70	35.84	26.70	3.27
234	11.97	35.43	26.95	3.10
309	9.08	35.11	27.21	3.10
382	7.00	34.89	27.35	3.32

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.30	36.18	24.46	4.88
10	24.39	36.17	24.43	4.90
20	24.40	36.16	24.42	4.91
30	24.39	36.15	24.42	4.90
50	24.18	36.15	24.48	4.77
75	23.52	36.16	24.68	4.47
100	22.52	36.36	25.12	4.17
150	18.54	36.38	26.21	3.53
200	14.30	35.78	26.74	3.24
250	11.29	35.35	27.01	3.10
300	9.39	35.14	27.18	3.10

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	3.0	0.3	0.5	1.7	1.0
14	0.9	0.0	0.5	-	<0.1
39	1.5	0.2	0.5	-	0.8
79	1.8	0.5	0.0	2.1	0.4
117	1.5	0.3	0.5	-	0.8
156	-	-	1.5	1.6	0.5
195	3.1	1.3	13.0	-	0.0
234	1.7	1.3	12.5	-	0.5
309	4.0	1.9	3.5	-	1.6
382	3.4	2.0	8.5	-	0.7

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	3.0	0.3	0.5	1.7	1.0
10	1.4	0.1	0.5	-	0.3
20	1.0	0.1	0.5	-	0.3
30	1.3	0.1	0.5	-	0.6
50	1.6	0.3	<0.5	-	0.7
75	1.8	0.5	0.0	2.1	0.5
100	1.6	0.4	<0.5	-	0.6
150	2.2	0.8	1.5	1.6	0.5
200	3.1	1.3	13.0	-	0.0
250	2.2	1.5	10.5	-	0.7
300	4.0	1.9	3.5	-	1.6

STATION 40

DATE November 30, 1954 LAT. 31°30'N. LONG. 78°42'W. TIME 11
DEPTH 539 WIND 9 , 02 BAR. 27 AIR TEMP: dry 17.8°C, wet 13.9°C
HUMIDITY 65% WEATHER 00 CLOUDS:type - ,amt. - SEA:dir. 02 ,amt. 3
SWELL:dir. - ,amt. - VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.32	36.08	24.08	4.82
18	25.36	36.08	24.07	4.88
45	25.40	36.07	24.05	4.78
91	24.99	36.26	24.32	4.79
134	22.60	36.74	25.39	3.88
175	19.91	36.60	26.02	3.68
215	18.32	36.41	26.29	3.57
255	16.88	36.21	26.49	3.58
332	14.95	35.91	26.70	-

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.32	36.08	24.08	4.82
10	25.34	36.08	24.07	4.86
20	25.37	36.08	24.06	4.87
30	25.38	36.08	24.06	4.83
50	25.36	36.09	24.07	4.78
75	25.15	36.16	24.19	4.79
100	24.53	36.36	24.53	4.54
150	21.42	36.69	25.68	3.79
200	18.90	36.48	26.20	3.60
250	17.04	36.23	26.47	3.58
300	15.62	36.02	26.64	-

STATION 40

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	3.7	0.6	<0.5	-	0.4
18	1.0	0.0	0.5	-	1.7
45	1.4	0.6	1.0	-	0.6
91	1.4	0.2	0.5	1.9	0.3
134	1.2	0.5	1.0	0.8	0.8
175	1.3	0.5	3.5	-	0.1
215	1.5	-	4.0	-	0.3
255	1.9	1.0	2.5	1.5	0.9
332	2.4	1.0	1.0	-	0.9

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	3.7	0.6	<0.5	-	0.4
10	2.3	0.3	0.5	-	1.1
20	1.0	0.0	0.5	-	1.7
30	1.2	0.3	0.5	-	1.2
50	1.4	0.6	1.0	-	0.6
75	1.4	0.3	0.5	-	0.4
100	1.4	0.3	0.5	1.7	0.4
150	1.2	0.5	2.0	0.9	0.5
200	1.4	0.7	4.0	1.2	0.2
250	1.8	1.0	2.5	1.5	0.8
300	2.2	1.0	1.5	-	0.9

STATION 41

DATE November 30, 1954 LAT. 31°40'N. LONG. 79°01'W. TIME 16
DEPTH 536 WIND 9 , 04 BAR. 32 AIR TEMP: dry 18.3°C, wet 13.9°C
HUMIDITY 61% WEATHER 00 CLOUDS: type - , amt. 1 SEA: dir. 04 , amt. 4
SWELL: dir. - , amt. - VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.36	36.09	24.07	4.80
13	25.39	36.10	24.07	4.79
33	25.43	36.09	24.05	4.80
67	24.98	36.34	24.38	4.78
100	22.54	36.47	25.20	4.42
135	20.57	36.46	25.74	3.83
169	19.44	36.49	26.06	3.54
204	16.37	36.13	26.55	3.47
276	11.32	35.32	26.98	3.10
352	9.83	35.21	27.16	3.31

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.36	36.09	24.07	4.80
10	25.38	36.10	24.08	4.79
20	25.40	36.10	24.07	4.79
30	25.42	36.09	24.06	4.80
50	25.20	36.23	24.23	4.79
75	24.34	36.38	24.60	4.71
100	22.54	36.47	25.20	4.42
150	20.30	36.47	25.82	3.68
200	16.70	36.17	26.50	3.48
250	12.74	35.53	26.87	3.17
300	10.84	35.28	27.04	3.17

STATION 41

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.5	0.0	0.0	0.8	0.9
13	0.5	0.2	<0.5	-	1.3
33	1.1	0.4	0.5	-	0.6
67	0.7	0.2	<0.5	-	-
100	1.2	0.3	0.0	-	0.5
135	0.7	0.2	0.5	-	1.7
169	1.0	0.0	1.0	1.7	1.3
204	1.5	1.1	10.0	0.0	0.9
276	2.0	1.9	13.5	2.9	2.0
352	2.5	1.9	13.0	1.0	0.3

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.5	0.0	0.0	0.8	0.9
10	0.7	0.2	<0.5	-	1.2
20	0.7	0.3	0.5	-	1.0
30	1.1	0.4	0.5	-	0.7
50	0.9	0.3	0.5	-	0.6
75	0.8	0.3	<0.5	-	0.6
100	1.2	0.3	0.0	-	0.5
150	0.9	0.1	0.5	-	1.5
200	1.5	1.1	10.0	0.0	0.9
250	1.8	1.6	12.5	1.9	1.6
300	2.2	1.9	13.5	2.3	1.5

STATION 42

DATE November 30, 1954 LAT. 31°57'N. LONG. 79°17'W. TIME 20
DEPTH 137 WIND 10 , 03 BAR. 31 AIR TEMP: dry 18.9°C, wet 14.4°C
HUMIDITY 61% WEATHER 00 CLOUDS: type - , amt. 0 SEA: dir. 03 , amt. 4
SWELL: dir. 04 , amt. 3 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.02	36.26	24.61	4.89
10	24.04	36.18	24.54	4.92
20	24.02	36.27	24.62	4.91
50	21.95	36.22	25.18	5.11
100	19.18	36.22	25.92	4.05

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.02	36.26	24.61	4.89
10	24.04	36.18	24.54	4.92
20	24.02	36.27	24.62	4.91
30	23.30	36.25	24.81	5.05
50	21.95	36.22	25.18	5.11
75	20.46	36.22	25.59	4.80
100	19.18	36.22	25.92	4.05

STATION 42

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.3	0.2	<0.5	1.4	1.4
10	1.1	0.0	0.0	-	2.0
20	1.0	0.2	0.5	-	-
50	1.0	0.5	<0.5	2.1	0.2
100	1.9	0.8	0.5	-	0.5

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.3	0.2	<0.5	1.4	1.4
10	1.1	0.0	0.0	-	2.0
20	1.0	0.2	0.5	-	1.5
30	1.0	0.3	0.5	-	1.1
50	1.0	0.5	<0.5	2.1	0.2
75	1.5	0.7	0.5	-	0.4
100	1.9	0.8	0.5	-	0.5

STATION 43

DATE November 30, 1954 LAT. 32°12'N. LONG. 79°33'W. TIME 23
DEPTH 31 WIND 9 , 03 BAR. 31 AIR TEMP: dry 15.0°C, wet 10.0°C
HUMIDITY 53% WEATHER 02 CLOUDS: type 5 , amt. 1 SEA: dir. 03 , amt. 3
SWELL: dir. 04 , amt. 3 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	19.84	36.40	25.89	5.28
10	19.87	36.32	25.82	5.34*
20	19.88	36.34	25.83	5.32

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	19.84	36.40	25.89	5.28
10	19.87	36.32	25.82	5.29
20	19.88	36.34	25.83	5.32

STATION 43

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.1	0.2	0.5	-	0.5
10	2.0	0.3	<0.5	2.6	1.3
20	1.0	1.2	0.0	0.0	0.1

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.1	0.2	0.5	-	0.5
10	2.0	0.3	<0.5	2.6	1.3
20	1.0	1.2	0.0	0.0	0.1

STATION 44

DATE December 1, 1954 LAT. 32°26'N. LONG. 79°50'W. TIME 01
DEPTH 16 WIND 7 , 01 BAR. 32 AIR TEMP: dry 13.9°C, wet 8.9°C
HUMIDITY 50% WEATHER 02 CLOUDS: type - , amt. 0 SEA: dir. 01 , amt. 2
SWELL: dir. - , amt. - VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	16.53	36.36	26.69	5.69
10	16.56	36.35	26.67	5.68

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	16.53	36.36	26.69	5.69
10	16.56	36.35	26.67	5.68

STATION 44

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.8	1.1	<0.5	-	0.6
10	0.8	0.0	7.0	1.8	0.9

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.8	1.1	<0.5	-	0.6
10	0.8	0.0	7.0	1.8	0.9

STATION 45

DATE December 2, 1954 LAT. 32°40'N. LONG. 79°33'W. TIME 01
DEPTH 13 WIND 4 , 19 BAR. 22 AIR TEMP: dry 15.6°C, wet 13.9°C
HUMIDITY 83% WEATHER 03 CLOUDS: type - , amt. 2 SEA: dir. 00 , amt. 0
SWELL: dir. - , amt. - VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	15.34	35.86	26.58	5.89
10	15.35	35.89	26.60	5.89

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	15.34	35.86	26.58	5.89
10	15.35	35.89	26.60	5.89

STATION 45

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.3	0.4	0.0	-	0.8
10	0.7	0.2	0.0	0.7	1.7

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.3	0.4	0.0	-	0.8
10	0.7	0.2	0.0	0.7	1.7

STATION 46

DATE December 2, 1954 LAT. 32°54'N. LONG. 79°16'W. TIME 03
DEPTH 14 WIND 9 , 25 BAR. 20 AIR TEMP: dry 16.1°C, wet 15.0°C
HUMIDITY 89% WEATHER 00 CLOUDS: type - , amt. - SEA: dir. 25 , amt. 2
SWELL: dir. - , amt. - VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	15.85	35.87	26.47	5.85
10	15.95	35.91	26.48	5.76

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	15.85	35.87	26.47	5.85
10	15.95	35.91	26.48	5.76

STATION 46

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	4.3	0.0	<0.5	0.4	-
10	1.3	0.2	<0.5	0.0	0.4

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	4.3	0.0	<0.5	0.4	-
10	1.3	0.2	<0.5	0.0	0.4

STATION 47

DATE December 3, 1954 LAT. 32°40'N. LONG. 79°00'W. TIME 22
DEPTH 24 WIND 1 , 35 BAR. 15 AIR TEMP: dry 11.1°C, wet 8.3°C
HUMIDITY 69% WEATHER 02 CLOUDS: type 8 , amt. 1 SEA: dir. 00 , amt. 0
SWELL: dir. 08 , amt. 2 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	20.76	36.35	25.61	5.37
10	20.79	36.37	25.61	5.50
20	19.67	36.39	25.93	5.35

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	20.76	36.35	25.61	5.37
10	20.79	36.37	25.61	5.50
20	19.67	36.39	25.93	5.35

STATION 47

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.5	0.0	0.0	-	0.1
10	1.0	0.3	0.0	-	0.0
20	0.5	0.0	0.0	-	0.0

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.5	0.0	0.0	-	0.1
10	1.0	0.3	0.0	-	0.0
20	0.5	0.0	0.0	-	0.0

STATION 48

DATE December 4, 1954 LAT. 32°26'N. LONG. 78°43'W. TIME 01
DEPTH 183 WIND 2 , 32 BAR. 16 AIR TEMP: dry 13.9°C, wet 10.6°C
HUMIDITY 66% WEATHER 02 CLOUDS: type 8 , amt. 1 SEA: dir. - , amt. -
SWELL: dir. 08 , amt. 2 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	22.46	36.36	25.14	5.04
10	22.50	36.31	25.09	5.11
20	22.26	36.29	25.14	5.11
50	22.08	36.30	25.20	5.03
100	20.96	36.31	25.52	5.02
150	17.36	36.20	26.37	3.53

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	22.46	36.36	25.14	5.04
10	22.50	36.31	25.09	5.11
20	22.26	36.29	25.14	5.11
30	22.24	36.29	25.15	5.08
50	22.08	36.30	25.20	5.03
75	21.83	36.31	25.28	5.02
100	20.96	36.31	25.52	5.02
150	17.36	36.20	26.37	3.53

STATION 48

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.8	0.2	0.5	-	0.5
10	2.7	0.2	<0.5	2.0	0.9
20	3.0	0.3	0.5	-	0.8
50	1.4	0.4	0.0	1.2	7.2
100	1.9	0.5	0.5	-	0.3
150	2.7	1.4	2.0	-	0.3

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.8	0.2	0.5	-	0.5
10	2.7	0.2	<0.5	2.0	0.9
20	3.0	0.3	0.5	1.8	0.8
30	2.5	0.3	0.5	1.6	-
50	1.4	0.4	0.0	1.2	7.2
75	1.7	0.5	<0.5	-	-
100	1.9	0.5	0.5	-	0.3
150	2.7	1.4	2.0	-	0.3

STATION 49

DATE December 4, 1954 LAT. 32°10'N. LONG. 78°28'W. TIME 04
DEPTH 357 WIND 5 , 32 BAR. 16 AIR TEMP: dry 14.4°C, wet 11.1°C
HUMIDITY 66% WEATHER 03 CLOUDS: type 8 , amt. - SEA: dir. 32 , amt. 1
SWELL: dir. 07 , amt. 2 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	23.82	36.20	24.62	5.01
17	23.13	36.26	24.87	5.01
44	22.80	36.31	25.00	4.97
89	22.27	36.27	25.13	4.94
134	16.96	36.22	26.48	5.24
179	13.90	35.79	26.84	3.32
226	11.79	35.58	27.10	3.25
274	10.86	35.32	27.07	3.22

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	23.82	36.20	24.62	5.01
10	23.39	36.24	24.78	5.01
20	23.09	36.27	24.89	5.00
30	22.97	36.29	24.94	4.99
50	22.73	36.30	25.02	4.95
75	22.43	36.28	25.09	4.95
100	20.76	36.26	25.54	5.22
150	15.76	36.04	26.62	4.35
200	12.81	35.70	26.99	3.28
250	11.17	35.46	27.12	3.23

STATION 49

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.8	<0.1	0.0	2.0	0.0
17	1.6	1.0	0.5	0.8	0.1
44	1.4	0.4	1.0	0.6	0.2
89	2.1	0.1	<0.5	3.5	0.1
134	1.3	1.2	4.5	1.5	1.3
179	1.6	1.2	12.0	0.2	0.0
226	3.5	2.0	9.0	6.6	0.6
274	1.9	2.3	11.5	-	0.5

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.8	<0.1	0.0	2.0	0.0
10	1.7	0.6	0.5	1.3	0.1
20	1.6	0.9	0.5	0.8	0.1
30	1.5	0.7	1.0	0.7	0.2
50	1.5	0.4	1.0	1.0	0.2
75	1.9	0.2	0.5	2.6	0.2
100	1.9	0.4	1.5	3.0	0.4
150	1.4	1.2	7.0	1.0	0.8
200	2.5	1.6	10.5	3.0	0.3
250	2.7	2.2	10.5	-	0.5

STATION 50

DATE December 4, 1954 LAT. 32°56'N. LONG. 78°08'W. TIME 07
DEPTH 677 WIND 3 , 35 BAR. 16 AIR TEMP: dry 16.1°C, wet 11.7°C
HUMIDITY 58% WEATHER 00 CLOUDS: type - , amt. 1 SEA: dir. 34 , amt. 1
SWELL: dir. 07 , amt. 2 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.49	36.09	24.03	4.84
18	25.53	36.10	24.03	4.83
46	25.58	36.11	24.02	4.84
91	25.47	36.07	24.03	4.84
120	25.14	36.29	24.29	4.84
155	22.67	36.53	25.21	4.47
190	20.33	36.58	25.90	4.60
222	18.38	36.40	26.27	3.41
284	13.04	35.59	26.86	3.24
344	10.35	35.32	27.16	3.22
403	8.41	35.05	27.27	3.37

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.49	36.09	24.03	4.84
10	25.51	36.10	24.04	4.83
20	25.54	36.10	24.03	4.83
30	25.56	36.10	24.02	4.83
50	25.57	36.09	24.01	4.84
75	25.57	36.08	24.00	4.84
100	25.37	36.14	24.11	4.84
150	22.99	36.51	25.10	4.59
200	19.78	36.54	26.01	4.15
250	15.65	35.97	26.59	3.31
300	12.25	35.52	26.96	3.23
400	8.49	35.06	27.27	3.36

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	-	1.0	<0.5	-	0.4
18	1.2	0.2	0.0	0.0	0.4
46	1.4	0.7	0.5	2.0	0.8
91	2.0	0.9	<0.5	0.0	0.4
120	1.3	0.8	0.0	-	-
155	4.0	0.4	1.5	0.0	0.6
190	2.5	0.5	4.5	0.9	0.3
222	-	1.5	7.5	0.1	0.2
284	1.8	1.9	14.0	-	0.6
344	3.3	1.8	14.0	-	0.3
403	2.0	1.8	12.0	-	0.5

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	-	1.0	<0.5	-	0.4
10	-	0.6	<0.5	-	0.4
20	1.2	0.3	<0.5	0.1	0.5
30	1.3	0.4	<0.5	0.9	0.6
50	1.5	0.7	0.5	1.8	0.8
75	1.8	0.8	0.5	0.7	0.5
100	1.8	0.9	<0.5	0.0	0.4
150	4.0	0.4	1.5	0.0	0.6
200	2.5	0.5	4.5	0.9	0.3
250	2.1	1.7	10.5	-	0.4
300	2.2	1.9	14.0	-	0.5
400	2.0	1.8	12.0	-	0.5

STATION 51

DATE December 4, 1954 LAT. 32°20'N. LONG. 77°35'W. TIME 11
DEPTH 585 WIND 4 , 32 BAR. 15 AIR TEMP: dry 15.0°C, wet 10.6°C
HUMIDITY 57% WEATHER 01 CLOUDS: type - , amt. 2 SEA: dir. 32 , amt. 1
SWELL: dir. 07 , amt. 3 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.23	36.23	24.52	5.00
12	24.24	36.20	24.50	4.98
30	24.27	36.18	24.47	4.99
60	23.62	36.26	24.73	4.86
91	22.81	36.26	24.96	4.74
118	19.54	36.38	25.95	3.78
145	17.09	36.20	26.43	3.59
173	15.43	35.96	26.63	3.44
231	11.40	35.41	27.04	3.29
292	9.68	35.26	27.23	3.18
357	8.83	35.16	27.29	3.46

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.23	36.23	24.52	5.00
10	24.24	36.21	24.51	4.98
20	24.25	36.19	24.49	4.98
30	24.27	36.18	24.47	4.99
50	23.85	36.24	24.64	4.90
75	23.23	36.26	24.84	4.80
100	21.63	36.33	25.35	4.22
150	16.81	36.16	26.47	3.51
200	13.26	35.65	26.86	3.36
250	10.77	35.36	27.12	3.22
300	9.52	35.24	27.24	3.19

STATION 51

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	2.3	0.5	0.0	-	0.6
12	0.5	0.2	0.5	-	1.0
30	1.6	0.4	0.5	0.3	0.0
60	1.9	0.1	<0.5	1.5	0.1
91	-	-	0.5	-	1.6
118	0.6	0.5	3.0	1.6	0.6
145	1.5	1.3	1.5	1.7	0.4
173	3.0	0.9	2.0	0.5	0.5
231	-	1.4	1.0	-	0.4
292	3.4	-	17.0	-	0.8
357	3.4	1.8	6.0	1.5	0.8

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	2.3	0.5	0.0	-	0.6
10	0.8	0.3	0.5	-	0.9
20	1.0	0.3	0.5	-	0.5
30	1.6	0.4	0.5	0.3	0.0
50	1.8	0.2	0.5	1.1	0.1
75	1.6	0.2	0.5	1.6	0.8
100	1.0	0.4	1.5	1.6	1.3
150	1.5	1.3	1.5	1.7	0.4
200	3.1	1.2	1.5	-	0.4
250	3.3	1.5	6.0	-	0.5
300	3.4	1.6	17.0	1.5	0.8

STATION 52

DATE December 4, 1954 LAT. 32°35'N. LONG. 77°47'W. TIME 14
DEPTH 357 WIND 6 , 28 BAR. 18 AIR TEMP: dry 15.0°C, wet 10.6°C
HUMIDITY 57% WEATHER 01 CLOUDS: type - , amt. 0 SEA: dir. 30 , amt. 1
SWELL: dir. 09 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	22.55	36.29	25.06	5.02
20	22.58	36.28	25.04	5.09
50	22.57	36.26	25.03	5.10
100	17.25	36.20	26.39	3.68
150	12.86	35.68	26.97	3.35
200	9.53	35.19	27.20	3.17
250	9.04	35.15	27.25	3.44
300	8.75	35.16	27.30	3.54

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	22.55	36.29	25.06	5.02
10	22.57	36.29	25.05	5.06
20	22.58	36.28	25.04	5.09
30	22.58	36.27	25.04	5.09
50	22.57	36.26	25.03	5.10
75	19.79	36.23	25.77	4.25
100	17.25	36.20	26.39	3.68
150	12.86	35.68	26.97	3.35
200	9.53	35.19	27.20	3.17
250	9.04	35.15	27.25	3.44
300	8.75	35.16	27.30	3.54

STATION 52

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.4	0.0	0.0	0.4	0.5
20	1.2	0.8	0.0	0.6	0.0
50	1.0	0.5	0.0	0.4	-
100	2.0	0.3	3.0	1.5	0.1
150	2.6	1.7	2.0	0.6	1.5
200	2.9	2.0	7.5	2.1	0.0
250	2.2	2.0	19.0	-	0.3
300	2.3	1.7	9.5	-	0.3

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.4	0.0	0.0	0.4	0.5
10	1.3	0.4	0.0	0.5	0.3
20	1.2	0.8	0.0	0.6	0.0
30	1.1	0.7	0.0	0.5	-
50	1.0	0.5	0.0	0.4	-
75	1.5	0.4	1.5	1.0	-
100	2.0	0.3	3.0	1.5	0.1
150	2.6	1.7	2.0	0.6	1.5
200	2.9	2.0	7.5	2.1	0.0
250	2.2	2.0	19.0	-	0.3
300	2.3	1.7	9.5	-	0.3

STATION 53

DATE December 4, 1954 LAT. 32°49'N. LONG. 78°04'W. TIME 17
DEPTH 174 WIND 6 , 22 BAR. 17 AIR TEMP: dry 15.6°C, wet 10.6°C
HUMIDITY 53% WEATHER 02 CLOUDS: type - , amt. 0 SEA: dir. 24 , amt. 2
SWELL: dir. - , amt. - VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	22.79	36.21	24.93	5.03
10	22.81	36.29	24.99	5.03
20	22.80	36.22	24.94	5.03
50	22.78	36.26	24.97	3.70
100	17.28	36.12	26.32	3.53
150	15.72	36.04	26.63	3.37

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	22.79	36.21	24.93	5.03
10	22.81	36.29	24.99	5.03
20	22.80	36.22	24.94	5.03
30	22.79	36.24	24.95	4.48
50	22.78	36.26	24.97	3.70
75	19.54	36.18	25.80	3.61
100	17.28	36.12	26.32	3.53
150	15.72	36.04	26.63	3.37

STATION 53

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.1	-	0.0	-	1.2
10	1.8	0.0	<0.5	0.0	1.4
20	0.7	-	4.0	3.0	0.5
50	0.8	-	0.0	0.7	0.9
100	1.4	-	5.0	0.0	0.2
150	1.4	-	0.5	-	0.8

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.1	-	0.0	-	1.2
10	1.8	0.0	<0.5	0.0	1.4
20	0.7	-	4.0	3.0	0.5
30	0.7	-	3.0	2.2	0.6
50	0.8	-	0.0	0.7	0.9
75	1.1	-	2.5	0.4	0.6
100	1.4	-	5.0	0.0	0.2
150	1.4	-	0.5	-	0.8

STATION 54

DATE December 4, 1954 LAT. 33°03'N. LONG. 78°22'W. TIME 20
DEPTH 29 WIND 8 , 26 BAR. 15 AIR TEMP: dry 15.6°C, wet 9.4°C
HUMIDITY 43% WEATHER 02 CLOUDS: type - , amt. 0 SEA: dir. 26 , amt. 2
SWELL: dir. - , amt. - VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	21.34	36.36	25.45	5.36
10	21.38	36.33	25.42	5.35
20	21.26	36.31	25.44	5.24

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	21.34	36.36	25.45	5.36
10	21.38	36.33	25.42	5.35
20	21.26	36.31	25.44	5.24

STATION 54

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	-	0.9	0.5	-	0.4
10	1.1	0.0	0.5	3.4	0.8
20	0.6	0.0	0.5	0.0	0.6

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	-	0.9	0.5	-	0.4
10	1.1	0.0	0.5	3.4	0.8
20	0.6	0.0	0.5	0.0	0.6

STATION 55

DATE December 4, 1954 LAT. 33°18'N. LONG. 78°38'W. TIME 23
DEPTH 18 WIND 8 , 25 BAR. 16 AIR TEMP: dry 14.4°C, wet 10.0°C
HUMIDITY 56% WEATHER 00 CLOUDS: type - , amt. 0 SEA: dir. 24 , amt. 2
SWELL: dir. - , amt. - VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	16.68	36.46	26.73	5.77
10	16.68	36.45	26.72	5.77

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	16.68	36.46	26.73	5.77
10	16.68	36.45	26.72	5.77

STATION 55

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.5	0.2	0.5	2.8	0.9
10	0.7	0.0	0.5	-	0.4

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.5	0.2	0.5	2.8	0.9
10	0.7	0.0	0.5	-	0.4

STATION 56

DATE December 5, 1954 LAT. 33°32'N. LONG. 78°55'W. TIME 01
DEPTH 8 WIND 3 , 27 BAR. 17 AIR TEMP: dry 13.3°C, wet 8.3°C
HUMIDITY 50% WEATHER 00 CLOUDS: type - , amt. 0 SEA: dir. - , amt. -
SWELL: dir. - , amt. - VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	13.61	35.94	27.01	6.11

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	13.61	35.94	27.01	6.11

STATION 56

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.7	0.0	0.5	0.1	0.2

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.7	0.0	0.5	0.1	0.2

STATION 57

DATE December 5, 1954 LAT. 33°34'N. LONG. 78°24'W. TIME 05
DEPTH 20 WIND 4 , 29 BAR. 18 AIR TEMP: dry 12.8°C, wet 9.4°C
HUMIDITY 65% WEATHER 00 CLOUDS: type - , amt. 0 SEA: dir. 28 , amt. 1
SWELL: dir. - , amt. - VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	16.38	36.53	26.85	5.73
10	16.40	36.47	26.80	5.73

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	16.38	36.53	26.85	5.73
10	16.40	36.47	26.80	5.73

STATION 57

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.7	-	0.0	1.6	1.6
10	0.6	0.0	0.0	0.2	0.8

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.7	-	0.0	1.6	1.6
10	0.6	0.0	0.0	0.2	0.8

STATION 58

DATE December 5, 1954 LAT. 33°36'N. LONG. 77°55'W. TIME 07
DEPTH 20 WIND 2 , 29 BAR. 18 AIR TEMP: dry 12.8°C, wet 9.4°C
HUMIDITY 65% WEATHER 00 CLOUDS: type - , amt. - SEA: dir. 00 , amt. 0
SWELL: dir. - , amt. - VIS. 6 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	16.44	36.35	26.70	5.44
10	16.45	36.34	26.69	5.51

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	16.44	36.35	26.70	5.44
10	16.45	36.34	26.69	5.51

STATION 58

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.0	0.0	0.0	0.0	0.5
10	0.8	0.3	0.5	1.6	1.1

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.0	0.0	0.0	0.0	0.5
10	0.8	0.3	0.5	1.6	1.1

STATION 59

DATE December 5, 1954 LAT. 33°22'N. LONG. 77°37'W. TIME 10
DEPTH 27 WIND 1 , 99 BAR. 18 AIR TEMP: dry 15.0°C, wet 10.6°C
HUMIDITY 57% WEATHER 00 CLOUDS: type - , amt. - SEA: dir. - , amt. -
SWELL: dir. - , amt. - VIS. 6 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	21.38	36.30	25.40	5.11
10	21.41	36.27	25.37	5.21
20	21.08	36.33	25.50	5.21

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	21.38	36.30	25.40	5.11
10	21.41	36.27	25.37	5.21
20	21.08	36.33	25.50	5.21

STATION 59

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.6	0.2	0.0	1.2	0.2
10	0.3	0.2	<0.5	1.5	0.0
20	0.7	0.3	1.0	3.4	0.5

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.6	0.2	0.0	1.2	0.2
10	0.3	0.2	<0.5	1.5	0.0
20	0.7	0.3	1.0	3.4	0.5

STATION 60

DATE December 5, 1954 LAT. 33°08'N. LONG. 77°20'W. TIME 12
DEPTH 227 WIND 3 , 34 BAR. 18 AIR TEMP: dry 16.7°C, wet 15.6°C
HUMIDITY 89% WEATHER 03 CLOUDS: type 4 , amt. 3 SEA: dir. 09 , amt. 1
SWELL: dir. 23 , amt. 2 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	22.72	36.26	24.99	4.94
10	22.73	36.29	25.01	5.02*
20	22.75	36.26	24.98	5.06
50	22.74	36.27	24.99	5.05
100	20.74	36.33	25.60	4.45
150	17.38	36.27	26.41	3.63
200	15.38	36.00	26.68	3.49

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	22.72	36.26	24.99	4.94
10	22.73	36.29	25.01	5.01
20	22.75	36.26	24.98	5.06
30	22.75	36.26	24.98	5.06
50	22.74	36.27	24.99	5.05
75	21.91	36.32	25.26	4.78
100	20.74	36.33	25.60	4.45
150	17.38	36.27	26.41	3.63
200	15.38	36.00	26.68	3.49

STATION 60

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.3	0.4	<0.5	1.2	0.4
10	0.8	0.1	0.0	2.4	0.0
20	-	0.3	0.0	-	0.2
50	0.8	0.0	0.0	0.2	0.0
100	0.9	0.4	5.0	0.3	8.7*
150	1.1	1.0	0.5*	1.1	0.6
200	1.7	1.4	8.0	-	0.0

* Value questionable

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.3	0.4	<0.5	1.2	0.4
10	0.8	0.1	0.0	2.4	0.0
20	0.8	0.3	0.0	1.9	0.2
30	0.8	0.2	0.0	1.3	0.2
50	0.8	0.0	0.0	0.2	0.0
75	0.9	0.2	2.5	0.3	0.2
100	0.9	0.4	5.0	0.3	0.3
150	1.1	1.0	6.5	1.1	0.6
200	1.7	1.4	8.0	-	0.0

STATION 61

DATE December 5, 1954 LAT. 32°51'N. LONG. 77°07'W. TIME 16
DEPTH 485 WIND 2 , 14 BAR. 18 AIR TEMP: dry 18.3°C, wet 13.9°C
HUMIDITY 61% WEATHER 03 CLOUDS: type 4 , amt. 4 SEA: dir. 00 , amt. 0
SWELL: dir. 09 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.03	36.09	24.18	4.91
16	25.05	36.05	24.14	4.89
41	24.95	36.08	24.19	4.90
83	23.09	36.45	25.03	4.60
125	20.02	36.43	25.86	4.60
167	17.83	36.35	26.37	3.45
209	14.24	35.81	26.78	3.37
252	13.20	35.68	26.90	3.57
340	8.73	35.11	27.27	3.31

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.03	36.09	24.18	4.91
10	25.04	36.06	24.15	4.90
20	25.03	36.05	24.15	4.89
30	24.99	36.07	24.17	4.90
50	24.65	36.14	24.33	4.81
75	23.54	36.41	24.86	4.63
100	21.74	36.44	25.40	4.60
150	18.89	36.38	26.12	3.79
200	14.80	35.89	26.72	3.39
250	13.27	35.69	26.89	3.56
300	11.15	35.42	27.09	3.44

STATION 61

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.5	0.1	0.0	1.9	1.6
16	0.2	0.0	0.5	4.0	0.6
41	0.4	0.4	<0.5	1.5	0.3
83	-	0.5	0.5	0.2	0.4
125	1.1	-	2.0	0.8	0.3
167	1.0	0.6	2.5	1.4	0.5
209	2.1	1.1	11.0	1.4	0.0
252	2.0	1.5	4.0	-	1.5
340	3.3	1.9	9.0	-	0.4

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.5	0.1	0.0	1.9	1.6
10	0.3	0.0	0.5	3.2	1.0
20	0.2	0.0	0.5	3.6	0.5
30	0.3	0.2	0.5	2.6	0.4
50	0.5	0.4	0.5	1.2	0.3
75	0.7	0.5	0.5	0.4	0.4
100	0.9	0.5	1.0	0.5	0.4
150	1.1	0.6	2.5	1.1	0.4
200	2.1	1.1	11.0	1.4	0.0
250	2.0	1.5	4.0	-	1.5
300	2.7	1.7	7.0	-	0.9

STATION 62

DATE December 5, 1954 LAT. 32°43'N. LONG. 76°47'W. TIME 19
DEPTH 768 WIND 4 , 14 BAR. 16 AIR TEMP: dry 20.0°C, wet 15.6°C
HUMIDITY 62% WEATHER 01 CLOUDS: type 4 ,amt. 2 SEA: dir. 23 ,amt. 1
SWELL: dir. 09 ,amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.34	36.13	24.11	4.90
15	25.39	36.18	24.13	4.94
38	25.36	36.10	24.08	4.90
75	25.29	36.18	24.16	4.84
113	23.53	36.41	24.87	4.62
151	20.58	36.55	25.81	3.87
227	18.05	36.40	26.35	4.04
304	16.37	36.18	26.59	4.24
382	14.58	35.90	26.78	3.83
462	12.59	35.61	26.97	3.55
543	9.86	35.25	27.19	3.18

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.34	36.13	24.11	4.90
10	25.38	36.17	24.13	4.93
20	25.38	36.15	24.11	4.93
30	25.37	36.12	24.09	4.91
50	25.34	36.11	24.10	4.88
75	25.29	36.18	24.16	4.84
100	24.27	36.34	24.59	4.75
150	20.64	36.55	25.79	3.88
200	18.85	36.46	26.19	3.98
250	17.56	36.34	26.42	4.16
300	16.46	36.19	26.57	4.23
400	14.19	35.84	26.81	3.77
500	11.40	35.45	27.07	3.39

STATION 62

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.4	0.1	0.0	1.3	1.4
15	0.6	0.1	0.5	2.1	0.3
38	0.5	0.0	0.5	1.9	-
75	-	0.3	0.0	0.1	0.8
113	0.8	0.5	0.5	0.2	0.4
151	1.0	0.6	4.0	0.0	1.0
227	1.1	1.2	6.5	2.6	0.1
304	1.5	0.9	8.0	0.7	2.0
382	1.9	1.3	10.0	4.0	0.7
462	2.5	1.6	7.5	3.2	0.3
543	2.7	1.9	0.5*	-	0.8

* Value questionable

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.4	0.1	0.0	1.3	1.4
10	0.5	0.1	0.5	1.9	0.6
20	0.6	0.1	0.5	2.0	0.4
30	0.5	0.1	0.5	1.9	0.5
50	0.6	0.1	0.5	1.3	0.6
75	0.7	0.3	0.0	0.1	0.8
100	0.8	0.5	0.5	0.2	0.5
150	1.0	0.6	4.0	0.0	1.0
200	1.1	1.0	5.5	1.7	0.4
250	1.2	1.1	7.0	2.0	0.7
300	1.5	0.9	8.0	0.7	2.0
400	2.0	1.4	9.5	3.8	0.6
500	2.6	1.7	-	-	0.6

STATION 63

DATE December 5, 1954 LAT. 33°12'N. LONG. 76°24'W. TIME 23
DEPTH 732 WIND 11 , 16 BAR. 13 AIR TEMP: dry 21.7°C, wet 17.2°C
HUMIDITY 64% WEATHER 00 CLOUDS: type 8 , amt. - SEA: dir. 16 , amt. 3
SWELL: dir. - , amt. - VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.32	36.09	24.09	4.84
17	25.38	36.08	24.06	4.89
41	25.39	36.14	24.10	4.74
82	25.39	36.15	24.11	4.73
119	24.11	36.41	24.70	4.58
154	21.40	36.47	25.52	3.98
219	18.76	36.45	26.21	3.48
279	16.70	36.16	26.49	3.42
335	12.75	35.57	26.90	3.16
389	10.51	35.32	27.13	3.16
444	9.17	35.08	27.17	3.12

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.32	36.09	24.09	4.84
10	25.36	36.08	24.07	4.88
20	25.38	36.09	24.07	4.87
30	25.39	36.12	24.09	4.80
50	25.39	36.14	24.10	4.74
75	25.39	36.15	24.11	4.73
100	24.97	36.30	24.35	4.72
150	21.66	36.46	25.44	4.04
200	19.49	36.46	26.03	3.58
250	17.98	36.34	26.32	3.45
300	15.02	35.90	26.68	3.29
400	10.17	35.27	27.15	3.15

STATION 63

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.7	0.1	0.0	3.1	0.4
17	-	0.4	<0.5	1.3	0.6
41	0.6	0.4	1.0	2.0	1.9
82	0.7	0.2	0.0	-	-
119	0.7	0.3	<0.5	-	0.9
154	1.0	0.8	-	1.0	0.3
219	1.4	0.7	1.0	2.6	-
279	2.2	1.3	1.5	1.9	0.3
335	2.2	1.2	6.5	0.9	1.5
389	3.4	2.0	13.5	-	0.6
444	2.7	1.7	4.0	0.5	0.3

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.7	0.1	0.0	3.1	0.4
10	0.7	0.3	<0.5	2.0	0.5
20	0.7	0.4	<0.5	1.4	0.8
30	0.6	0.4	0.5	1.7	1.3
50	0.6	0.4	1.0	2.0	1.8
75	0.7	0.2	<0.5	1.7	1.5
100	0.7	0.2	<0.5	1.5	1.2
150	1.0	0.8	0.5	1.0	0.3
200	1.3	0.7	1.0	2.2	0.3
250	1.8	1.1	1.5	2.2	0.3
300	2.2	1.3	3.5	1.5	0.8
400	3.3	2.0	11.5	0.7	0.5

STATION 65

DATE December 11, 1954 LAT. 33°43'N. LONG. 76°56'W. TIME 01
DEPTH 40 WIND 12 , 31 BAR. 19 AIR TEMP: dry 13.3°C, wet 9.4°C
HUMIDITY 60% WEATHER 03 CLOUDS: type 4 , amt. 2 SEA: dir. 32 , amt. 4
SWELL: dir. 27 , amt. 3 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	22.13	36.33	25.21	5.08
10	22.15	36.32	25.20	5.02
20	22.12	36.33	25.21	4.96
30	22.15	36.26	25.15	5.06

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	22.13	36.33	25.21	5.08
10	22.15	36.32	25.20	5.02
20	22.12	36.33	25.21	4.96
30	22.15	36.26	25.15	5.06

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.9	0.9	1.0	3.3	0.6
10	1.4	0.3	<0.5	1.2	0.5
20	1.0	0.0	0.0	3.7	0.2
30	0.6	0.6	0.5	0.6	1.0

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.9	0.9	1.0	3.3	0.6
10	1.4	0.3	<0.5	1.2	0.5
20	1.0	0.0	0.0	3.7	0.2
30	0.6	0.6	0.5	0.6	1.0

STATION 66

DATE December 10, 1954 LAT. 33°57'N. LONG. 77°13'W. TIME 22
DEPTH 27 WIND 8 , 32 BAR. 17 AIR TEMP: dry 11.7°C, wet 8.3°C
HUMIDITY 63% WEATHER 02 CLOUDS: type 4 , amt. 1 SEA: dir. 33 , amt. 3
SWELL: dir. 19 , amt. 3 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	18.73	36.43	26.20	5.42
10	18.76	36.35	26.13	5.34
20	18.76	36.38	26.15	5.34

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	18.73	36.43	26.20	5.42
10	18.76	36.35	26.13	5.34
20	18.76	36.38	26.15	5.34

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.7	1.0	0.0	-	1.6
10	1.0	0.4	1.5	-	1.2
20	0.5	0.4	<0.5	0.6	0.9

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.7	1.0	0.0	-	1.6
10	1.0	0.4	1.5	-	1.2
20	0.5	0.4	<0.5	0.6	0.9

STATION 67

DATE December 10, 1954 LAT. 34°11'N. LONG. 77°29'W. TIME 20
DEPTH 17 WIND 7 , 31 BAR. 15 AIR TEMP: dry 11.1°C, wet 7.8°C
HUMIDITY 63% WEATHER 02 CLOUDS: type - , amt. 0 SEA: dir. 31 , amt. 2
SWELL: dir. 24 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	15.67	36.43	26.94	5.82
10	15.64	36.38	26.91	5.81

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	15.67	36.43	26.94	5.82
10	15.64	36.38	26.91	5.81

STATION 67

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.9	-	0.0	1.8	0.6
10	1.3	0.0	0.0	2.1	0.1

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.9	-	0.0	1.8	0.6
10	1.3	0.0	0.0	2.1	0.1

STATION 68

DATE December 10, 1954 LAT. 34°22'N. LONG. 77°09'W. TIME 17
DEPTH 18 WIND 10 , 30 BAR. 16 AIR TEMP: dry 10.6°C, wet 7.2°C
HUMIDITY 62% WEATHER 00 CLOUDS: type - , amt. 0 SEA: dir. 30 , amt. 2
SWELL: dir. 00 , amt. 0 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	14.39	36.33	27.15	5.93*
10	14.45	36.33	27.14	5.89

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	14.39	36.33	27.15	-
10	14.45	36.33	27.14	5.89

STATION 68

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.1	0.2	0.0	2.0	0.3
10	2.2	0.2	0.0	4.2	0.4

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.1	0.2	0.0	2.0	0.3
10	2.2	0.2	0.0	4.2	0.4

STATION 69

DATE December 8, 1954 LAT. 34°31'N. LONG. 76°49'W. TIME 14
DEPTH 16 WIND 1 , 99 BAR. 30 AIR TEMP: dry 10.6°C, wet 6.1°C
HUMIDITY 50% WEATHER 02 CLOUDS: type - , amt. 0 SEA: dir. 00 , amt. 0
SWELL: dir. - , amt. - VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	13.14	36.35	27.43	5.92
10	13.16	36.35	27.42	6.03

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	13.14	36.35	27.43	5.92
10	13.16	36.35	27.42	6.03

STATION 69

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.0	0.0	1.0	1.2	0.4
10	1.0	0.4	0.5	0.3	0.3

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.0	0.0	1.0	1.2	0.4
10	1.0	0.4	0.5	0.3	0.3

STATION 70

DATE December 8, 1954 LAT. 34°18'N. LONG. 76°32'W. TIME 17
DEPTH 26 WIND 2 , 15 BAR. 30 AIR TEMP: dry 6.7°C, wet 3.3°C
HUMIDITY 56% WEATHER 03 CLOUDS: type 6 , amt. 1 SEA: dir. 00 , amt. 0
SWELL: dir. 12 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	18.70	36.31	26.12	5.25
10	18.58	36.30	26.14	5.35
20	18.58	36.31	26.15	5.19

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	18.70	36.31	26.12	5.25
10	18.58	36.30	26.14	5.35
20	18.58	36.31	26.15	5.19

STATION 70

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	2.0	0.0	1.0	1.0	0.7
10	0.9	0.0	1.5	1.7	0.6
20	1.3	0.0	1.0	-	0.2

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	2.0	0.0	1.0	1.0	0.7
10	0.9	0.0	1.5	1.7	0.6
20	1.3	0.0	1.0	-	0.2

STATION 71

DATE December 8, 1954 LAT. 34°03'N. LONG. 76°15'W. TIME 19
DEPTH 124 WIND 1 , 99 BAR. 28 AIR TEMP: dry 10.6°C, wet 7.8°C
HUMIDITY 68% WEATHER 03 CLOUDS: type 2 , amt. 3 SEA: dir. 00 , amt. 0
SWELL: dir. 12 , amt. 2 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	22.31	36.22	25.08	4.98
10	22.30	36.23	25.09	4.97
20	22.26	36.26	25.12	4.89
50	22.18	36.24	25.13	4.95
100	22.03	36.22	25.15	4.82

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	22.31	36.22	25.08	4.98
10	22.30	36.23	25.09	4.97
20	22.26	36.26	25.12	4.89
30	22.23	36.25	25.12	4.92
50	22.18	36.24	25.13	4.95
75	22.11	36.23	25.14	4.92
100	22.03	36.22	25.15	4.82

STATION 71

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.5	0.2	<0.5	1.3	0.3
10	2.7	0.1	0.0	0.9	0.2
20	1.0	0.3	0.5	0.7	0.0
50	1.0	0.7	1.0	0.6	0.7
100	1.9	0.0	0.5	2.8	0.5

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.5	0.2	<0.5	1.3	0.3
10	2.7	0.1	0.0	0.9	0.2
20	1.0	0.3	0.5	0.7	0.0
30	1.0	0.4	0.5	0.7	0.2
50	1.0	0.7	1.0	0.6	0.7
75	1.5	0.3	1.0	1.7	0.6
100	1.9	0.0	0.5	2.8	0.5

STATION 72

DATE December 8, 1954 LAT. 33°50'N. LONG. 75°58'W. TIME 22
DEPTH 728 WIND 3 , 14 BAR. 27 AIR TEMP: dry 12.8°C, wet 9.4°C
HUMIDITY 65% WEATHER 03 CLOUDS: type 4 , amt. 3 SEA: dir. - , amt. -
SWELL: dir. 09 , amt. 4 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.65	36.24	24.40	4.84
8	24.64	36.21	24.39	4.88
25	24.61	36.22	24.40	4.81
43	24.38	36.26	24.50	4.79
67	24.36	36.27	24.51	4.88
91	23.86	36.36	24.73	4.61
142	22.08	36.26	25.17	4.93
200	19.00	36.27	26.01	3.73
271	16.48	36.07	26.48	3.46
356	9.56	35.17	27.18	3.26

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.65	36.24	24.40	4.84
10	24.64	36.21	24.39	4.87
20	24.62	36.22	24.40	4.83
30	24.53	36.23	24.43	4.80
50	24.37	36.26	24.50	4.85
75	24.22	36.31	24.59	4.76
100	23.61	36.33	24.78	4.63
150	21.60	36.26	25.31	4.88
200	19.00	36.27	26.01	3.73
250	17.53	36.16	26.29	3.53
300	14.60	35.84	26.72	3.38

STATION 72

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	-	0.5	0.5	1.2	0.7
8	1.4	0.4	1.0	-	0.7
25	0.7	0.0	-	-	1.0
43	1.1	0.4	0.5	-	0.9
67	0.8	0.0	3.5	-	0.8
91	0.5	0.2	13.5	1.6	0.2
142	1.5	1.6	1.0*	-	0.1
200	0.8	0.8	10.5	7.0	0.5
271	2.5	0.9	6.5	0.8	0.4
356	2.3	2.0	8.0	1.2	1.1

* Value questionable

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	-	0.5	0.5	1.2	0.7
10	1.3	0.4	1.0	-	0.8
20	0.9	0.1	1.0	-	0.9
30	0.8	0.1	0.5	-	1.0
50	1.0	0.3	1.5	-	0.9
75	0.7	0.1	7.0	-	0.6
100	0.7	0.5	13.5	1.6	0.2
150	1.4	1.5	12.0	-	0.2
200	0.8	0.8	10.5	7.0	0.5
250	2.0	0.9	7.5	-	0.4
300	2.5	1.3	7.0	1.0	0.7

STATION Standard 1

DATE November 6, 1954 LAT. 26°20'N. LONG. 76°43'W. TIME 13
DEPTH 4297 WIND 3 , 26 BAR. 14 AIR TEMP: dry 26.1°C, wet 23.3°C
HUMIDITY 79% WEATHER 03 CLOUDS: type 4 , amt. 5 SEA: dir. 26 , amt. 1
SWELL: dir. 09 , amt. 2 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.82	36.20	24.02	4.70
20	25.95	36.24	24.00	4.71
50	25.92	36.26	24.03	4.72
100	22.90	36.58	25.18	4.90
149	20.80	36.64	25.81	4.58
199	19.58	36.64	26.14	4.36
298	18.15	36.44	26.35	4.78
398	17.46	36.35	26.46	4.46
497	15.67	36.04	26.64	4.18
597	13.15	35.63	26.87	3.74
798	8.81	35.08	27.23	3.33
997	6.13	35.01	27.56	4.63
1196	4.59	34.94	27.70	5.67
1496	4.01	34.92	27.74	6.05
1995	3.57	34.93	27.80	6.11
2494	3.11	34.85	27.78	6.18

STATION Standard 1

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.82	36.20	24.02	4.70
10	25.90	36.22	24.01	4.70
20	25.95	36.24	24.00	4.71
30	25.94	36.25	24.02	4.71
50	25.92	36.26	24.03	4.72
75	24.30	36.45	24.67	4.87
100	22.90	36.58	25.18	4.90
150	20.77	36.64	25.82	4.57
200	19.56	36.64	26.15	4.37
250	18.75	36.52	26.26	4.67
300	18.15	36.44	26.35	4.77
400	17.43	36.34	26.46	4.45
500	15.59	36.03	26.65	4.16
600	13.07	35.62	26.88	3.72
800	8.78	35.08	27.24	3.34
1000	6.10	35.01	27.57	4.65
1200	4.58	34.94	27.70	5.68
1500	4.01	34.92	27.74	6.05
2000	3.57	34.93	27.80	6.11

STATION Standard 1

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.5	0.2	2.0	3.5	0.0
20	1.9	0.2	0.0	0.8	0.7
50	1.5	0.0	0.5	-	0.4
100	2.5	0.3	1.0	0.5	0.7
149	1.3	0.0	<0.5	2.5	0.3
199	1.9	0.7	1.5	1.1	0.0
298	2.9	0.2	8.5	0.1	1.2
398	3.3	0.5	2.5	1.2	1.4
497	3.2	0.8	9.5	0.7	1.9
597	2.5	1.0	6.0	1.7	0.5
798	-	1.6	16.5	-	0.5
997	2.7	1.4	17.0	0.2	0.6
1196	2.5	1.1	12.5	1.6	0.0
1496	3.5	1.3	10.5	1.4	0.4
1995	3.3	1.9	13.5	7.5	0.7
2494	3.0	-	3.0	1.1	0.0

STATION Standard 1

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.5	0.2	2.0	3.5	0.0
10	1.7	0.2	1.0	2.2	0.3
20	1.9	0.2	0.0	0.8	0.7
30	1.8	0.1	<0.5	0.8	0.6
50	1.5	0.0	0.5	0.7	0.4
75	2.0	0.2	1.0	0.6	0.6
100	2.5	0.3	1.0	0.5	0.7
150	1.3	0.0	<0.5	2.5	0.3
200	1.9	0.7	1.5	1.1	0.0
250	2.4	0.5	5.0	0.6	0.6
300	2.9	0.2	8.5	0.1	1.2
400	3.3	0.5	2.5	1.2	1.4
500	3.2	0.8	9.5	0.7	1.9
600	2.5	1.0	6.0	1.7	0.5
700	-	1.3	11.0	-	0.5
800	-	1.6	16.5	-	0.5
1000	2.7	1.4	17.0	0.2	0.6
1200	2.5	1.1	12.5	1.6	0.0
1500	3.5	1.3	10.5	1.4	0.4
2000	3.3	1.9	13.5	7.5	0.7
2500	3.0	-	3.0	1.1	0.0

STATION Standard 2

DATE November 6, 1954 LAT. 26°20'N. LONG. 76°43'W. TIME 18
DEPTH 4297 WIND 3 , 30 BAR. 13 AIR TEMP: dry 25.6°C, wet 22.2°C
HUMIDITY 75% WEATHER 01 CLOUDS: type 4 , amt. 5 SEA: dir. 30 , amt. 1
SWELL: dir. 09 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	26.26	36.21	23.89	4.64
20	26.18	36.21	23.91	4.64
50	26.18	36.22	23.92	4.65
100	22.87	36.58	25.19	4.98
149	20.95	36.64	25.77	4.55
199	19.57	36.62	26.13	4.34
298	18.13	36.44	26.36	4.48
398	17.36	36.35	26.48	4.38
498	15.74	36.05	26.63	4.04
597	13.68	35.73	26.84	3.79
797	9.18	35.16	27.23	3.40
997	6.12	34.96	27.53	4.54

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	26.26	36.21	23.89	4.64
10	26.21	36.21	23.90	4.64
20	26.18	36.21	23.91	4.64
30	26.18	36.21	23.91	4.64
50	26.18	36.22	23.92	4.65
75	24.35	36.44	24.65	4.91
100	22.87	36.58	25.19	4.98
150	20.92	36.64	25.78	4.54
200	19.55	36.62	26.13	4.34
250	18.74	36.52	26.27	4.44
300	18.12	36.44	26.36	4.48
400	17.33	36.34	26.48	4.37
500	15.70	36.04	26.63	4.03
600	13.60	35.72	26.84	3.77
800	9.12	35.15	27.24	3.41

STATION Standard 3

DATE November 6, 1954 LAT. 26°20'N. LONG. 76°43'W. TIME 21
DEPTH 4297 WIND 10, 27 BAR. 12 AIR TEMP: dry 25.0°C, wet 22.2°C
HUMIDITY 79% WEATHER 03 CLOUDS: type 4, amt. 6 SEA: dir. 27, amt. 2
SWELL: dir. -, amt. - VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	26.24	36.44	24.06	4.71
19	26.31	36.38	24.00	4.73
48	26.30	36.38	24.00	4.45
96	23.33	36.69	25.14	4.99
144	21.41	36.83	25.79	-
192	19.87	36.82	26.20	4.43
290	18.25	36.60	26.45	4.55
387	17.42	36.51	26.59	4.39
485	16.03	36.23	26.70	4.06
583	14.27	35.98	26.90	3.82
780	9.47	35.29	27.29	3.39
978	6.39	35.08	27.59	4.39

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	26.24	36.44	24.06	4.71
10	26.28	36.40	24.02	4.72
20	26.31	36.38	24.00	4.71
30	26.31	36.38	24.00	4.57
50	26.25	36.38	24.02	4.48
75	24.50	36.58	24.71	4.82
100	23.16	36.71	25.20	4.95
150	21.19	36.83	25.85	4.59
200	19.71	36.80	26.23	4.45
250	18.82	36.67	26.36	4.54
300	18.19	36.60	26.47	4.54
400	17.26	36.47	26.60	4.34
500	15.79	36.20	26.74	4.02
600	13.85	35.91	26.94	3.78
800	9.08	35.25	27.32	3.43

STATION Standard 3

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.5	0.0	<0.5	0.8	1.0
19	1.5	0.4	0.0	0.5	0.6
48	1.1	0.0	0.0	0.0	0.1
96	1.2	0.1	0.0	2.7	-
144	1.5	0.0	0.0	1.0	1.3
192	2.3	0.6	1.5	0.1	1.2
290	3.0	-	1.0	-	0.5
387	2.1	0.8	4.0	0.7	0.1
485	3.4	0.6	0.5*	-	0.6
583	1.3	1.4	4.0	1.6	1.0
780	2.5	0.9	11.5	2.2	0.7
978	-	2.2	16.0	-	0.8

* Value questionable

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.5	0.0	<0.5	0.8	1.0
10	1.0	0.2	<0.5	0.7	0.8
20	1.5	0.4	0.0	0.5	0.6
30	1.4	0.3	0.0	0.3	0.4
50	1.1	0.0	0.0	0.0	0.1
75	1.2	0.1	0.0	1.4	0.4
100	1.2	0.1	0.0	2.7	0.7
150	1.5	0.0	0.0	1.0	1.3
200	2.3	0.6	1.5	0.1	1.2
250	2.7	0.7	1.5	0.3	0.9
300	3.0	0.7	1.0	0.5	0.5
400	2.3	0.8	4.0	0.8	0.2
500	3.1	0.7	4.0	1.2	0.7
600	1.5	1.4	4.5	1.7	1.0
700	2.0	1.1	8.5	2.0	0.8
800	-	1.0	12.0	-	0.7

STATION Standard 4

DATE November 6, 1954 LAT. 26°20'N. LONG. 76°40'W. TIME 24
DEPTH 4663 WIND 8 , 29 BAR. 14 AIR TEMP: dry 25.0°C, wet 23.3°C
HUMIDITY 87% WEATHER 01 CLOUDS: type 4 , amt. 2 SEA: dir. 29 , amt. 2
SWELL: dir. 30 , amt. 2 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	26.16	36.35	24.02	4.73
19	26.20	36.36	24.02	4.73
49	26.20	36.38	24.03	4.72
97	22.89	36.71	25.28	5.00
195	19.66	36.81	26.25	4.35
294	18.14	36.64	26.51	4.59
392	17.36	36.45	26.56	4.40
491	15.88	36.18	26.70	4.08
590	14.19	35.98	26.92	3.87
789	9.37	35.30	27.31	3.41
989	6.30	35.08	27.60	4.42

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	26.16	36.35	24.02	4.73
10	26.18	36.35	24.02	4.73
20	26.20	36.36	24.02	4.73
30	26.20	36.37	24.02	4.73
50	26.12	36.39	24.06	4.73
75	24.27	36.58	24.78	4.92
100	22.77	36.72	25.32	4.97
150	20.93	36.78	25.89	4.54
200	19.57	36.80	26.27	4.37
250	18.72	36.72	26.42	4.54
300	18.11	36.63	26.51	4.58
400	17.25	36.43	26.57	4.37
500	15.75	36.17	26.72	4.06
600	13.91	35.93	26.94	3.81
800	9.15	35.28	27.33	3.43

STATION Standard 5

DATE November 7, 1954 LAT. 26°20'N. LONG. 76°46'W. TIME 02
DEPTH 4663 WIND 2 , 33 BAR. 15 AIR TEMP: dry 24.4°C, wet 22.2°C
HUMIDITY 82% WEATHER 50 CLOUDS: type - , amt. 7 SEA: dir. 00 , amt. 0
SWELL: dir. 30 , amt. 1 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	26.17	36.36	24.03	4.65
20	26.22	36.40	24.04	4.67
49	26.27	36.49	24.09	4.66
98	23.12	36.73	25.23	5.05
148	19.76	36.83	26.24	4.49
197	19.51	36.76	26.25	4.38
296	18.19	36.60	26.47	4.57
395	17.48	36.47	26.54	4.45
494	16.03	36.22	26.70	4.13
593	14.27	36.00	26.92	3.84
793	9.59	35.30	27.28	3.41
993	6.47	35.08	27.57	4.31

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	26.17	36.36	24.03	4.65
10	26.20	36.38	24.03	4.66
20	26.22	36.40	24.04	4.67
30	26.24	36.43	24.06	4.67
50	26.21	36.50	24.12	4.68
75	24.62	36.63	24.71	4.98
100	22.93	36.74	25.29	5.02
150	19.76	36.83	26.24	4.48
200	19.46	36.75	26.26	4.39
250	18.73	36.67	26.38	4.52
300	18.18	36.60	26.47	4.57
400	17.41	36.46	26.55	4.43
500	15.93	36.21	26.71	4.11
600	14.08	35.97	26.94	3.80
800	9.45	35.28	27.28	3.42

STATION Standard 5

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.7	0.2	0.0	1.4	0.9
20	0.6	-	0.0	1.4	-
49	-	0.0	0.5	0.2	0.8
98	0.7	0.0	0.0	0.2	1.1
148	0.5	0.0	1.5	1.2	0.8
197	1.7	0.4	1.5	1.9	0.5
296	0.9	0.0	2.0	3.4	2.1
395	1.4	0.8	3.0	2.4	1.3
494	0.6	0.7	7.0	1.5	0.3
593	1.7	0.8	11.0	1.3	0.2
793	2.5	1.6	9.5	-	0.6
993	2.2	-	11.5	2.4	0.7

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.7	0.2	0.0	1.4	0.9
10	0.7	0.2	0.0	1.4	0.9
20	0.6	0.1	0.0	1.4	0.9
30	-	0.1	<0.5	1.0	0.8
50	-	0.0	0.5	0.2	0.8
75	-	0.0	<0.5	0.2	1.0
100	0.7	0.0	0.0	0.2	1.1
150	0.5	0.0	1.5	1.2	0.8
200	1.7	0.4	1.5	1.9	0.5
250	1.3	0.2	2.0	2.6	1.3
300	0.9	0.0	2.0	3.4	2.1
400	1.4	0.8	3.0	2.4	1.3
500	0.6	0.7	7.0	1.5	0.3
600	1.7	0.8	11.0	1.3	0.2
700	2.1	1.2	10.0	-	0.4
800	2.5	1.6	9.5	-	0.6
1000	2.2	-	11.5	2.4	0.7

STATION Standard 6

DATE November 7, 1954 LAT. 26°20'N. LONG. 76°42'W. TIME 06
DEPTH 4663 WIND 3 , 03 BAR. 15 AIR TEMP: dry 23.9°C, wet 22.2°C
HUMIDITY 86% WEATHER 00 CLOUDS: type - , amt. 7 SEA: dir. 03 , amt. 1
SWELL: dir. 30 , amt. 1 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	26.18	36.44	24.08	4.64
20	26.21	36.38	24.03	4.64
50	26.20	36.38	24.03	4.64
100	22.84	36.74	25.32	4.99
150	20.78	36.83	25.96	4.55
200	19.36	36.71	26.25	4.39
300	18.17	36.58	26.46	4.55
400	17.27	36.42	26.56	4.36
500	15.65	36.18	26.75	4.02
600	13.81	35.90	26.94	3.78
800	8.98	35.28	27.36	3.24
1000	6.33	35.10	27.61	4.31

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	26.18	36.44	24.08	4.64
10	26.20	36.41	24.05	4.64
20	26.21	36.38	24.03	4.64
30	26.21	36.38	24.03	4.64
50	26.20	36.38	24.03	4.64
75	24.60	36.59	24.68	4.91
100	22.84	36.74	25.32	4.99
150	20.78	36.83	25.96	4.55
200	19.36	36.71	26.25	4.39
250	18.73	36.65	26.37	4.51
300	18.17	36.58	26.46	4.55
400	17.27	36.42	26.56	4.36
500	15.65	36.18	26.75	4.02
600	13.81	35.90	26.94	3.78
800	8.98	35.28	27.36	3.24
1000	6.33	35.10	27.61	4.31

STATION Standard 7

DATE November 7, 1954 LAT. 26°20'N. LONG. 76°40'W. TIME 08
DEPTH 4663 WIND 6 , 35 BAR. 14 AIR TEMP: dry 23.9°C, wet 21.1°C
HUMIDITY 78% WEATHER 01 CLOUDS:type - ,amt. 5 SEA:dir. 35 ,amt. 1
SWELL:dir. 07 ,amt. 1 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	26.12	36.37	24.05	4.65
20	26.14	36.36	24.04	4.68
50	25.77	36.30	24.11	4.82
100	23.19	36.78	25.25	4.92
149	21.03	36.80	25.87	4.56
199	19.65	36.80	26.24	4.33
298	18.17	36.56	26.44	4.45
398	17.15	36.39	26.56	4.31
498	15.80	36.17	26.71	4.02
597	13.71	35.84	26.91	3.73
797	9.20	35.24	27.29	3.40
997	6.30	35.09	27.61	4.39

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	26.12	36.37	24.05	4.65
10	26.13	36.37	24.05	4.66
20	26.14	36.36	24.04	4.68
30	26.02	36.34	24.06	4.73
50	25.77	36.30	24.11	4.82
75	24.43	36.60	24.74	4.87
100	23.19	36.78	25.25	4.92
150	21.00	36.80	25.88	4.55
200	19.63	36.80	26.25	4.33
250	18.83	36.67	26.36	4.42
300	18.15	36.56	26.45	4.45
400	17.13	36.39	26.57	4.30
500	15.76	36.16	26.71	4.01
600	13.63	35.83	26.92	3.72
800	9.14	35.23	27.29	3.41

STATION Standard 7

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.5	0.0	0.0	1.8	0.2
20	1.4	0.2	0.0	3.0	0.9
50	1.7	0.0	0.0	1.8	1.4
100	0.7	0.0	4.0	0.9	0.8
149	0.6	0.0	3.5	0.8	0.1
199	0.5	0.3	0.5	1.7	0.4
298	1.0	0.6	0.0	-	0.0
398	0.7	0.5	<0.5	2.1	1.2
498	1.2	-	6.0	1.0	1.0
597	1.5	1.0	10.5	2.8	-
797	3.7	1.9	13.0	0.2	0.8
997	3.2	2.0	9.5	4.0	2.0

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.5	0.0	0.0	1.8	0.2
10	1.0	0.1	0.0	2.4	0.5
20	1.4	0.2	0.0	3.0	0.9
30	1.5	0.2	0.0	2.6	1.1
50	1.7	0.0	0.0	1.8	1.4
75	1.2	0.0	2.0	1.4	1.1
100	0.7	0.0	4.0	0.9	0.8
150	0.6	0.0	3.5	0.8	0.1
200	0.5	0.3	0.5	1.7	0.4
250	0.8	0.5	<0.5	1.8	0.2
300	1.0	0.6	0.0	1.9	0.0
400	0.7	0.5	<0.5	2.1	1.2
500	1.2	0.8	6.0	1.0	1.0
600	1.5	1.0	10.5	2.8	0.9
700	2.6	1.5	12.0	1.5	0.9
800	3.7	1.9	13.0	0.2	0.8
1000	3.2	2.0	9.5	4.0	2.0

STATION Standard 8

DATE November 7, 1954 LAT. 26°20'N. LONG. 76°40'W. TIME 11
DEPTH 4663 WIND 10, 03 BAR. 15 AIR TEMP: dry 23.9°C, wet 21.1°C
HUMIDITY 78% WEATHER 01 CLOUDS: type 4, amt. 2 SEA: dir. 03, amt. 3
SWELL: dir. -, amt. - VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.89	36.35	24.11	4.64
20	25.91	36.33	24.09	4.69
50	25.91	36.34	24.09	4.79
99	23.08	36.71	25.23	5.31
149	20.78	36.76	25.91	4.51
198	19.65	36.76	26.21	4.45
298	18.13	36.54	26.44	4.48
397	17.16	36.44	26.60	4.37
496	15.61	36.16	26.75	4.03
596	13.63	35.89	26.97	3.77
796	8.92	35.26	27.35	3.35
996	6.13	35.12	27.65	4.48

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.89	36.35	24.11	4.64
10	25.90	36.34	24.10	4.66
20	25.91	36.33	24.09	4.69
30	25.91	36.33	24.09	4.70
50	25.91	36.34	24.09	4.79
75	24.39	36.57	24.73	5.22
100	23.02	36.71	25.24	5.29
150	20.75	36.76	25.92	4.51
200	19.61	36.75	26.22	4.45
250	18.79	36.63	26.34	4.47
300	18.12	36.54	26.44	4.48
400	17.12	36.43	26.60	4.36
500	15.54	36.15	26.75	4.02
600	13.52	35.87	26.98	3.75
800	8.85	35.25	27.36	3.36

STATION Standard 9

DATE November 7, 1954 LAT. 26°20'N. LONG. 76°40'W. TIME 14
DEPTH 4480 WIND 10 , 04 BAR. 16 AIR TEMP: dry 23.9°C, wet 21.1°C
HUMIDITY 78% WEATHER 02 CLOUDS: type 4 , amt. 2 SEA: dir. 04 , amt. 3
SWELL: dir. - , amt. - VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	26.09	36.41	24.09	4.73
20	26.09	36.38	24.07	4.75
49	25.76	36.31	24.12	4.83
98	23.19	36.82	25.28	5.07
148	20.81	36.79	25.93	4.71
197	19.78	36.76	26.18	4.57
296	18.21	36.64	26.49	4.57
395	17.37	36.50	26.59	4.47
494	15.89	36.21	26.72	-
593	13.69	35.86	26.93	3.87
791	11.53	35.59	27.15	3.55

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	26.09	36.41	24.09	4.73
10	26.09	36.40	24.08	4.74
20	26.09	36.38	24.07	4.75
30	25.93	36.36	24.10	4.77
50	25.71	36.33	24.15	4.84
75	24.37	36.65	24.80	5.03
100	23.07	36.82	25.31	5.05
150	20.76	36.79	25.94	4.70
200	19.72	36.76	26.20	4.57
250	18.85	36.70	26.38	4.57
300	18.19	36.64	26.50	4.57
400	17.31	36.49	26.60	4.45
500	15.74	36.18	26.73	4.12
600	13.61	35.84	26.94	3.85

STATION Standard 10

DATE November 7, 1954 LAT. 26°21'N. LONG. 76°47'W. TIME 17
DEPTH 4480 WIND 9 , 02 BAR. 17 AIR TEMP: dry 23.9°C, wet 20.0°C
HUMIDITY 70% WEATHER 02 CLOUDS: type 4 , amt. 3 SEA: dir. 02 , amt. 2
SWELL: dir. - , amt. - VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	26.04	36.38	24.08	4.57
19	26.05	36.36	24.06	4.69
48	25.93	36.41	24.14	4.69
96	23.23	36.74	25.21	5.00
144	20.94	36.78	25.88	4.60
192	19.86	36.76	26.16	4.32
289	18.26	36.59	26.44	4.34
387	17.48	36.48	26.55	4.39
485	16.14	36.24	26.69	3.96
584	13.94	35.89	26.90	3.85
782	9.48	35.27	27.27	3.44
980	6.37	35.07	27.58	4.39

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	26.04	36.38	24.08	4.57
10	26.05	36.37	24.07	4.64
20	26.05	36.36	24.06	4.69
30	26.00	36.37	24.09	4.69
50	25.81	36.43	24.19	4.72
75	24.36	36.63	24.79	4.95
100	22.99	36.75	25.28	4.96
150	20.79	36.78	25.92	4.55
200	19.70	36.74	26.19	4.32
250	18.80	36.65	26.35	4.33
300	18.20	36.58	26.45	4.37
400	17.35	36.45	26.56	4.31
500	15.81	36.19	26.72	3.95
600	13.53	35.82	26.94	3.83
800	9.14	35.23	27.29	3.47

STATION Standard 11

DATE November 7, 1954 LAT. 26°17'N. LONG. 76°47'W. TIME 20
DEPTH 4480 WIND 12 , 02 BAR. 16 AIR TEMP: dry 23.3°C, wet 20.6°C
HUMIDITY 78% WEATHER 03 CLOUDS: type 4 , amt. 6 SEA: dir. 02 , amt. 3
SWELL: dir. 02 , amt. 3 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.93	36.40	24.13	4.67
19	25.92	36.41	24.14	4.66
48	25.85	36.40	24.16	4.73
97	23.30	36.80	25.23	4.93
146	15.21*	36.83	27.35	4.58
195	19.92	36.87	26.23	4.38
294	18.29	36.64	26.47	4.41
393	17.39	36.50	26.59	4.31
492	15.72	36.21	26.76	4.05
591	13.83	36.01	27.02	3.86
791	9.13	35.28	27.34	3.35
991	6.37	35.12	27.62	4.27

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.93	36.40	24.13	4.67
10	25.93	36.41	24.14	4.66
20	25.92	36.41	24.14	4.66
30	25.89	36.41	24.15	4.68
50	25.73	36.42	24.21	4.75
75	24.37	36.67	24.81	4.91
100	23.17	36.80	25.27	4.90
150	21.25	36.84	25.84	4.56
200	19.82	36.86	26.25	4.38
250	18.92	36.73	26.38	4.40
300	18.26	36.64	26.48	4.40
400	17.28	36.48	26.60	4.29
500	15.58	36.20	26.78	4.04
600	13.58	35.96	27.03	3.81
800	8.96	35.26	27.35	3.36

STATION Standard 12

DATE November 7, 1954 LAT. 26°17'N. LONG. 76°46'W. TIME 23
DEPTH 4571 WIND 11 , 02 BAR. 18 AIR TEMP: dry 22.8°C, wet 19.4°C
HUMIDITY 73% WEATHER 03 CLOUDS: type 4 , amt. 5 SEA: dir. 02 , amt. 3
SWELL: dir. 02 , amt. 3 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.72	36.37	24.17	4.71
19	25.76	36.36	24.15	4.75
48	25.78	36.40	24.18	4.75
96	23.50	36.79	25.16	5.07
145	21.22	36.86	25.87	4.64
193	19.96	36.84	26.19	4.42
290	18.27	36.66	26.49	4.52
388	17.37	36.53	26.62	4.31
485	15.85	36.24	26.75	4.13
583	13.70	35.93	26.99	-
778	9.14	35.30	27.35	3.35
978	6.37	35.14	27.64	4.38

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.72	36.37	24.17	4.71
10	25.74	36.36	24.16	4.73
20	25.76	36.36	24.15	4.75
30	25.77	36.36	24.15	4.75
50	25.68	36.42	24.22	4.78
75	24.49	36.66	24.77	5.02
100	23.28	36.80	25.24	5.03
150	21.08	36.86	25.91	4.61
200	19.81	36.83	26.23	4.44
250	18.87	36.73	26.39	4.48
300	18.21	36.65	26.50	4.50
400	17.21	36.50	26.63	4.29
500	15.53	36.19	26.79	4.08
600	13.23	35.86	27.03	3.75
800	8.74	35.26	27.38	3.40

STATION Standard 13

DATE November 8, 1954 LAT. 26°14'N. LONG. 76°45'W. TIME 02
DEPTH 4480 WIND 9 , 03 BAR. 19 AIR TEMP: dry 22.8°C, wet 18.9°C
HUMIDITY 69% WEATHER 02 CLOUDS: type 4 , amt. 5 SEA: dir. 03 , amt. 2
SWELL: dir. 02 , amt. 2 VIS. 6 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.73	36.41	24.20	4.77
18	25.76	36.39	24.18	4.73
45	25.79	36.38	24.16	4.70
90	23.30	36.80	25.23	5.04
137	21.14	36.79	25.84	4.59
184	19.86	36.80	26.19	-
280	18.30	36.64	26.47	4.60
377	17.52	36.56	26.60	4.37
475	16.09	36.26	26.71	4.07
573	14.08	35.92	26.90	3.79
771	9.26*	-	-	-
969	6.38	35.32	27.78	4.30

*Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.73	36.41	24.20	4.77
10	25.75	36.40	24.19	4.75
20	25.76	36.39	24.18	4.72
30	25.77	36.38	24.17	4.72
50	25.70	36.40	24.20	4.78
75	25.15	36.66	24.57	5.01
100	22.77	36.80	25.38	4.93
150	20.75	36.80	25.95	4.59
200	19.55	36.77	26.25	4.59
250	18.70	36.68	26.40	4.60
300	18.19	36.63	26.49	4.55
400	17.24	36.49	26.62	4.28
500	15.60	36.17	26.76	3.98
600	13.61	35.88	26.97	-
800	9.60	35.54	27.46	4.08

STATION Standard 14

DATE November 8, 1954 LAT. 26°10'N. LONG. 76°44'W. TIME 05
DEPTH 4571 WIND 9 , 02 BAR. 19 AIR TEMP: dry 23.3°C, wet 18.9°C
HUMIDITY 65% WEATHER 03 CLOUDS: type 4 , amt. 2 SEA: dir. 03 , amt. 2
SWELL: dir. 03 , amt. 2 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.68	36.44	24.24	4.81
18	25.70	36.38	24.19	4.69
45	25.77	36.41	24.19	4.73
91	24.01	36.64	24.90	4.88
137	21.55	36.82	25.75	4.76
184	19.96	36.77	26.14	4.48
279	18.39	36.67	26.47	4.54
376	17.62	36.53	26.55	4.48
474	16.03	36.28	26.74	4.12
571	13.98	35.95	26.94	3.83
767	9.66	35.43	27.36	3.44
965	6.49	35.12	27.60	4.29

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.68	36.44	24.24	4.81
10	25.69	36.40	24.21	4.73
20	25.71	36.38	24.19	4.69
30	25.73	36.39	24.18	4.70
50	25.61	36.44	24.26	4.76
75	24.70	36.57	24.64	4.86
100	23.46	36.69	25.10	4.87
150	21.06	36.81	25.87	4.66
200	19.64	36.76	26.22	4.50
250	18.78	36.70	26.39	4.53
300	18.29	36.65	26.48	4.53
400	17.28	36.48	26.60	4.39
500	15.49	36.19	26.80	4.04
600	13.27	35.86	27.02	3.77
800	9.05	35.36	27.41	3.49

STATION Standard 15

DATE November 8, 1954 LAT. 26°10'N. LONG. 76°44'W. TIME 08
DEPTH 4571 WIND 9 , 02 BAR. 18 AIR TEMP: dry 22.8°C, wet 18.9°C
HUMIDITY 69% WEATHER 02 CLOUDS: type 4 , amt. 2 SEA: dir. 02 , amt. 2
SWELL: dir. 03 , amt. 2 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.64	36.44	24.25	4.77
19	25.67	36.44	24.24	4.85
47	25.70	36.44	24.23	4.84
94	23.51	36.73	25.12	4.92
141*	19.11*	36.89*	26.45	4.84
189	19.79	36.79	26.20	4.58
285	18.20	36.62	26.48	4.74
383	17.59	36.56	26.58	4.47
481	15.81	36.27	26.78	4.23
580	13.69	35.90	26.97	3.98
778	9.10	35.33	27.38	3.50
977	6.21	35.16	27.67	4.60

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.64	36.44	24.25	4.77
10	25.66	36.44	24.25	4.82
20	25.68	36.44	24.24	4.85
30	25.69	36.44	24.24	4.85
50	25.55	36.46	24.30	4.85
75	24.37	36.63	24.78	4.91
100	23.21	36.74	25.21	4.88
150	21.06	36.79	25.86	4.80
200	19.56	36.76	26.24	4.62
250	18.67	36.67	26.40	4.73
300	18.18	36.61	26.48	4.70
400	17.30	36.52	26.63	4.43
500	15.41	36.19	26.81	4.18
600	13.15	35.82	27.02	3.93
800	8.70	35.29	27.41	3.54

STATION Special 5

DATE November 4, 1954 LAT. 30°00'N. LONG. 77°00'W. TIME 22
DEPTH 988 WIND 3 , 13 BAR. 20 AIR TEMP: dry 20.6°C, wet 16.7°C
HUMIDITY 67% WEATHER 03 CLOUDS: type 4, amt. 7 SEA: dir. 13, amt. 1
SWELL: dir. 13, amt. 1 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.44	36.26	24.18	4.75
19	25.48	36.24	24.15	4.78
48	25.48	36.25	24.16	4.68
97	24.78	36.47	24.54	4.52
145	22.48	36.62	25.33	4.71
194	20.93	36.65	25.79	5.09
291	18.78	36.53	26.26	4.44
388	18.09	36.46	26.38	4.54
485	17.30	36.37	26.51	4.38
680	13.64	35.71	26.83	3.47
778	11.11	35.29	27.00	3.00
875	8.24	34.99	27.25	3.12

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.44	36.26	24.18	4.75
10	25.46	36.24	24.16	4.77
20	25.48	36.24	24.15	4.78
30	25.48	36.24	24.15	4.74
50	25.48	36.26	24.17	4.67
75	25.15	36.36	24.34	4.55
100	24.61	36.48	24.60	4.53
150	22.31	36.63	25.39	4.77
200	20.75	36.64	25.83	5.03
250	19.51	36.59	26.12	4.62
300	18.72	36.52	26.27	4.46
400	18.03	36.46	26.40	4.53
500	17.08	36.33	26.53	4.31
600	15.36	36.01	26.69	3.85
800	10.49	35.21	27.05	3.03

STATION Special 5

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.8	0.2	0.0	1.2	0.2
19	0.6	0.2	<0.5	-	0.9
48	0.4	0.4	1.0	1.9	0.2
97	0.7	0.2	-	-	0.2
145	0.2	0.0	0.5	1.4	1.0
194	0.4	0.2	1.5	0.7	1.3
291	0.9	0.0	2.5	0.1	0.8
388	-	0.4	3.5	0.7	0.7
485	0.8	0.4	5.0	2.8	0.5
680	1.7	1.8	12.5	0.8	0.5
778	2.2	1.4	9.0	3.2	1.5
875	2.9	1.6	13.0	1.6	0.6

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.8	0.2	0.0	1.2	0.2
10	0.7	0.2	<0.5	1.3	0.6
20	0.6	0.2	<0.5	1.5	0.9
30	0.6	0.3	0.5	1.6	0.7
50	0.4	0.4	1.0	1.9	0.2
75	0.6	0.3	1.0	1.8	0.2
100	0.7	0.2	0.5	1.7	0.2
150	0.2	0.0	0.5	1.4	1.0
200	0.4	0.2	1.5	0.7	1.3
250	0.7	0.1	2.0	0.4	1.1
300	0.9	0.0	2.5	0.1	0.8
400	0.9	0.4	3.5	1.0	0.7
500	0.9	0.5	5.5	2.6	0.5
600	1.3	1.2	9.5	1.7	0.5
700	1.8	1.7	12.0	1.3	0.7
800	2.4	1.5	10.0	2.8	1.3

STATION Special 6

DATE November 5, 1954 LAT. 29°00'N. LONG. 77°00'W. TIME 07
DEPTH 1189 WIND 4 , 13 BAR. 19 AIR TEMP: dry 22.2°C, wet 18.9°C
HUMIDITY 73% WEATHER 00 CLOUDS: type - , amt. 0 SEA: dir. 13 , amt. 1
SWELL: dir. 13 , amt. 1 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.22	36.27	24.25	4.81
20	25.24	36.25	24.23	4.83
49	25.29	36.27	24.23	4.80
98	25.20	36.28	24.27	4.82
147	21.39	36.60	25.62	4.64
196	20.39	36.66	25.94	4.65
294	18.68	36.55	26.30	4.77
391	18.10	36.48	26.40	4.80
489	17.75	36.44	26.45	4.72
586	16.40	36.25	26.63	4.24
781	13.25	35.77	26.96	3.79
977	8.70	35.21	27.35	3.40

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.22	36.27	24.25	4.81
10	25.23	36.26	24.24	4.82
20	25.24	36.25	24.23	4.83
30	25.27	36.26	24.23	4.82
50	25.29	36.27	24.23	4.80
75	25.24	36.28	24.26	4.81
100	25.15	36.30	24.30	4.81
150	21.33	36.61	25.65	4.64
200	20.30	36.65	25.96	4.66
250	19.25	36.61	26.20	4.73
300	18.64	36.54	26.31	4.78
400	18.07	36.48	26.40	4.79
500	17.60	36.42	26.48	4.66
600	16.22	36.22	26.65	4.21
800	12.87	35.72	26.99	3.75

STATION Special 6

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	-	0.9	<0.5	0.7	1.2
20	-	0.8	0.0	1.1	0.0
49	0.9	0.0	0.5	2.0	0.2
98	0.8	<0.1	0.0	1.4	<0.1
147	1.0	0.0	0.5	1.1	0.2
196	1.2	0.1	<0.5	3.3	0.7
294	0.7	0.3	0.0	0.9	0.6
391	0.8	0.4	1.0	3.7	0.8
489	0.6	0.4	3.0	0.3	0.0
586	1.0	0.8	5.5	1.5	0.7
781	2.1	0.8	11.5	1.6	0.8
977	2.3	1.3	17.5	4.7	-

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	-	0.9	<0.5	0.7	1.2
10	-	0.9	<0.5	0.9	0.6
20	-	0.8	0.0	1.1	0.0
30	-	0.5	<0.5	1.4	0.1
50	0.9	0.0	0.5	2.0	0.2
75	0.8	0.0	<0.5	1.7	0.1
100	0.8	<0.1	0.0	1.4	<0.1
150	1.0	0.0	0.5	1.1	0.2
200	1.2	0.1	<0.5	3.3	0.7
250	0.9	0.2	<0.5	2.1	0.7
300	0.7	0.3	0.0	0.9	0.6
400	0.8	0.4	1.0	3.7	0.8
500	0.6	0.5	3.5	0.4	0.1
600	1.1	0.8	6.0	1.5	0.7
700	1.7	0.8	9.0	1.6	0.8
800	2.1	0.9	12.0	2.0	0.8

STATION Special 7

DATE November 5, 1954 LAT. 28°00'N. LONG. 77°00'W. TIME 15
DEPTH 1097 WIND 5 , 23 BAR. 19 AIR TEMP: dry 25.6 °C, wet 20.6 °C
HUMIDITY 63 % WEATHER 03 CLOUDS: type 4 , amt. 3 SEA: dir. 28 , amt. 1
SWELL: dir. 25 , amt. 1 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.27	36.35	24.30	4.81
20	25.28	36.35	24.30	4.78
49	25.30	36.35	24.29	4.78
99	23.00	36.62	25.18	4.85
149	21.34	36.62	25.65	4.68
198	19.96	36.64	26.04	4.65
297	18.41	36.53	26.36	4.79
396	25.19*	36.40	24.36	4.79
495*	17.40*	36.13*	26.30	4.51
594	15.93	36.13	26.65	4.18
793	11.73	35.50	27.05	3.54
993	7.17	35.03	27.44	4.08

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.27	36.35	24.30	4.81
10	25.27	36.35	24.30	4.79
20	25.28	36.35	24.30	4.78
30	25.29	36.35	24.29	4.78
50	25.25	36.36	24.31	4.78
75	24.02	36.52	24.81	4.82
100	22.96	36.62	25.19	4.85
150	21.31	36.62	25.66	4.68
200	19.93	36.64	26.05	4.65
250	19.10	36.58	26.22	4.74
300	18.37	36.53	26.37	4.79
400	17.55	36.39	26.46	4.78
500	16.85	36.28	26.55	4.47
600	15.81	36.11	26.66	4.14
800	11.58	35.48	27.06	3.56

STATION Special 7

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.8	0.2	0.0	1.8	0.0
20	-	0.2	1.5	0.2	1.5
49	0.9	0.2	17.0*	3.9	0.5
99	-	0.2	<0.5	0.0	0.5
149	1.0	0.2	<0.5	0.9	0.1
198	0.7	0.2	1.0	0.6	0.1
297	0.4	0.4	3.5	2.7	0.2
396	0.7	0.3	0.5	3.0	0.9
495	1.3	0.7	3.0	0.0	0.1
594	1.3	-	6.0	-	-
793	2.2	1.2	13.5	0.0	0.6
993	2.0	1.7	0.0*	0.5	0.6

* Value questionable

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.8	0.2	0.0	1.8	0.0
10	0.8	0.2	1.0	1.0	0.8
20	0.8	0.2	1.5	0.2	1.5
30	0.9	0.2	-	1.4	1.2
50	0.9	0.2	-	3.9	0.5
75	0.9	0.2	-	2.0	0.5
100	1.0	0.2	<0.5	0.0	0.5
150	1.0	0.2	<0.5	0.9	0.1
200	0.7	0.2	1.0	0.6	0.1
250	0.6	0.3	2.5	1.7	0.1
300	0.4	0.4	3.5	2.7	0.2
400	0.7	0.3	0.5	3.0	0.9
500	1.3	0.7	3.0	0.0	0.1
600	1.3	0.9	6.0	0.0	0.3
700	1.8	1.1	10.0	0.0	0.5
800	2.2	1.2	13.5	0.0	0.6
1000	2.0	1.7	-	0.5	0.6

STATION Special 8

DATE November 5, 1954 LAT. 28°00'N. LONG. 78°00'W. TIME 22
DEPTH 1061 WIND 3 , 25 BAR. 15 AIR TEMP: dry 24.4°C, wet 20.6°C
HUMIDITY 70% WEATHER 02 CLOUDS: type 4 , amt. 3 SEA: dir. 25 , amt. 1
SWELL: dir. 25 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.84	36.33	24.11	4.81
19	25.84	36.31	24.09	4.79
49	25.75	36.27	24.09	4.82
98	23.39	36.64	25.08	5.00
147	20.91	36.67	25.81	4.85
197	19.32	36.60	26.18	4.68
295	18.20	36.51	26.40	4.79
394	17.69	36.43	26.46	4.70
494	16.30	36.18	26.60	4.25
593	14.43	35.88	26.79	3.99
793	10.18	35.30	27.17	3.39
993	6.62	35.05	27.53	4.36

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.84	36.33	24.11	4.81
10	25.84	36.32	24.10	4.80
20	25.84	36.31	24.09	4.79
30	25.81	36.28	24.08	4.80
50	25.70	36.28	24.11	4.83
75	24.51	36.51	24.65	4.96
100	23.27	36.64	25.12	4.99
150	20.80	36.67	25.84	4.84
200	19.28	36.60	26.19	4.69
250	18.69	36.55	26.30	4.75
300	18.19	36.51	26.40	4.79
400	17.62	36.42	26.47	4.67
500	16.19	36.16	26.61	4.23
600	14.27	35.85	26.80	3.98
800	10.04	35.29	27.19	3.40

STATION Special 8

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.8	0.2	0.5	0.9	0.6
19	1.8	0.0	<0.5	1.4	0.0
49	-	0.1	2.0	0.0	0.2
98	1.8	0.1	1.5	-	0.3
147	-	0.4	0.0	0.4	1.0
197	1.3	0.3	5.0	2.5	-
295	0.6	0.1	1.5	0.9	0.4
394	0.9	0.5	3.5	0.5	0.5
494	1.7	0.5	5.5	-	0.7
593	3.6	1.4	8.5	-	1.0
793	3.4	1.4	17.0	0.7	0.2
993	-	2.0	7.5	0.8	0.4

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.8	0.2	0.5	0.9	0.6
10	1.8	0.1	<0.5	1.2	0.3
20	1.8	0.0	<0.5	1.4	0.0
30	1.8	0.0	1.0	0.9	0.1
50	1.8	0.1	2.0	0.0	0.2
75	1.8	0.1	2.0	0.1	0.2
100	1.8	0.1	1.5	0.2	0.3
150	1.5	0.4	0.0	0.4	1.0
200	1.3	0.3	5.0	2.5	0.8
250	1.0	0.2	3.0	1.7	0.6
300	0.6	0.1	1.5	0.9	0.4
400	0.9	0.5	3.5	0.5	0.5
500	1.7	0.5	5.5	0.5	0.7
600	3.6	1.4	8.5	0.6	1.0
700	3.5	1.4	12.5	0.6	0.6
800	3.4	1.4	17.0	0.7	0.2
1000	-	2.0	7.5	0.8	0.4

STATION Special 9

DATE November 17, 1954 LAT. 28°00' N. LONG. 79°00' W. TIME 04
DEPTH 850 WIND 5 , 15 BAR. 13 AIR TEMP: dry 24.4 °C, wet 22.8 °C
HUMIDITY 87 % WEATHER 00 CLOUDS: type - , amt. 1 SEA: dir. 15 , amt. 2
SWELL: dir. 31 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	25.04	36.35	24.37	4.91
18	25.07	36.35	24.36	4.95
45	25.05	36.34	24.36	4.85
91	25.04	36.34	24.36	4.89
138	22.73	36.66	25.29	4.85
185	20.31	36.64	25.95	4.73
233	18.93	36.56	26.25	4.76
280	18.35	36.49	26.34	4.73
374	17.33	36.35	26.49	4.61
468	15.23	36.00	26.71	4.17
564	12.54	35.54	26.92	3.77
761	7.79	35.03	27.35	3.83

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	25.04	36.35	24.37	4.91
10	25.06	36.35	24.36	4.94
20	25.07	36.35	24.36	4.94
30	25.06	36.34	24.36	4.89
50	25.05	36.34	24.36	4.86
75	25.04	36.34	24.36	4.88
100	24.90	36.36	24.42	4.88
150	22.01	36.66	25.49	4.81
200	19.79	36.61	26.06	4.75
250	18.71	36.53	26.28	4.75
300	18.22	36.48	26.37	4.70
400	16.80	36.26	26.55	4.48
500	14.31	35.83	26.78	4.01
600	11.59	35.40	27.00	3.78

STATION Special 9

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.4	0.1	0.0	1.5	0.3
18	0.5	0.2	1.0	1.7	0.2
45	0.5	0.1	0.0	1.2	1.4
91	1.4	0.4	0.5	0.3	0.7
138	0.2	-	0.5	1.6	0.3
185	0.2	0.0	0.5	0.2	1.3
233	0.5	0.4	1.5	-	0.3
280	0.7	-	2.0	-	0.8
374	0.5	0.5	4.0	-	0.8
468	1.0	0.6	4.5	-	0.1
564	1.5	1.1	10.0	-	0.7
761	2.3	1.8	3.0	2.9	<0.1

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.4	0.1	0.0	1.5	0.3
10	0.5	0.2	0.5	1.6	0.3
20	0.5	0.2	1.0	1.7	0.2
30	0.5	0.2	0.5	1.5	0.6
50	0.5	0.1	0.0	1.2	1.4
75	1.0	0.3	<0.5	0.8	1.0
100	1.4	0.4	0.5	0.3	0.7
150	0.2	0.1	0.5	1.3	0.6
200	0.3	0.1	1.0	0.2	1.0
250	0.6	0.4	1.5	-	0.5
300	0.7	0.5	2.5	-	0.8
400	0.7	0.6	4.0	-	0.6
500	1.2	0.8	6.5	-	0.3
600	1.6	1.2	8.5	-	0.6
700	2.1	1.6	5.0	2.9	0.3

STATION Tongue of the Ocean 1

DATE November 11, 1954 LAT. 23°46'N. LONG. 76°57'W. TIME 23
DEPTH 1262 WIND 6 , 07 BAR. 18 AIR TEMP: dry 25.0°C, wet 23.9°C
HUMIDITY 91% WEATHER 03 CLOUDS: type 4 , amt. 6 SEA: dir. - , amt. -
SWELL: dir. - , amt. - VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	26.98	36.92	24.19	4.49
47	27.01	36.92	24.18	4.54
95	26.08	36.90	24.46	4.44
142	23.74	36.94	25.21	4.22
190	21.69	36.91	25.77	4.13
285	18.31	36.61	26.44	4.12
382	16.95	36.38	26.60	3.93
479	14.63	36.09	26.91	3.68
577	12.17	35.70	27.12	3.39
774	8.77	35.34	27.44	3.68
971	5.86	35.13	27.69	4.81
1169	4.68	35.08	27.80	5.47

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	26.98	36.92	24.19	4.49
10	26.99	36.92	24.19	4.50
20	26.99	36.92	24.19	4.51
30	27.00	36.92	24.18	4.52
50	27.00	36.92	24.18	4.53
75	26.65	36.90	24.28	4.48
100	25.82	36.91	24.55	4.41
150	23.38	36.94	25.31	4.20
200	21.24	36.87	25.87	4.13
250	19.32	36.71	26.26	4.12
300	18.10	36.58	26.47	4.09
400	16.53	36.33	26.66	3.89
500	14.06	35.99	26.96	3.59
600	11.75	35.65	27.16	3.42
800	8.29	35.30	27.48	3.86
1000	5.58	35.11	27.71	4.94

☆U.S. GOVERNMENT PRINTING OFFICE 1960 O—540989