

Temperature, Salinity and Dissolved Oxygen Data
for the Penobscot River Estuary, Maine, 1963-1977

edited by

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MARCH 26, 1985

Introduction

The Penobscot River is the largest river in Maine. It has a length of over 300 miles and a water shed of 8500 square miles. The last dam on the river before it enters Penobscot Bay and the Gulf of Maine is in Bangor-Brewer (Fig. 1). The Penobscot River estuary then, includes that length of river from this dam to Penobscot Bay.

Regular hydrographic surveys of the estuary were begun in 1963 by the Maine Cooperative Fishery Research Unit and the University of Maine. The station locations are shown in Figure 1. These cruises continued to 1977. On most cruises, surface to bottom profiles were made for temperature, salinity and dissolved oxygen. The methods and summary of results of the surveys from 1963 to 1965 are given in Haefner (1967). Usually temperature and salinity were measured with an Industrial Instrument salinometer, although early in the project the salinities were titrated following the method of Strickland and Parsons (1960). Dissolved oxygen was determined by the sodium azide modification of the Winkler method (American Public Health Assoc., 1960) early in the program but were subsequently determined with an oxygen electrode. When the electrode was used, oxygen values were determined at 1-m intervals.

This document presents data from these cruises in tables and as vertical section plots. Only those data which were considered synoptic are included here.

References

American Public Health Association. 1960. Standard methods for the examination of water and waste water including bottom sediments and sludges. Am. Publ. Health Assoc., Inc. New York, 626 p.

Haefner, P.A., Jr. 1967. Hydrography of the Penobscot River (Maine) estuary. J. Fish. Res. Bd. Canada 24(7): 1553-1571.

Strickland, J.D.H. and T.R. Parsons. 1960. A manual of seawater analysis. Bull. Fish. Res. Bd. Canada, No. 125. 185 p.

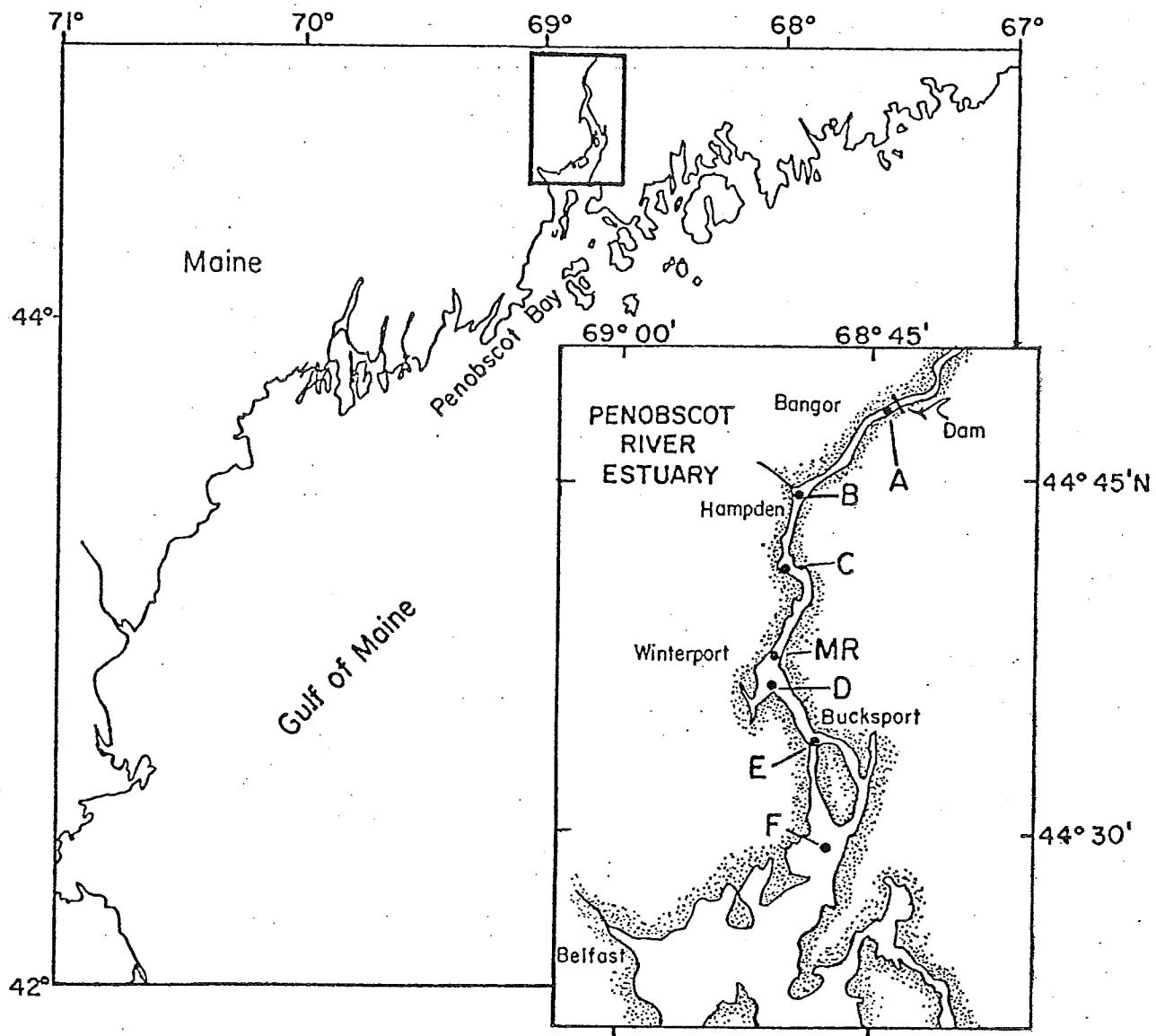


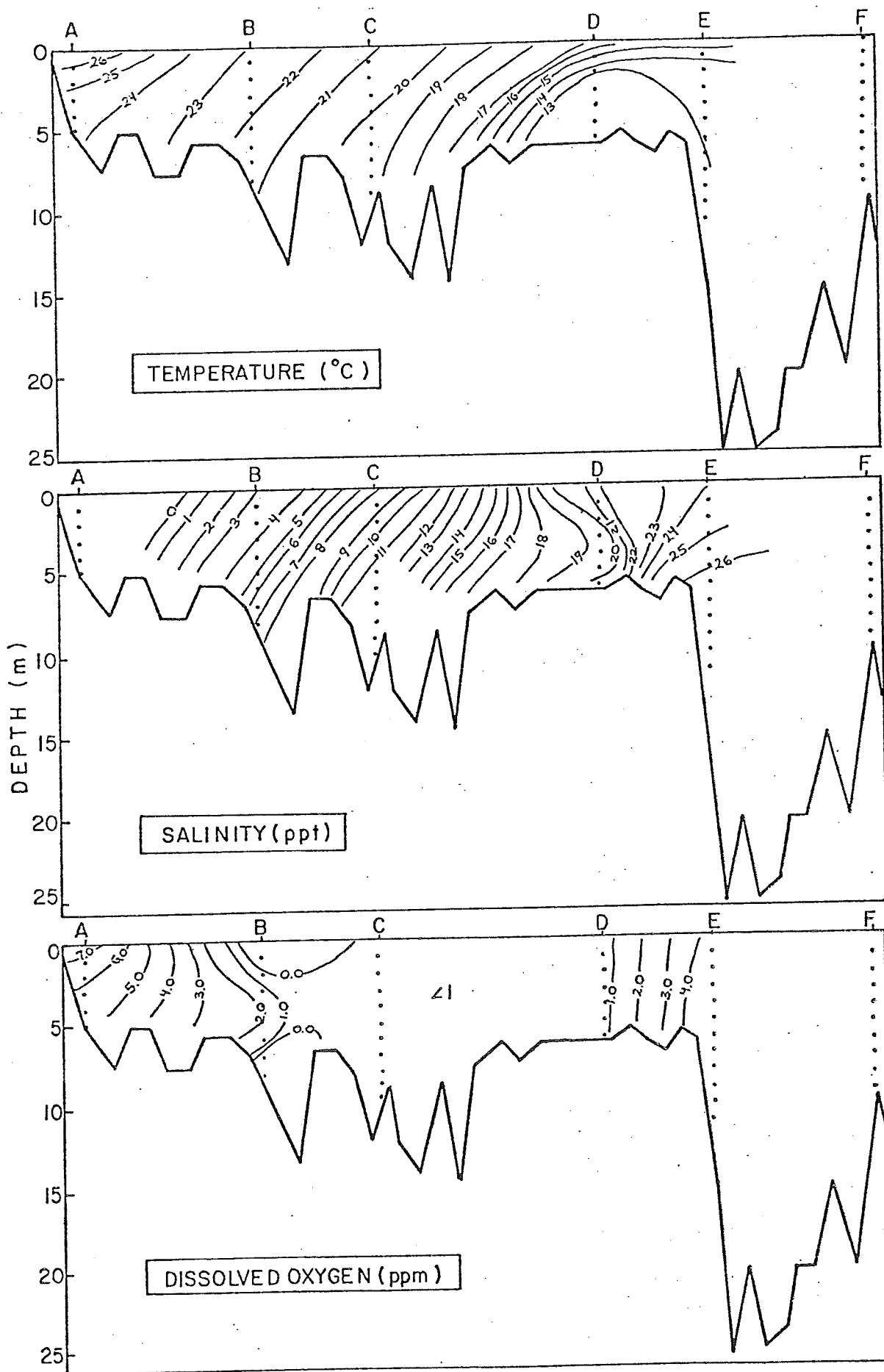
Figure 1. Locations of hydrographic sampling stations in the Penobscot River estuary, Maine.

5 August 1963 B
 6 August 1963 C,D
 7 August 1963 E
 Date: 8 August 1963 A

Station	A			B			C			D			E		
	Depth (m)	Temp. °C	Sal. ppt	DO ppm	Temp. °C	Sal. ppt									
0	27.9	0	7.5	22.9	3.64	0.0	21.4	8.24	<1.0	17.7	22.03	1.0	16.1	24.24	4.5
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	22.3	-	-	20.4	9.58	<1.0	13.0	-	-	13.7	-	-
3	24.1	0	6.0	22.2	-	-	20.1	-	-	12.9	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	24.2	0	-	21.9	4.27	2.2	19.8	11.55	<1.0	12.7	19.68	1.0	13.3	26.00	-
6	-	-	-	-	-	-	-	-	-	-	-	-	13.2	-	4.7
7	24.0	0	-	21.8	-	-	19.7	-	-	12.7	-	-	-	-	-
8	24.0	0	-	21.3	-	-	-	-	-	12.6	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	23.9	0	-	20.9	8.49	0.0	19.5	-	-	12.4	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Time	1245			1200			0845			1145			1130		

5, 6, 7, 8 August 1963

6



2 October 1963 A, B, + C

3 October 1963 D

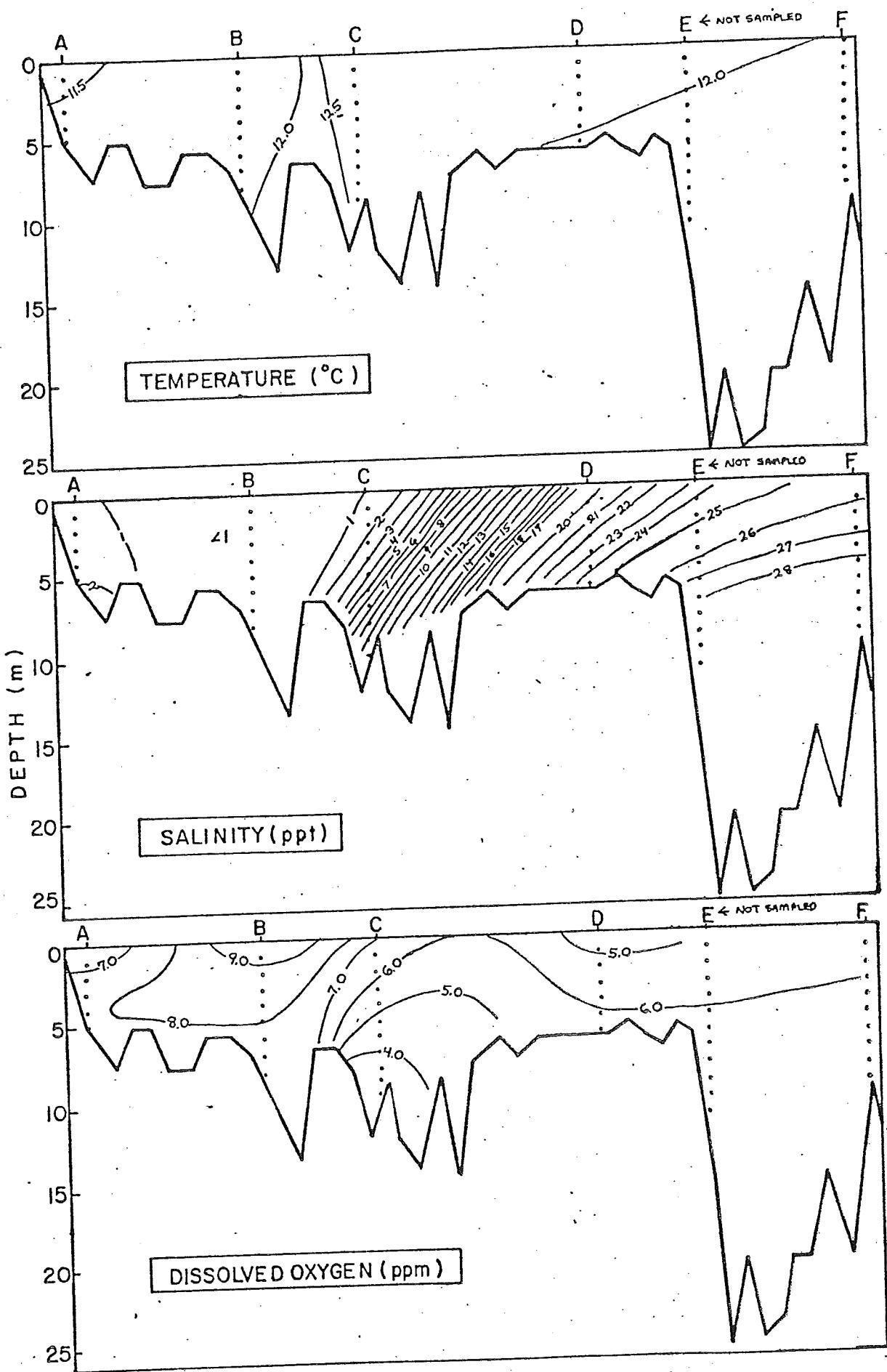
Date: 11 October 1963 E

F

Station-	A			B			C			D			E			F		
	Depth (m)	Temp. °C	Sal. ppt	DO ppm	Temp. °C	Sal. ppt	DO ppm	Temp. °C	Sal. ppt									
0	11.5	1.28	7.0	12.0	0.28	9.0	12.9	1.28	7.0	12.4	19.44	5.0	not sampled	-	-	12.0	25.60	5.8
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	11.4	1.60	8.0	12.0	0.24	8.8	12.7	3.76	-	12.1	23.60	6.0	-	-	-	11.7	28.68	6.1
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	11.4	2.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	12.0	0.28	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Time:	0920			1100			1113			0910			1113			1030		

2,3,11 October 1963

8



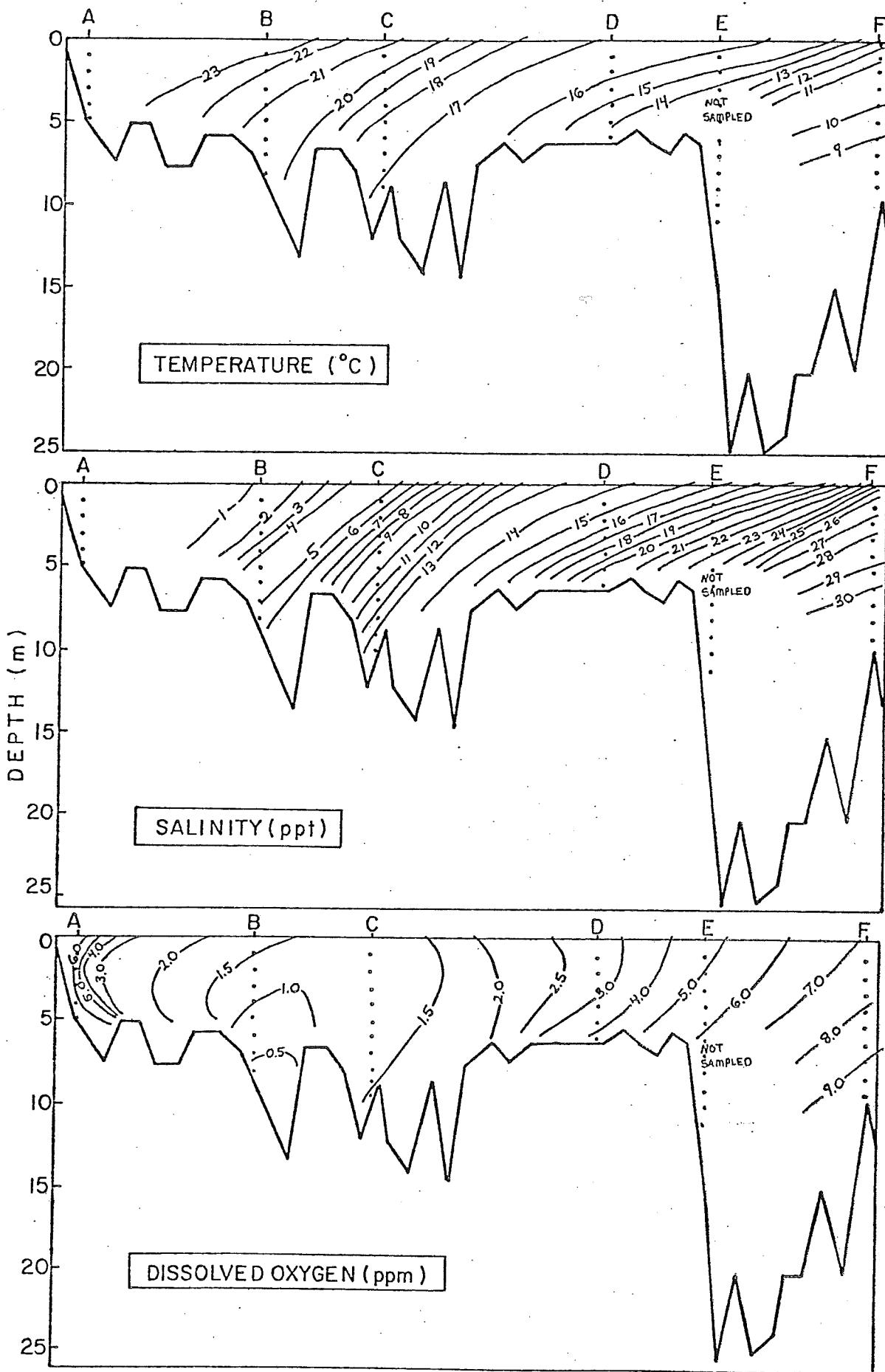
25 June 1964 A, B, + C

Date: 26 June 1964 D

Station- Depth (m)	A			B			C			D			E			F		
	Temp. °C	Sal. ppt	DO ppm	Temp. °C	Sal. ppt	DO ppm	Temp. °C	Sal. ppt	DO ppm									
0	23.3	0.08	6.4	23.0	1.32	1.6	21.4	5.00	1.4	17.5	13.70	2.9	not sampled	14.2	24.20	7.4		
1	23.2	0.08	-	23.0	1.68	-	21.1	4.84	-	13.0	14.10	-		12.0	26.40	-		
2	23.2	0.08	3.4	23.0	1.84	-	21.2	4.96	-	16.4	14.70	-		11.2	26.80	-		
3	23.2	0.08	-	21.7	2.68	-	20.1	6.84	-	16.0	15.60	-		10.7	27.64	-		
4	23.2	0.08	-	21.2	3.04	-	19.0	8.36	-	15.7	14.28	-		10.7	27.80	-		
5	23.2	0.08	-	20.8	4.44	-	18.4	9.60	-	14.2	19.90	-		9.9	28.92	-		
6	23.2	0.08	-	-	-	-	-	-	-	-	-	-		-	-	-	-	
7	23.1	0.16	6.2	-	-	-	-	-	-	14.2	20.20	4.0		8.2	30.76	9.2		
8	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	
9	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	
10	-	-	-	20.2	6.00	0.4	16.9	13.16	-	-	-	-		-	-	-	-	
11	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	
12	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	
13	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	
14	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	
15	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	
Time:	0940	1055	1300	1300	0945	1055	1300	1300	0945	1055	1300	1300	1055	1055	1055	1055	1055	

25,26 June 1964

10

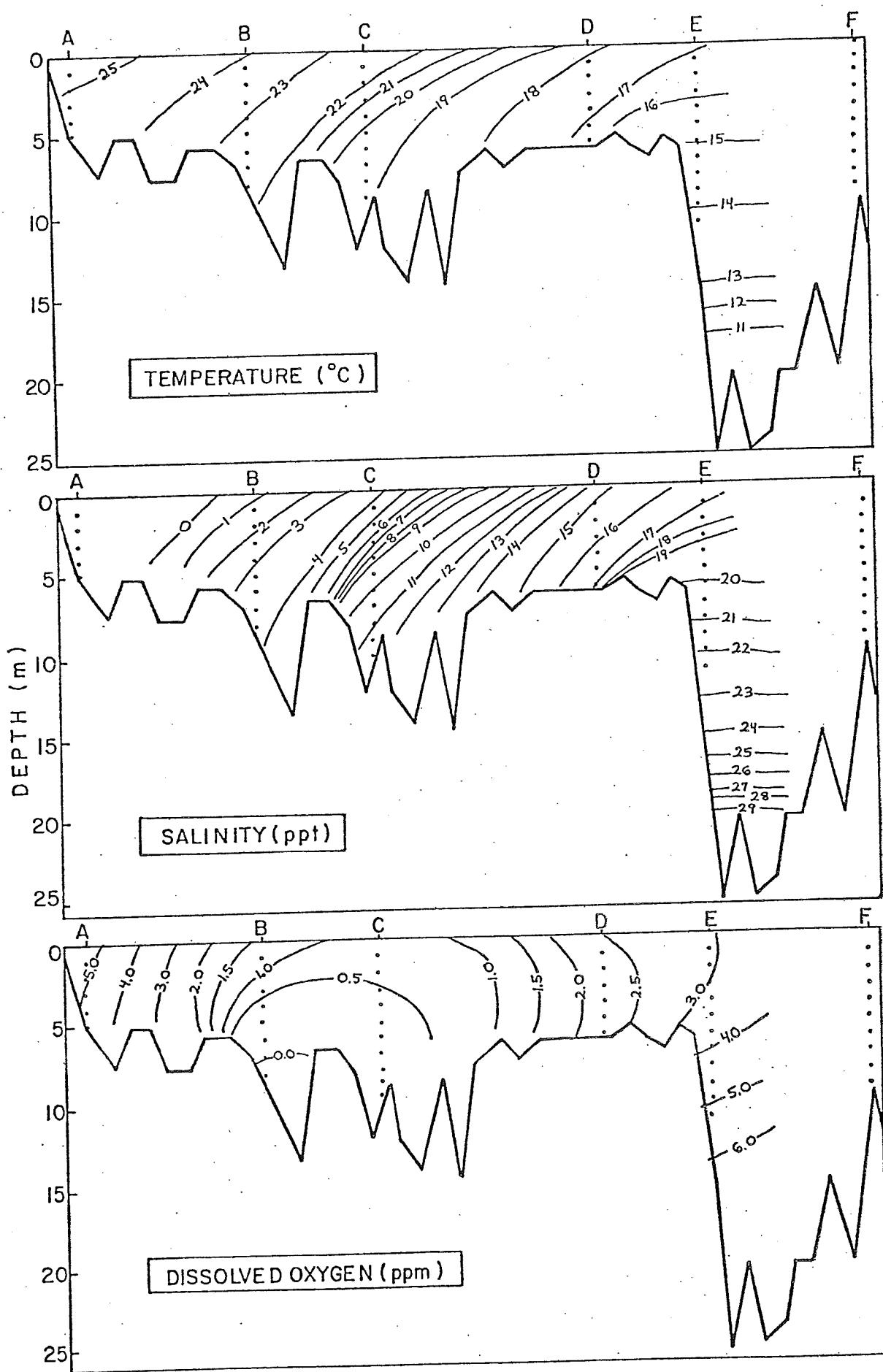


28 July 1964 A,B
Date: 29 July 1964 C,D,E

Station- Depth (m)	A			B			C			D			E		
	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm
0	25.4	0	5.6	24.4	0.80	1.2	22.7	3.80	0.8	18.6	15.60	2.6	17.6	16.44	2.9
1	25.2	0	-	23.9	1.22	-	22.4	4.40	-	17.9	15.60	-	17.0	17.00	-
2	25.0	0	-	23.8	1.36	-	22.3	5.00	-	17.7	15.80	-	16.9	17.60	-
3	25.0	0	-	23.2	2.08	-	21.3	7.40	-	17.7	15.90	-	16.1	19.20	-
4	24.0	0	-	23.2	2.48	-	20.4	9.00	-	17.2	16.20	-	15.9	19.50	-
5	25.0	0	4.9	22.6	3.12	-	20.0	9.20	-	17.0	16.60	-	15.7	19.90	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	24.9	0	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	22.0	4.40	0.0	20.4	11.40	-	-	-	-	-	-	-	14.3	22.60	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	13.4	24.50	6.6
20	-	-	-	-	-	-	-	-	-	-	-	-	10.9	29.00	-
Time	1400		1515		1245		1130		1015						

28,29 July 1964

12



Date: 22 October 1964 A,B
23 October 1964 C,D

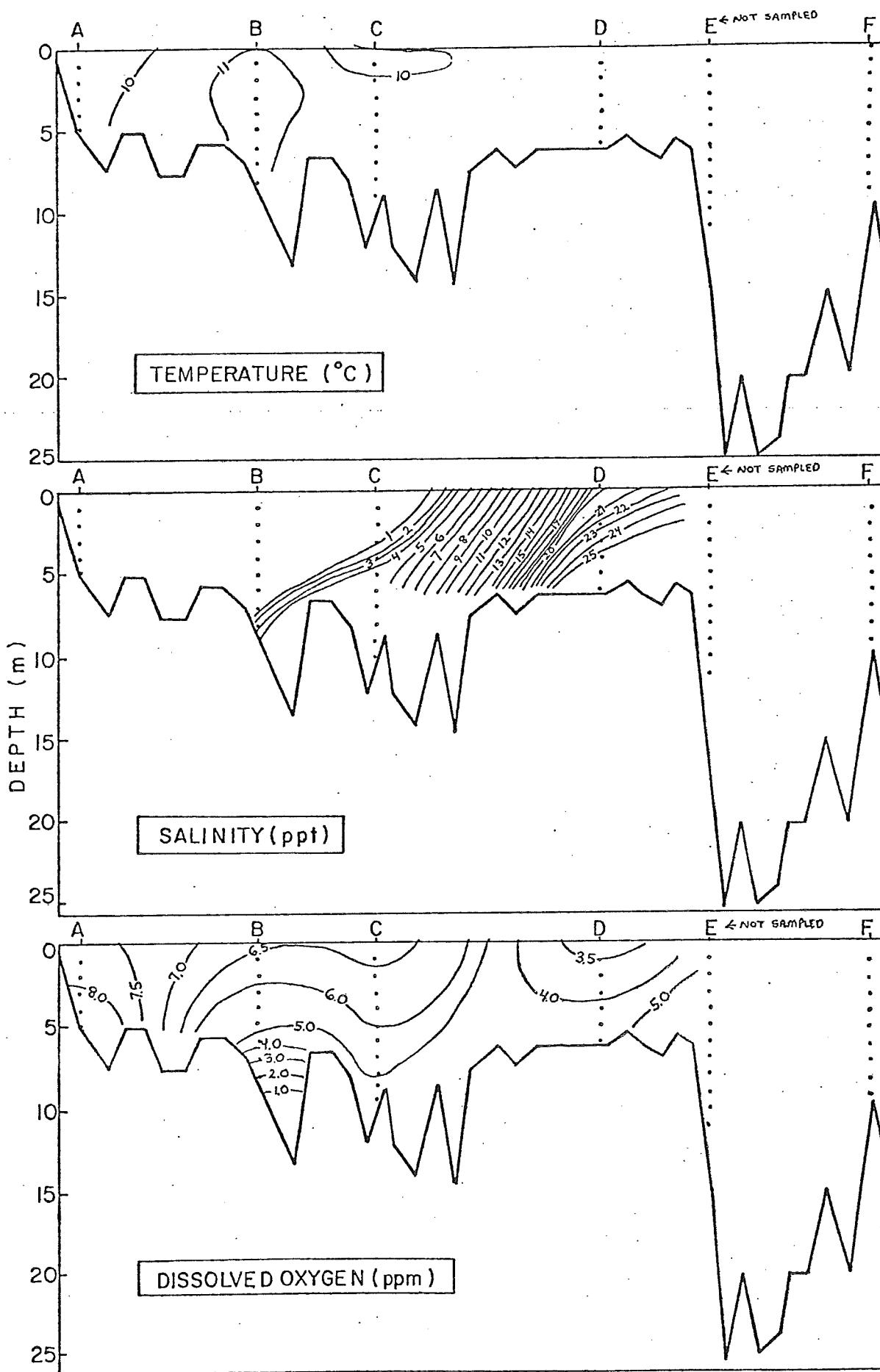
13

Station- (m)	A			B			C			D			E		
	Temp. °C	Sal. ppt	DO ppm												
0	10.2	0.08	7.6	11.0	0.16	6.6	9.2	0.44	6.6	10.4	20.00	3.4			
1	10.3	0.20	-	11.2	0.56	-	10.0	0.44	-	10.6	20.00	-			
2	10.3	0.08	-	11.2	0.36	-	10.0	0.44	-	10.6	23.00	-			
3	10.3	0.16	-	11.2	0.36	-	10.1	0.44	-	10.4	24.52	-			
4	10.3	0.04	8.2	11.2	0.44	-	10.1	0.56	-	10.4	15.00	-			
5	10.3	0.24	-	11.0	0.44	5.4	10.1	0.56	6.0	10.5	25.00	4.8			
6	-	-	-	-	-	-	-	-	-	-	-	-			
7	-	-	-	-	-	-	-	-	-	-	-	-			
8	10.3	0.08	8.2	-	-	-	-	-	-	-	-	-			
9	-	-	-	-	-	-	-	-	-	-	-	-			
10	-	-	-	-	-	-	-	-	-	-	-	-			
11	-	-	-	-	-	-	-	-	-	-	-	-			
12	-	-	-	-	-	-	-	-	-	-	-	-			
13	-	-	-	-	-	-	-	-	-	-	-	-			
14	-	-	-	-	-	-	-	-	-	-	-	-			
15	-	-	-	-	-	-	-	-	-	-	-	-			
Time	1230	1515	0945										1130		

not
sampled

22, 23 October 1964

14



Date: 25 August 1964 A, C, D, + F

Station- Depth (m)	A			B			C			D			E			F		
	Temp. °C	Sal. ppt	DO ppm															
0	18.9	0	6.8		not		18.4	6.80	1.3	14.7	21.40	4.1		not		14.4	25.10	4.9
1	-	-	-		sampled		-	-	-	-	-	-		sampled		-	-	-
2	-	-	-				-	-	-	-	-	-				-	-	-
3	18.7	0	-				17.4	7.40	-	12.4	25.80	4.9				-	-	-
4	-	-	-				-	-	-	-	-	-				-	-	-
5	18.8	0	6.8				17.1	8.40	0.4	12.2	26.00	-				11.0	29.80	-
6							-	-	-	-	-	-				-	-	-
7							-	-	-	-	-	-				-	-	-
8							-	-	-	-	-	-				-	-	-
9							-	-	-	-	-	-				-	-	-
10							18.4	11.20	-	12.0	26.40	4.9				10.5	30.80	-
11							-	-	-	-	-	-				-	-	-
12							-	-	-	-	-	-				10.4	30.60	7.2
13							-	-	-	-	-	-						
14							-	-	-	-	-	-						
15							16.0	12.40	1.0									

1007

1130

1258

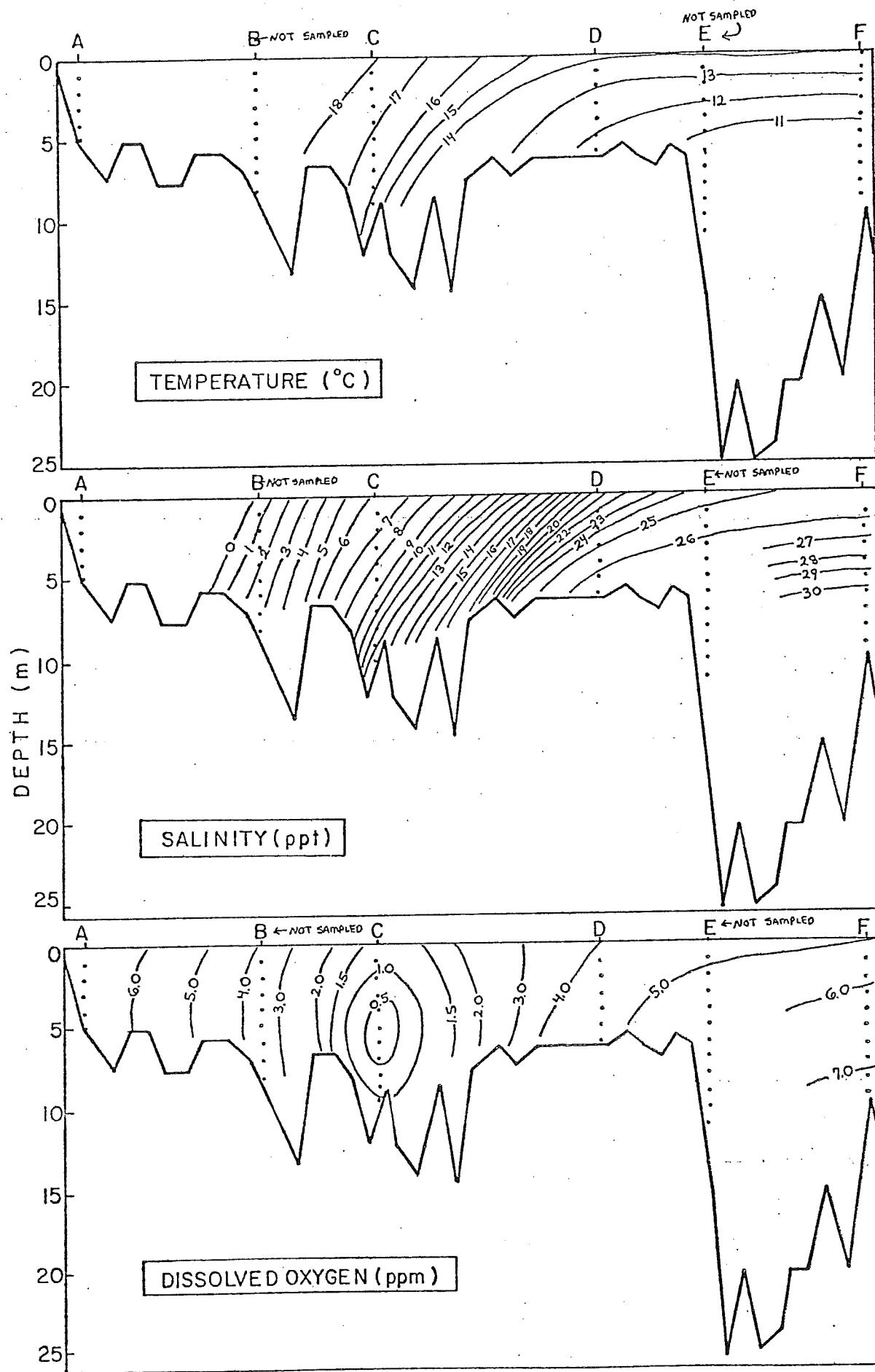
1430

Time:

F

25 August 1964

16

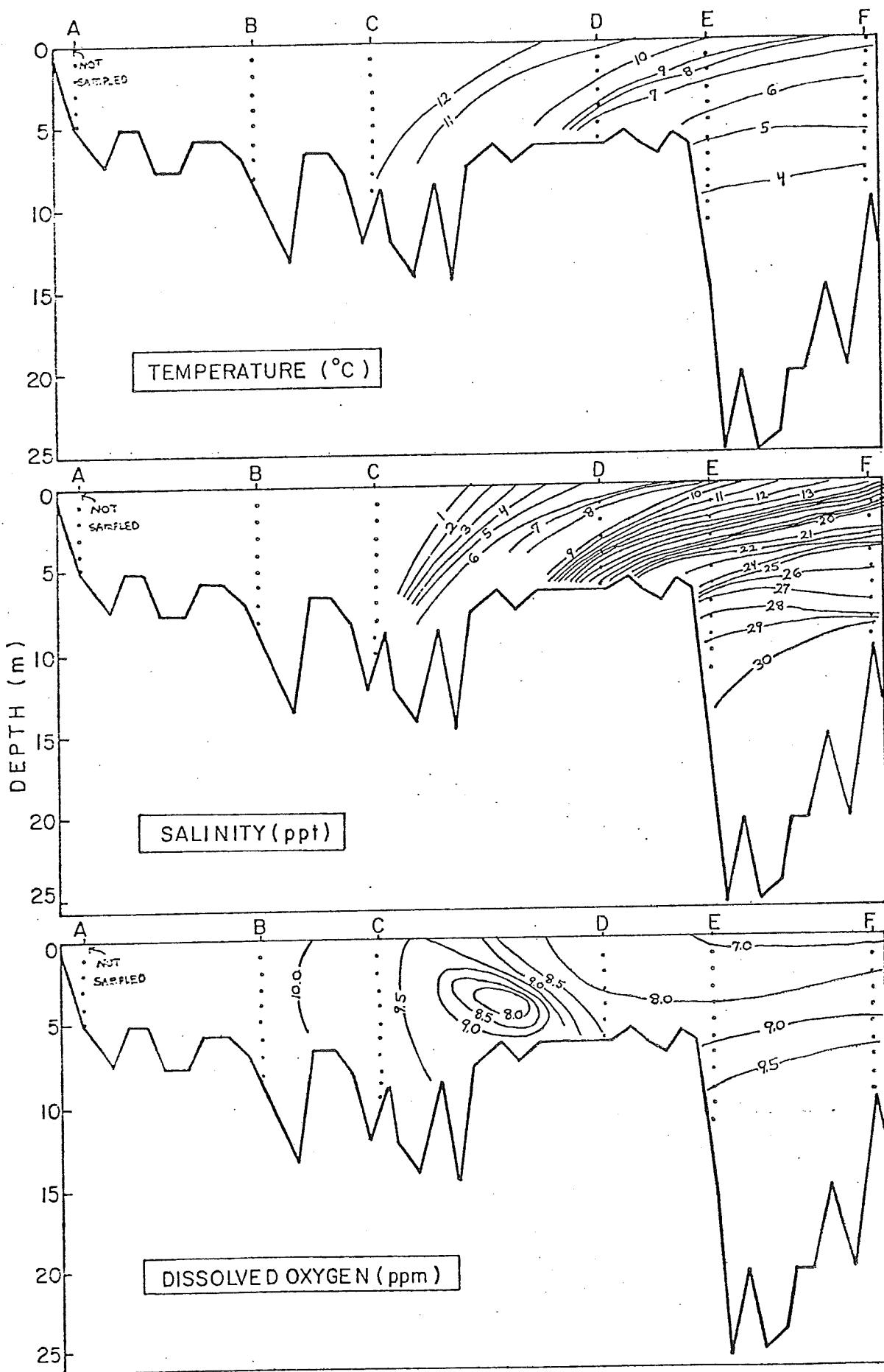


20 May 1965 D, E, + F
Date: 21 May 1965 B, C, + MR

Station- Depth (m)	B			C			ST. MR			D			E			F		
	Temp. °C	Sal. ppt	DO ppm															
0	12.8	0.12	10.2	12.6	0.12	9.6	14.4	2.76	8.4	12.7	5.52	7.4	10.4	9.28	7.0	9.4	12.28	7.0
1	12.8	0.40	-	12.5	0.12	-	12.5	3.08	-	11.2	6.28	-	9.7	10.56	-	7.5	17.88	-
2	12.6	0.16	-	12.6	0.16	-	12.3	3.32	-	10.6	8.20	-	9.1	12.72	-	6.7	20.36	-
3	12.6	0.16	-	12.6	0.20	-	11.6	5.04	-	10.5	8.36	-	8.0	16.36	-	6.5	21.12	-
4	12.5	0.16	10.0	12.6	0.20	-	10.9	6.56	7.6	9.4	12.32	-	6.7	20.28	-	5.5	24.80	8.8
5	12.5	0.16	-	12.6	0.04	-	-	-	-	7.4	17.92	-	6.5	21.76	-	5.3	25.40	-
6	12.6	0.16	-	12.6	0.20	-	-	-	-	6.7	20.92	-	5.6	24.04	-	5.1	26.20	-
7	12.5	0.12	-	12.6	0	9.6	-	-	-	6.2	22.36	-	4.8	27.64	-	4.8	26.92	-
8	12.5	0.12	10.1	12.6	0.20	-	-	-	-	6.1	22.56	-	4.4	27.92	-	4.5	27.60	-
9	-	-	-	12.5	0.20	-	-	-	-	6.0	22.56	8.2	4.2	28.40	-	3.7	30.52	9.8
10	-	-	-	12.6	0.20	-	-	-	-	-	-	4.0	29.16	9.6	-	-	-	-
11	-	-	-	12.6	0.20	-	-	-	-	-	-	3.8	29.84	-	-	-	-	-
12	-	-	-	12.6	0.24	-	-	-	-	-	-	3.8	29.80	-	-	-	-	-
13	-	-	-	12.6	0.20	-	-	-	-	-	-	3.9	30.28	-	-	-	-	-
14	-	-	-	12.7	0.20	9.6	-	-	-	-	-	3.9	30.20	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	3.8	30.12	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	3.8	30.12	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	3.8	30.28	9.6	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Time:	1030	0913	1210	1143	1010	1010	1143	1210	1030	0905	1010	1010	1143	1210	1030	0913	1210	1030

20, 21 May 1965

13



15 June 1965 F
 16 June 1965 C, D, + E
 Date: 17 June 1975 A + B

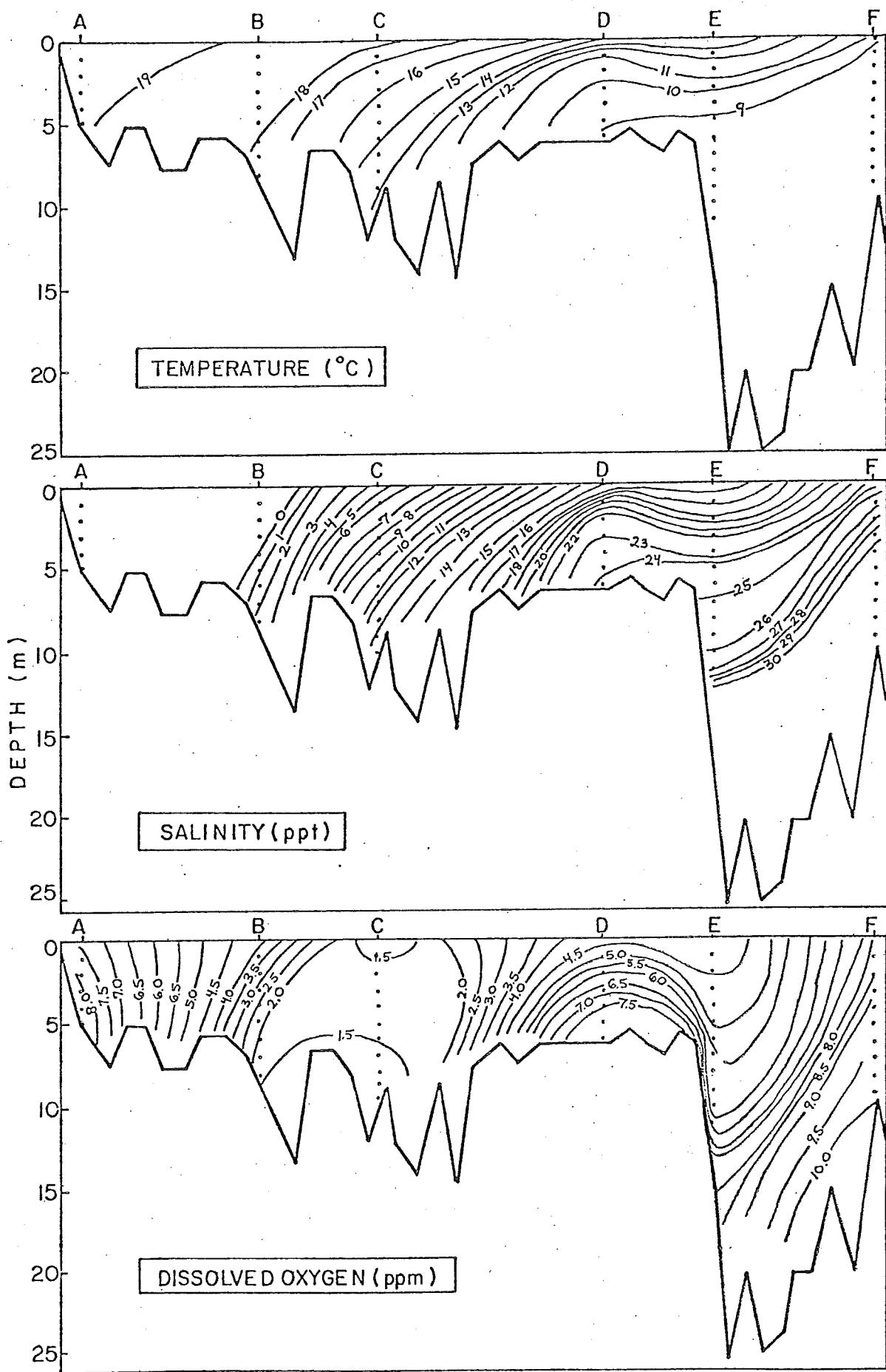
Station-	A			B			C			D			E			F		
	Depth (m)	Temp. °C	Sal. ppt	DO ppm	Temp. °C	Sal. ppt												
0	19.7	0.04	7.8	18.7	0	4.3	19.0	4.40	1.2	15.4	16.44	4.4	14.0	16.20	4.1	10.3	24.80	8.0
1	19.2	0.04	-	18.2	0	-	17.4	6.68	-	11.7	19.88	-	12.6	17.36	-	9.2	25.56	-
2	19.2	0.04	-	18.2	0	-	16.9	6.96	-	10.6	22.12	-	11.8	18.60	-	8.4	26.48	-
3	19.2	0.08	-	18.1	0	-	16.8	7.40	-	10.0	22.80	-	11.0	21.24	-	6.8	28.80	-
4	19.0	0.08	-	18.1	0	-	16.2	8.60	-	9.8	23.48	-	9.8	22.80	-	6.2	29.76	-
5	19.0	0.08	8.1	18.1	0.24	2.4	15.7	10.12	-	9.5	23.64	7.6	9.2	24.52	-	5.7	30.48	-
6				18.1	0.68	-	15.4	10.40	-	9.4	24.16	-	8.8	24.76	-	5.5	30.68	-
7				17.9	1.40	-	15.0	11.24	-	9.3	24.28	-	8.7	25.00	-	5.4	30.92	-
8				17.6	2.48	-	14.6	12.52	1.5	9.0	24.44	-	8.7	25.00	-	5.4	30.96	-
9				17.6	2.88	1.5	14.4	13.00	-	9.0	24.60	7.5	8.7	25.16	-	5.4	30.96	-
10							14.2	13.16	-				8.6	25.36	6.0	5.4	30.84	-
11							14.2	13.16	-				6.9	26.80	-	5.4	30.88	-
12							14.0	13.32	-				6.2	29.84	-	5.4	30.92	10.0
13							14.1	13.32	-				6.6	30.24	-			
14							14.0	13.76	-				6.0	30.20	-			
15							13.9	13.76	-				6.0	30.08	-			
16							13.9	13.88	1.4				-	-	-			
20													6.0	30.08	8.7			

Time: 0842 1155 1020 0842

Time: 1005 1110 1110

15, 16, 17 June 1965

20

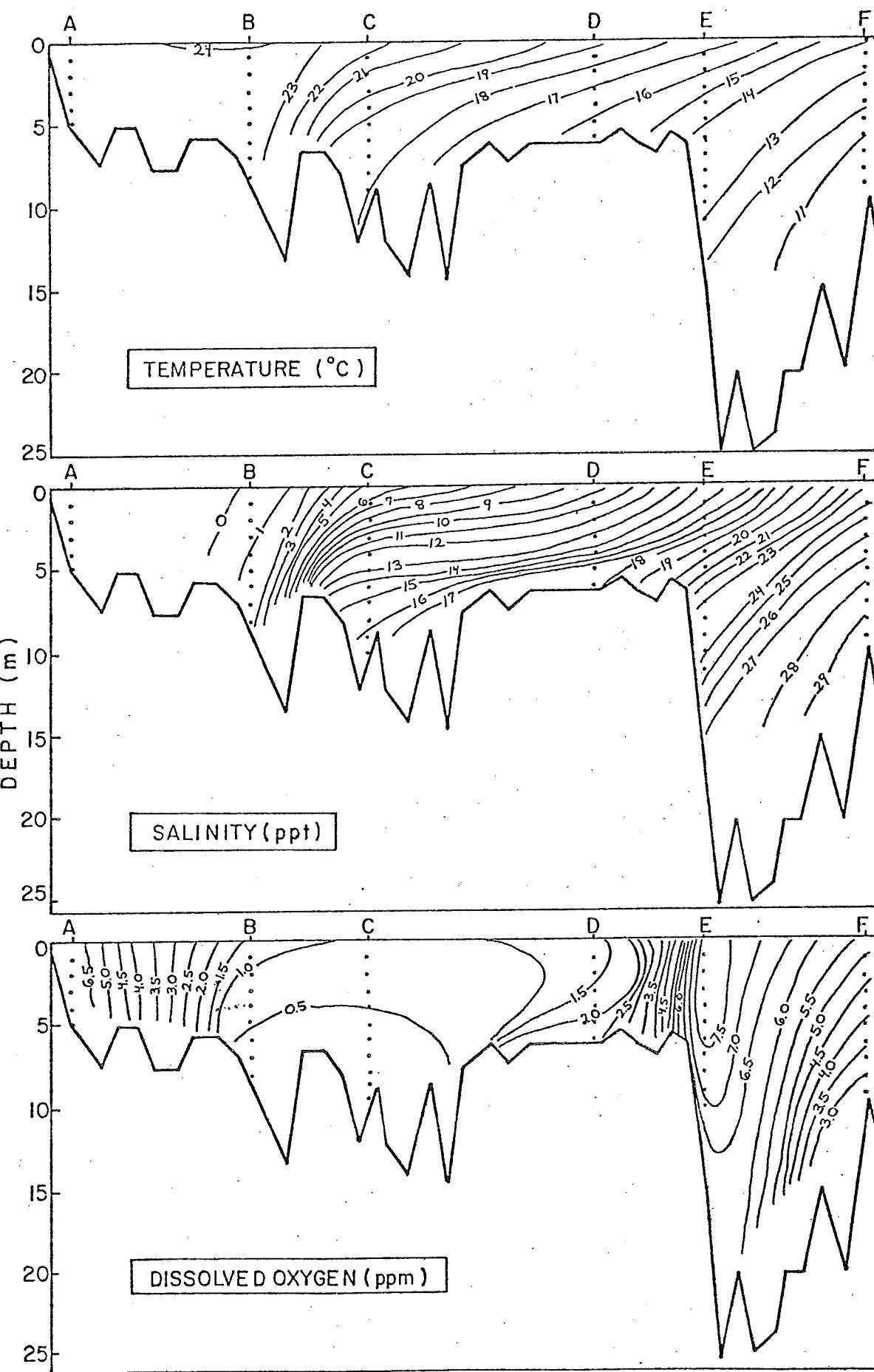


3 August 1966 A, B, + C
Date: 4 August 1966 D, E, + F

Station- Depth (m)	A			B			C			D			E			F		
	Temp. °C	Sal. ppt	DO ppm															
0	23.6	0.16	5.6	24.0	0.56	1.2	22.6	5.16	1.0	19.2	9.52	1.2	17.8	14.72	7.9	14.7	23.12	5.5
1	23.5	0.16	-	23.7	0.68	-	-	-	-	18.4	11.56	-	-	-	-	-	-	-
2	23.5	0.16	-	23.7	0.72	-	20.9	0.72	-	17.9	12.36	-	16.1	16.80	-	13.1	24.92	-
3	23.6	0	-	23.6	0.88	-	-	-	-	17.3	13.84	-	-	-	-	-	-	-
4	23.6	0	-	23.3	1.00	-	19.4	12.66	-	16.8	15.28	-	14.8	19.68	-	12.4	26.80	-
5	23.6	0	5.8	22.9	1.56	-	-	-	-	16.0	17.28	-	-	-	-	-	-	-
6	23.6	0	-	22.9	1.80	-	18.8	15.00	-	15.9	17.48	2.4	13.6	22.64	-	11.1	28.16	-
7				22.7	1.84	-	-	-	-	15.9	17.56	-	-	-	-	-	-	-
8				22.7	1.96	-	18.6	15.30	-				13.4	23.24	-	10.5	29.40	-
9				22.6	2.28	-	-	-	-				-	-	-	-	-	-
10				22.6	2.20	0.1	-	18.4	16.56	-			13.3	23.40	-	10.2	29.44	-
11							-	-	-				-	-	-	-	-	-
12							18.2	16.92	-				-	-	-	10.2	29.44	2.2
13							-	-	-				-	-	-	-	-	-
14							18.2	17.22	0.4				-	-	-	-	-	-
15							17.9	17.46	"				11.3	27.28	6.4			
20													11.2	27.80	-			
25													11.2	28.08	-			
27													-	-	6.7			
	Time:	0930	1030		1155		0830			0930			1025					

3,4 August 1966

22



1968 Only Stations B, C, and D were sampled over several days;
not included here

1967 Nothing complete

Date:

Station-	A	B	C	D	E							
Depth (m)	Temp. °C	Sal. ppt	DO ppm									

8 July 1969 A + B
 9 July 1969 C
 Date: 10 July 1969 D + E

Station-	A			B			C			D			E		
	Depth (m)	Temp. °C	Sal. ppt	DO ppm	Temp. °C	Sal. ppt									
0	21.52	0.12	6.6	21.6	0.16	6.4	20.9	1.56	5.4	18.6	8.36	5.5	16.1	12.84	6.2
1	21.48	0.28	-	21.5	0.52	-	22.9	2.00	-	17.4	10.64	-	15.4	16.48	-
2	21.28	0.12	-	21.3	0.48	-	20.3	2.68	-	16.6	10.96	-	15.0	12.64	-
3	21.36	0.28	6.8	21.4	0.48	-	20.1	2.96	-	16.0	13.96	-	14.9	12.88	-
4	21.20	0.16	-	21.3	0.60	-	19.2	6.40	-	12.9	13.28	7.2	14.9	12.80	-
5	21.20	0.28	-	21.4	0.72	-	18.3	8.48	-	10.6	24.76	-	14.2	13.04	-
6	21.16	0.16	-	21.2	1.36	4.0	17.8	9.56	-	10.1	25.64	-	14.0	14.72	-
7	21.12	0.24	6.9	20.7	3.72	-	17.8	12.88	3.6	9.8	26.40	-	13.7	15.24	-
8				19.8	6.32	-	16.4	13.88	-	9.6	26.48	7.5	13.7	14.96	-
9				19.3	7.76	-	16.2	13.84	-				13.6	15.04	-
10				19.2	7.91	-	16.2	14.12	-				13.6	15.76	6.8
11				19.2	8.08	-	-	-	-				-	-	-
12				19.1	8.76	-	15.7	15.28	-				10.8	20.32	-
13				19.0	8.92	2.8	-	-	15.28	4.2			-	-	-
14													10.2	25.64	-
15													-	-	-
16													10.2	25.76	-
18													9.9	26.12	-
20													10.0	26.08	-
22													10.2	26.16	7.6

Time:

1016

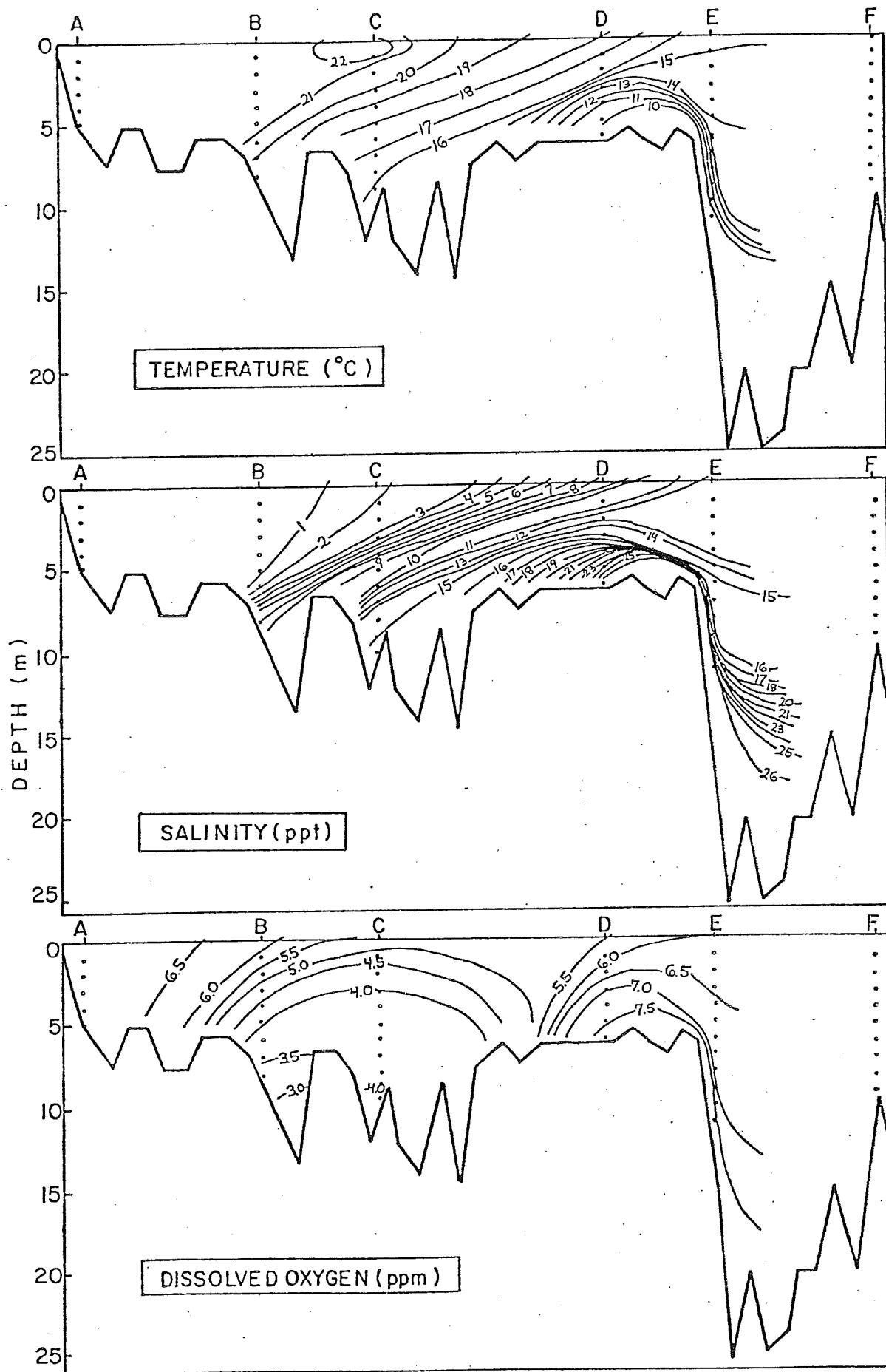
1030

1110

0916

8, 9, 10 July 1969

25

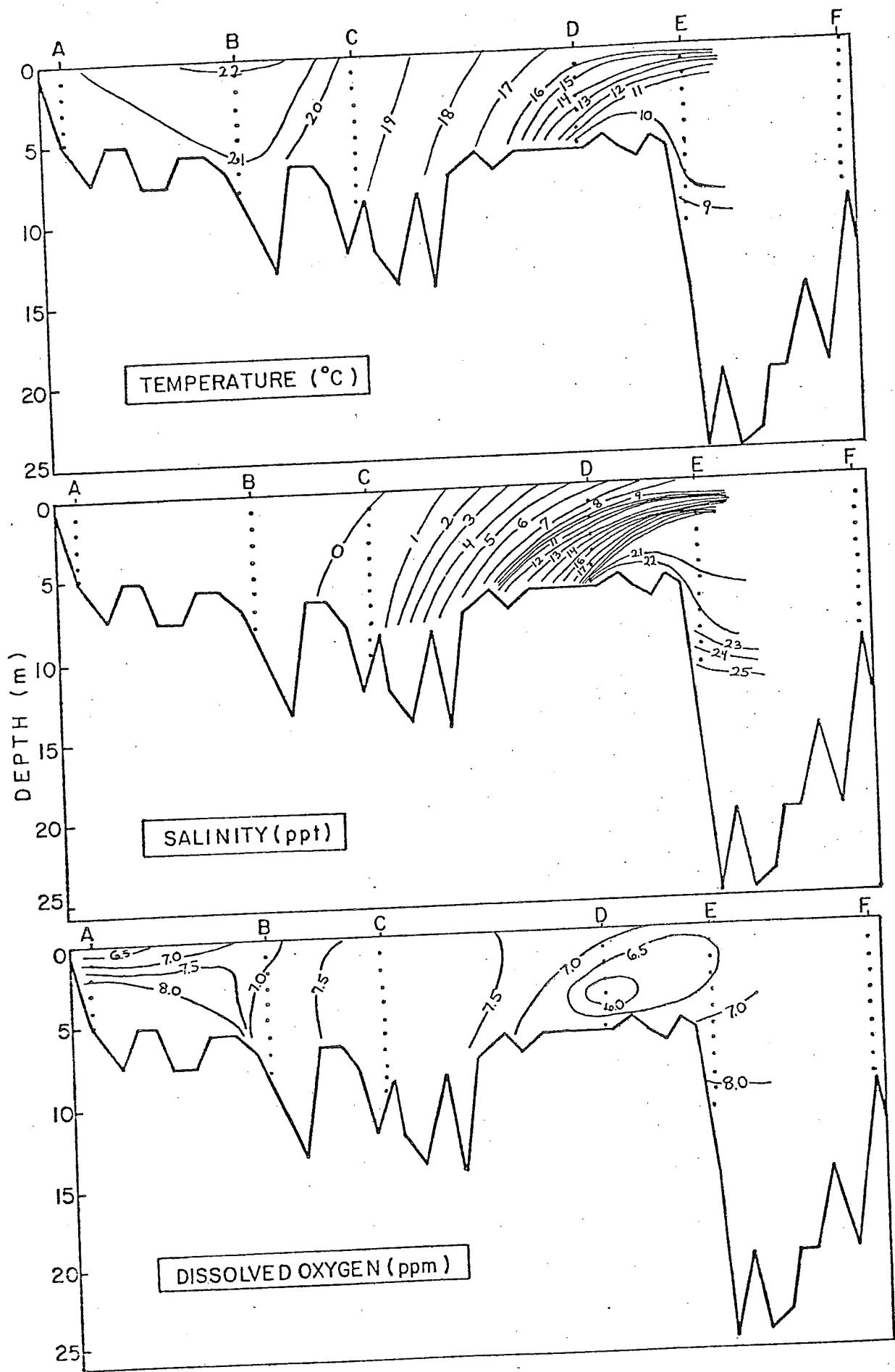


17 June 1969 A+B
 18 June 1969 C
 Date: 19 June 1969 D+E

Station	A			B			C			D			E			
	Depth (m)	Temp. °C	Sal. ppt	DO ppm												
0	20.2	0.12	6.5	22.8	0.20	7.0	19.6	0	7.8	17.4	5.84	7.3	16.4	8.24	6.6	
1	20.2	0.16	-	22.0	0.12	-	19.8	0.16	-	17.2	6.76	-	16.3	8.52	-	
2	20.2	0.12	-	21.0	0.08	-	19.8	0	-	15.8	9.80	-	12.5	20.80	-	
3	-	-	8.2	-	-	-	19.6	0	-	14.6	12.16	-	10.4	20.84	-	
4	20.2	0.20	-	21.0	0.20	-	19.7	0	-	13.5	14.76	5.7	10.4	20.81	-	
5	-	-	-	-	-	-	-	-	-	12.6	16.88	-	-	-	-	
6	20.2	0.16	8.1	21.4	0.20	6.7	19.5	0.12	-	9.8	22.24	-	10.3	21.00	-	
7	-	-	-	-	-	-	-	7.8	9.8	22.24	-	-	-	-	-	
8	-	20.9	0.20	-	-	-	19.6	0	-	9.8	22.24	-	10.1	21.56	-	
9	-	-	-	-	-	-	-	-	-	9.7	22.24	6.7	-	-	-	
10	-	20.8	0.12	-	19.5	0	-	-	-	-	-	-	9.2	23.20	8.0	
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12	-	20.8	0.08	6.9	19.7	0	-	-	-	-	-	-	8.3	25.28	-	
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
14	-	-	-	19.7	0	7.9	-	-	-	-	-	-	8.2	25.28	-	
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
16	-	-	-	-	-	-	-	-	-	-	-	-	8.5	25.56	-	
18	-	-	-	-	-	-	-	-	-	-	-	-	8.2	25.66	-	
20	-	-	-	-	-	-	-	-	-	-	-	-	8.2	25.68	8.6	
Time	0845	0945	0915	1125	1115	1025										

17, 18, 19 July 1969

27

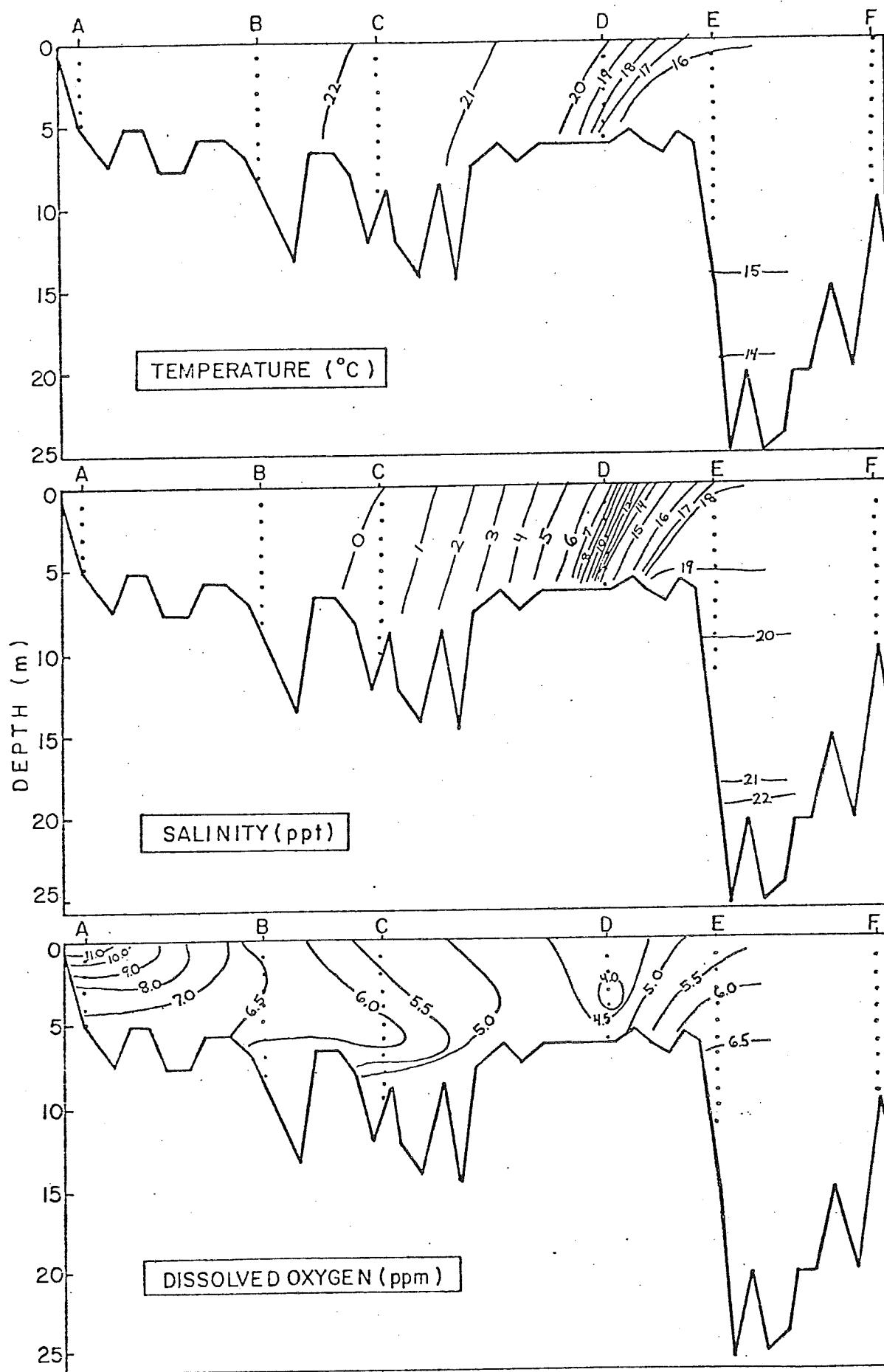


Date: 21 July 1970 A + B
22 July 1970 C
23 July 1970 D + E

Station- Depth (m)	A			B			C			D			E		
	Temp. °C	Sal. ppt	DO ppm												
0	22.3	0	11.1	22.3	0	6.2	21.5	0	5.2	20.5	6.08	4.2	16.3	17.80	5.1
1	22.3	0	-	22.3	0	-	22.2	0.04	-	20.2	6.96	-	16.1	18.36	-
2	22.3	0	-	22.5	0	-	22.2	0.04	-	19.6	8.64	-	15.8	18.36	-
3	22.3	0.12	6.8	22.3	0	-	22.3	0.04	-	19.6	9.48	-	15.8	18.52	-
4	22.3	0	-	22.3	0	-	22.3	0.04	-	19.1	9.64	4.0	15.6	18.52	-
5	22.3	0	7.1	22.3	0	-	22.4	0.08	-	18.6	11.08	-	15.6	18.92	-
6				22.4	0	-	22.3	0.08	6.0	17.1	14.08	-	15.6	19.08	-
7				22.3	0	5.8	22.4	0.08	-	18.2	14.64	4.6	15.5	19.12	-
8				22.3	0	-	22.1	0.08	-				15.4	19.68	6.8
9				22.6	0	-	22.3	0.12	-				15.3	19.52	-
10				22.3	0	-	21.8	0.12	-				15.1	20.56	-
11				22.3	0	-	21.8	0.12	-				-	-	-
12				22.3	0	6.0	21.8	0.12	4.6				15.1	20.04	-
13													-	-	-
14													15.1	20.04	-
15													-	-	-
16													14.8	20.36	-
18													13.9	20.16	-
20													14.5	22.72	-
22													13.2	23.60	6.9

21,22,23 July 1970

29



19 August 1970 A + B
 20 August 1970 C
 21 August 1970 D + E

Date: 21 August 1970 D + E

Station-	A			B			C			D			E		
	Depth (m)	Temp. °C	Sal. ppt	DO ppm	Temp. °C	Sal. ppt									
0	25.1	0.12	6.6	24.5	1.12	2.0	21.9	6.60	2.2	17.0	20.80	4.2	17.1	20.56	4.4
1	25.4	0.12	-	24.9	1.20	-	22.2	6.92	-	16.7	21.40	-	16.5	21.36	-
2	25.4	0.08	-	24.9	1.16	-	21.9	7.16	-	16.2	22.40	-	16.5	21.16	-
3	25.2	0.08	-	24.5	1.40	-	21.8	7.16	-	15.4	25.48	-	16.2	21.04	-
4	25.2	0.08	5.8	24.7	1.40	-	21.8	7.80	-	14.6	25.56	-	15.9	23.00	-
5	25.2	0.08	-	24.5	1.80	-	21.7	8.60	-	14.5	25.44	5.2	15.8	23.16	-
6	25.2	0.08	5.5	24.5	1.64	-	21.7	7.60	-	14.5	25.36	-	15.8	23.40	-
7	24.3	1.84	-	21.4	8.40	-	14.5	25.36	-	15.6	23.12	-			
8	24.3	1.76	1.4	20.8	9.84	1.8	14.4	26.12	-	15.8	22.64	-			
9	24.2	1.76	-	21.3	10.12	-	14.3	26.12	-	15.5	22.64	-			
10	24.2	2.08	-	21.6	10.48	-	14.3	26.12	4.8	15.8	23.08	-			
11	24.2	2.24	-	20.7	10.76	-	14.1	26.12	-	-	-	-			
12	24.2	2.20	-	20.7	10.80	-	14.3	26.24	-	16.0	23.08	5.1			
13	24.2	2.20	-	20.7	11.04	-	-	-	-						
14	24.2	2.40	-	20.7	10.88	-				15.4	24.00	-			
15	23.9	2.40	1.20	20.7	10.88	-				-	-	-			
16				20.5	10.96	1.6				15.0	24.00	-			
18										15.0	24.60	-			
20										14.9	25.12	-			
22										14.9	24.76	-			
24										14.9	24.76	5.7			

Time: 1000

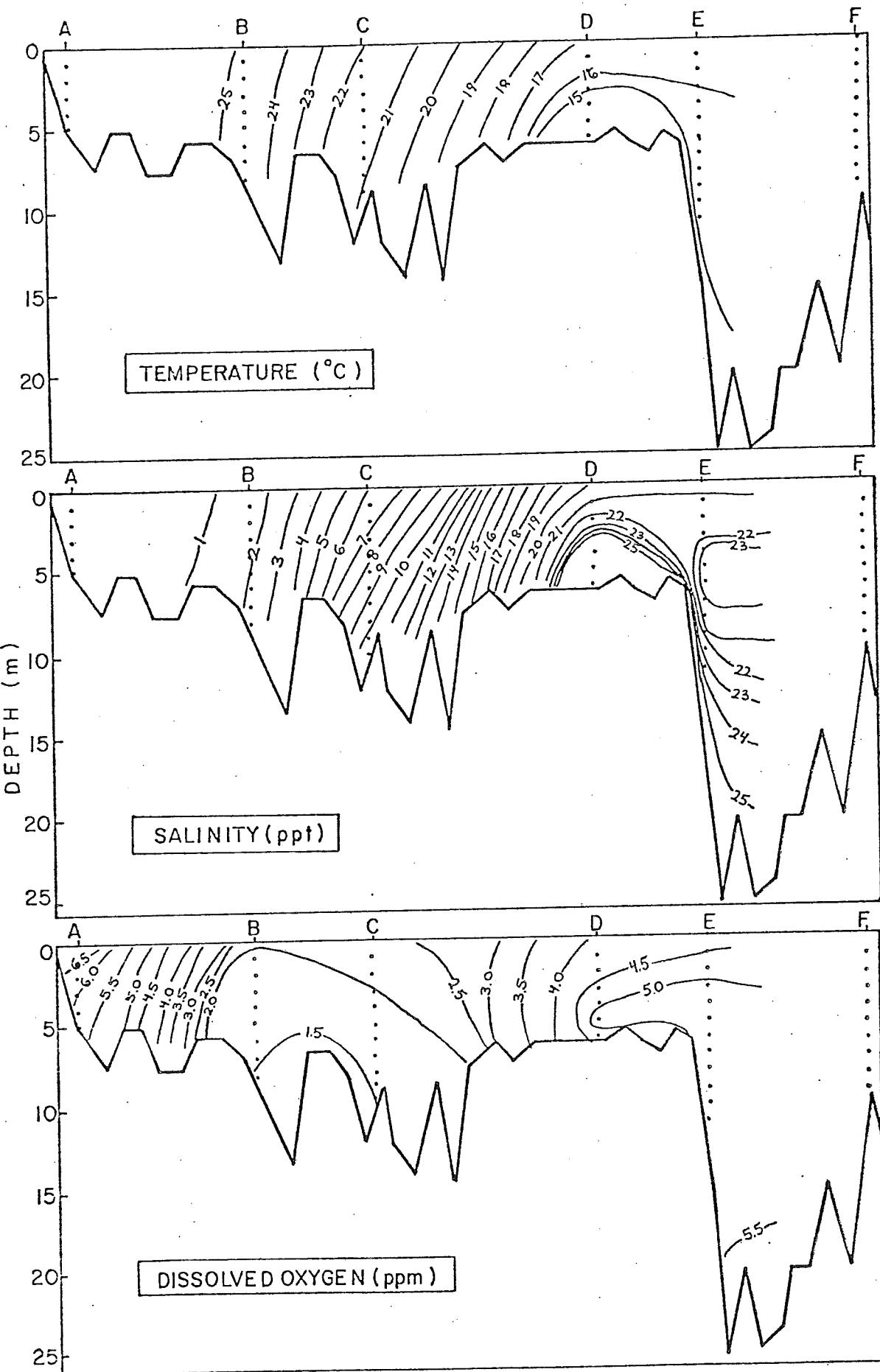
1210

1300

1200

19, 20, 21 August 1970

31

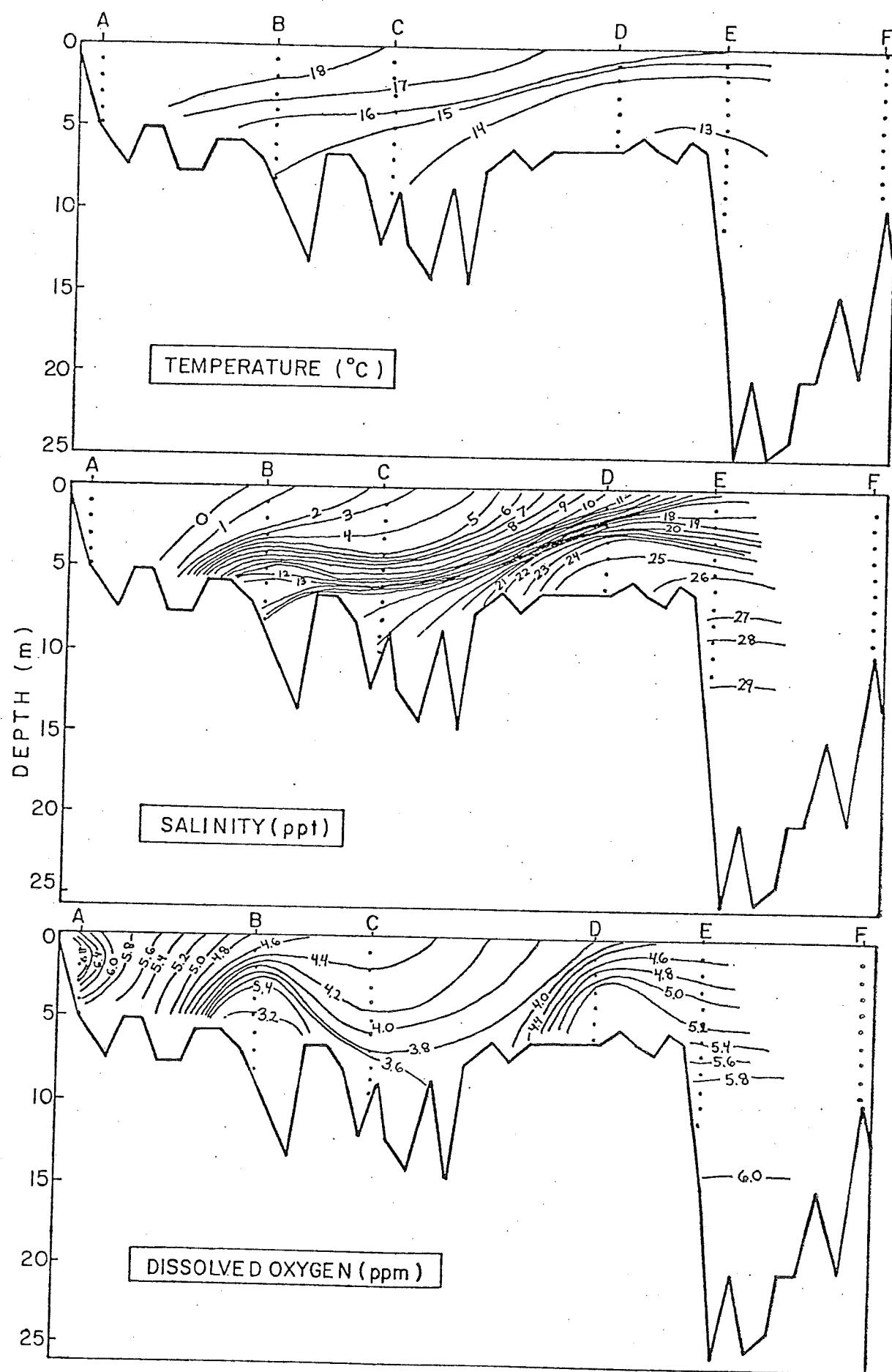


Date: 24 September 1970

Station- Depth (m)	A			B			C			D			E		
	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm
0	18.9	0	6.0	18.2	0.96	4.8	17.9	2.24	4.6	16.1	10.04	3.8	16.4	16.04	4.4
1	18.6	0	-	18.2	1.28	-	17.6	3.24	-	16.4	10.96	-	15.2	17.72	-
2	18.6	0	-	18.2	1.68	-	17.2	3.84	-	14.5	20.00	-	14.7	18.52	-
3	18.5	0	6.9	17.2	4.16	-	16.9	4.52	-	13.5	24.16	5.2	13.9	21.80	-
4	18.5	0	-	16.7	7.08	3.3	16.8	4.40	-	13.4	25.00	-	13.4	25.56	-
5	18.5	0	-	15.8	11.28	-	15.8	9.80	4.2	13.2	25.16	-	13.2	25.84	-
6	18.4	0	5.8	15.6	13.08	-	15.0	12.44	-	13.2	25.16	5.2	13.0	26.80	-
7				15.2	13.92	-	14.4	16.72	-				12.8	26.80	-
8				15.0	16.04	3.1	14.4	17.92	-				12.8	27.60	-
9				14.7	16.36	-	14.3	18.08	-				12.1	28.16	-
10							14.3	18.56	-				12.1	28.44	5.9
11							14.2	18.84	3.6				12.5	28.44	-
12													12.4	29.20	-
13													12.3	29.16	-
14													12.3	28.96	-
15													12.3	29.20	-
16													12.2	29.08	-
18													12.4	29.48	-
20													12.2	29.60	6.1
Time:	1100			1140			1235			1315			1415		

24 September 1970

33



Date: 14 June 1971 A + B
15 June 1971 D + E
16 June 1971 C

Station-	A	B	C	D	E								
Depth (m)	Temp. °C	Sal. ppt	DO ppm										
0	20.5	0.16	7.7	20.1	0	7.2	20.3	0.84	5.6	16.8	9.76	5.7	
1	20.4	0.12	-	20.0	0.08	-	19.7	1.20	-	16.0	10.56	-	
2	20.4	0.08	-	20.0	0.04	-	19.6	1.12	-	16.2	11.00	-	
3	20.8	0.08	7.1	20.0	0.12	7.2	19.8	1.28	-	14.1	13.84	-	
4	20.0	0.08	-	19.7	0.08	-	19.7	1.36	-	13.0	16.20	6.1	
5	20.2	0.08	-	20.0	0.12	-	19.5	1.72	5.5	12.2	18.16	-	
6	20.2	0.08	7.0	20.0	0.08	7.1	19.4	2.12	-	12.1	18.36	-	
7				19.2	3.08	-	12.0	18.36	6.2		9.6	23.28	7.9
8				19.1	2.96	-				10.0	23.68	-	
9				18.0	5.88	-				9.5	23.68	-	
10				17.7	6.40	4.5				9.2	24.00	-	

Time: 1100

1230

130

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1990

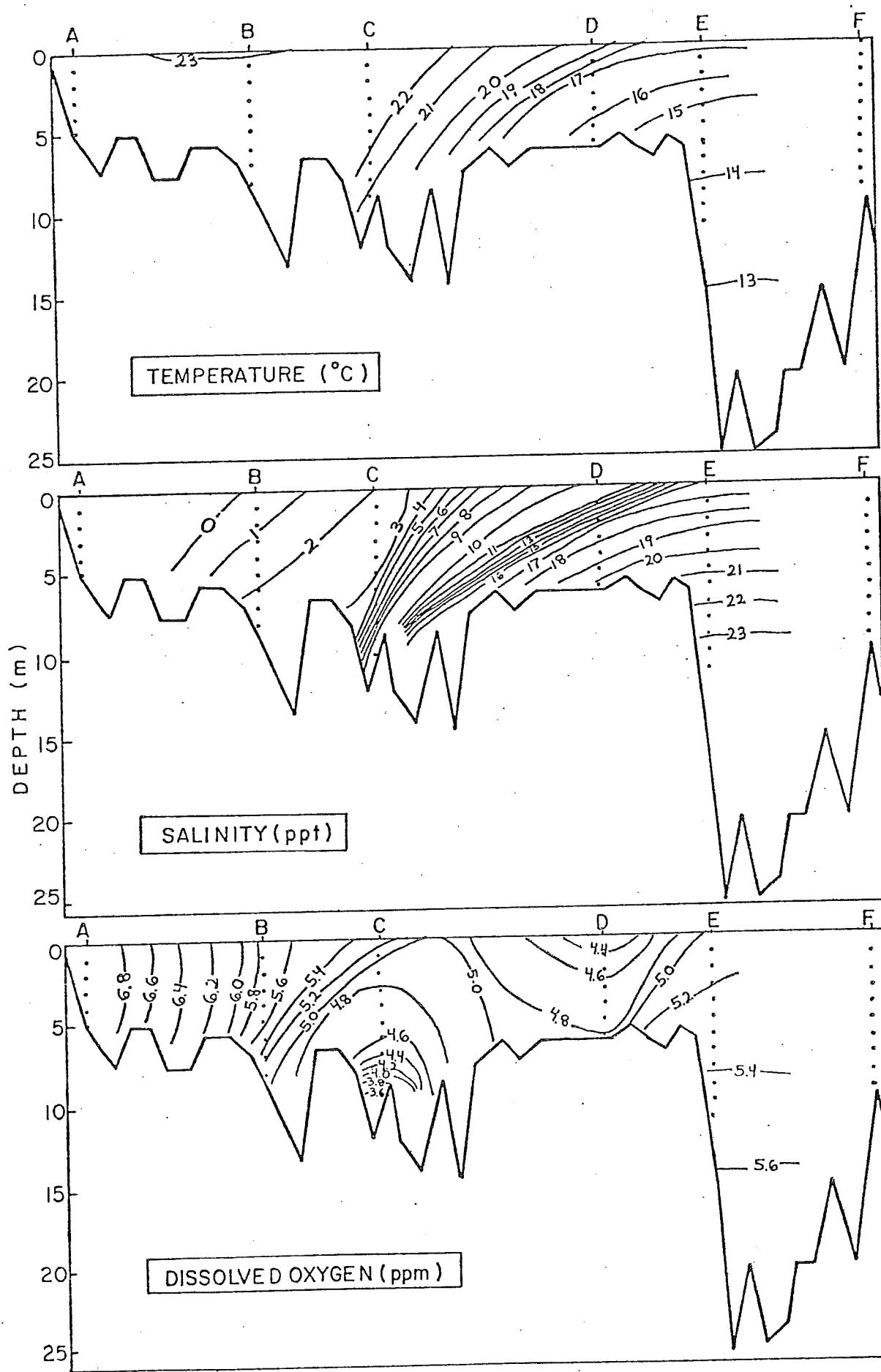
13 July 1971 D + E
 14 July 1971 C
 Date: 15 July 1971 A + B

Station-	Depth (m)	A			B			C			D			E		
		Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm
	0	22.5	0	6.9	23.1	0.12	5.7	22.7	2.00	5.3	20.0	10.80	4.3	17.8	16.60	5.1
1	22.5	0	-	22.8	0.40	-	22.8	2.12	-	19.6	10.84	-	17.7	16.72	-	-
2	22.5	0	-	22.7	0.48	-	22.7	2.20	-	17.6	15.80	-	16.5	18.08	-	-
3	22.4	0	6.9	22.5	1.08	-	22.7	2.36	-	16.5	17.60	4.7	16.0	19.28	-	-
4	22.3	0	-	22.5	1.28	-	22.4	2.76	-	16.3	18.60	-	15.8	19.48	-	-
5	22.2	0	-	22.3	1.72	5.7	22.5	2.96	-	16.1	19.04	-	14.8	20.76	-	-
6	22.2	0	6.9	22.3	2.00	-	22.2	3.60	-	15.2	20.12	4.8	14.6	21.72	-	-
7				22.3	2.52	-	22.1	4.00	4.6				14.4	21.72	5.3	
8				22.2	2.60	-	21.7	5.08	-				14.2	22.40	-	
9				22.0	2.84	-	21.6	5.92	-				14.0	22.48	-	
10				-	-	4.7	21.3	6.76	-				13.8	23.32	-	
11							21.0	7.64	-				13.3	23.76	-	
12							20.3	9.28	3.5				13.2	24.16	-	
13													13.1	24.16	-	
14													13.1	24.64	5.6	
15													13.2	24.76	-	
16													12.8	24.76	-	
17													12.8	24.88	-	

Time: 1225 1315 1020 0930 1025

13,14,15 July 1971

37



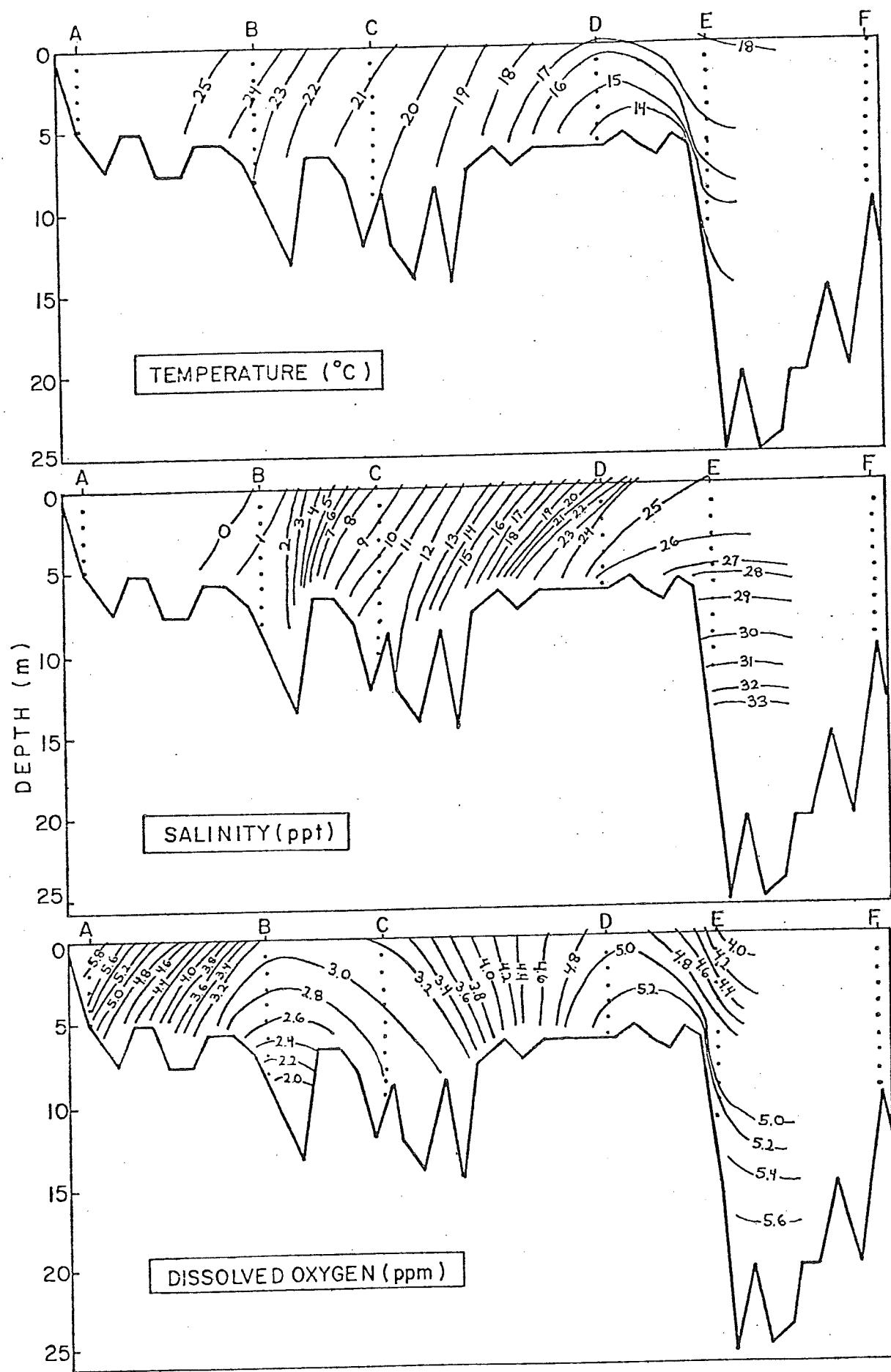
11 August 1971 A + B
 12 August 1971 D + E
 Date: 13 August 1971 C

Station-	Depth	A			B			C			D			E		
		Temp. °C	Sal.	DO ppm												
0	25.16	0	5.9	24.8	0.52	3.2	21.2	8.04	3.3	17.5	20.92	4.9	18.0	25.20	4.0	
1	25.12	0	-	24.7	0.60	-	21.8	8.80	-	16.5	21.72	-	17.7	25.44	-	
2	25.12	0	-	24.7	0.68	-	21.6	8.88	-	15.2	24.20	-	17.7	25.56	-	
3	24.92	0	5.7	24.2	0.68	-	21.0	9.88	-	15.3	24.20	-	17.6	25.80	-	
4	25.0	0	-	23.9	1.12	-	20.9	9.80	-	14.9	24.72	-	17.6	26.04	-	
5	25.0	0	-	23.7	1.28	-	20.8	10.00	-	14.7	25.28	5.2	17.1	26.58	-	
6	25.0	0	4.8	23.7	1.28	2.5	20.7	10.60	-	14.7	25.64	-	16.4	28.26	-	
7				23.6	1.40	-	20.4	11.16	-	14.2	26.48	-	16.5	28.80	-	
8				23.6	1.52	-	20.1	11.44	2.9	13.9	26.48	-	16.0	29.52	-	
9				23.6	1.64	-	20.1	11.64	-	13.9	26.56	5.2	15.6	29.76	-	
10				23.6	1.64	-	20.0	11.68	-				15.7	30.00	4.9	
11				23.5	1.72	-	20.0	11.84	-				14.2	30.72	-	
12				23.5	1.88	1.9	20.0	12.16	-				15.2	31.20	-	
13							20.0	12.56	-				14.5	31.50	-	
14							19.7	12.72	-				13.9	33.30	-	
15							19.6	12.72	-				13.9	33.30	-	
18							19.7	12.76	2.9				13.6	33.48	-	
21													13.7	33.60	5.7	

Time: 1100 1200 1500 1440 1400 1200

11,12,13 August 1971

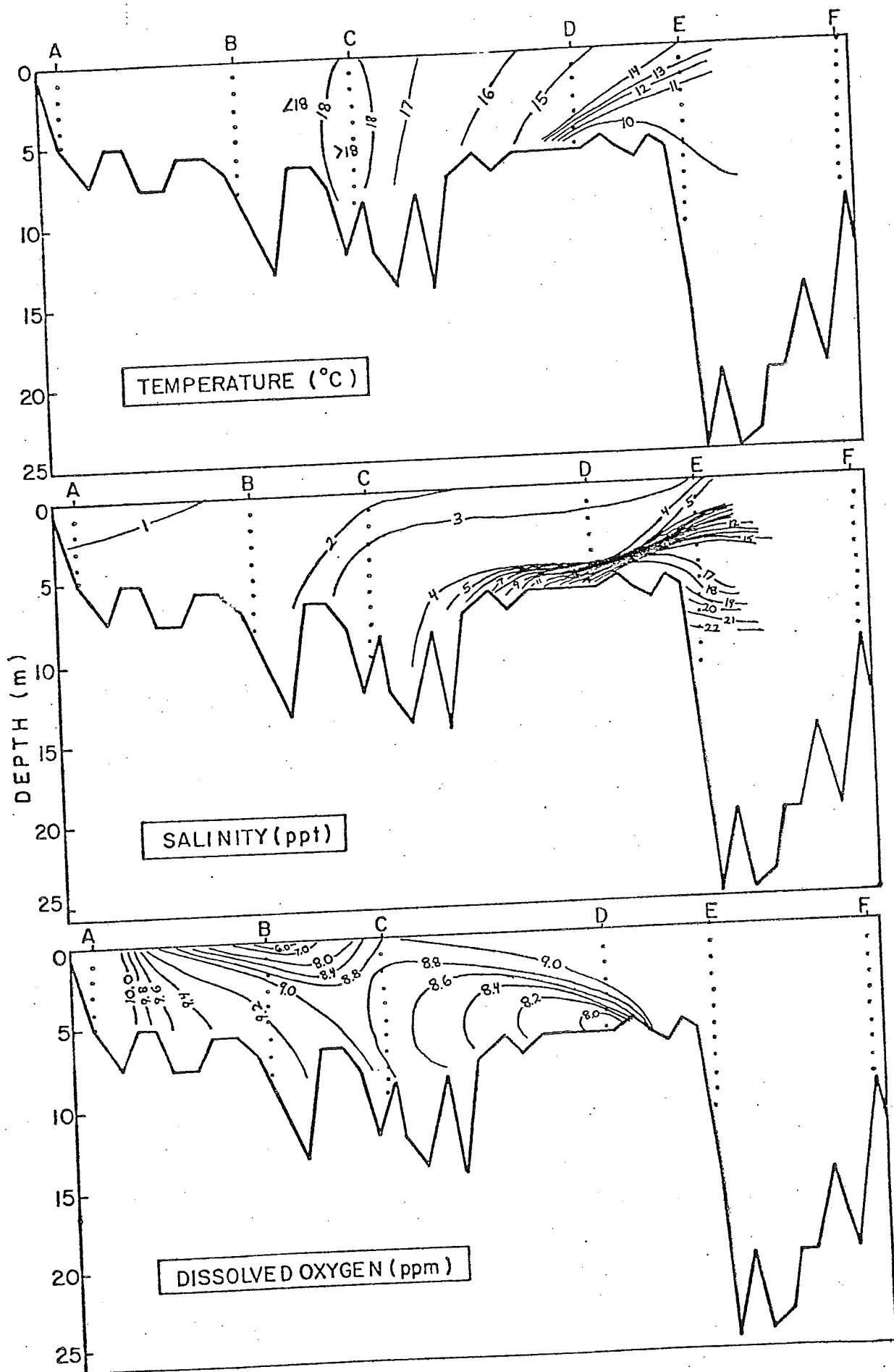
59



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Date: 14 June 1972 D + E
15 June 1972 A + B
16 June 1972 C

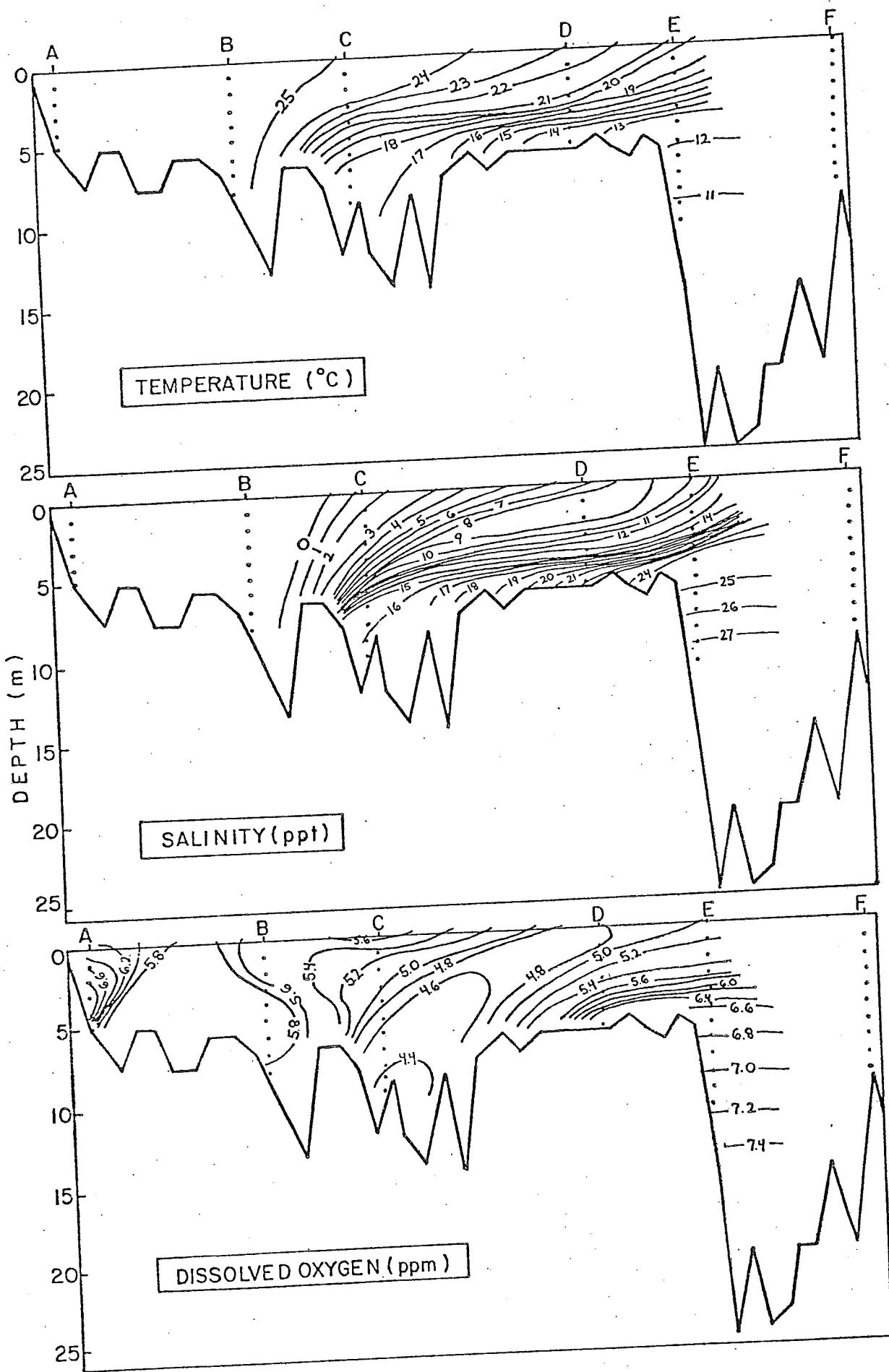
14, 15, 16 June 1972



17 July 1972 A + B
 18 July 1972 D + E
 Date: 19 July 1972 C

Station- Depth (m)	A			B			C			D			E		
	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm
0	25.7	0	6.2	25.4	0	5.6	24.6	1.80	5.8	23.2	7.20	4.8	21.6	10.44	5.0
1	25.0	0	-	25.3	0	-	24.6	2.00	-	22.1	8.32	-	19.8	12.56	-
2	25.0	0	-	25.4	0	-	24.6	2.12	-	21.8	8.80	-	19.3	12.84	-
3	25.0	0	6.8	25.4	0	-	24.2	2.84	-	21.5	10.48	-	17.3	15.68	-
4	25.0	0	-	25.4	0	-	22.7	5.72	-	19.7	12.32	5.4	15.1	23.08	-
5	25.0	0	-	25.3	0	5.9	21.4	8.60	-	16.0	18.08	-	12.5	24.12	-
6	25.0	0	5.7	25.3	0	-	18.8	13.68	-	13.9	22.00	-	12.4	24.88	-
7				25.3	0	-	17.9	15.20	-	13.1	23.28	6.5	11.8	25.40	-
8				25.3	0	-	17.3	15.84	4.5				11.8	26.00	-
9				25.3	0	5.7	17.3	16.28	-				11.1	26.48	-
10							17.1	16.60	-				11.0	27.08	-
11															
12															
13															
14															
15															
20															
25															
30															
Time:	1140			1040			1530			1345			1240		

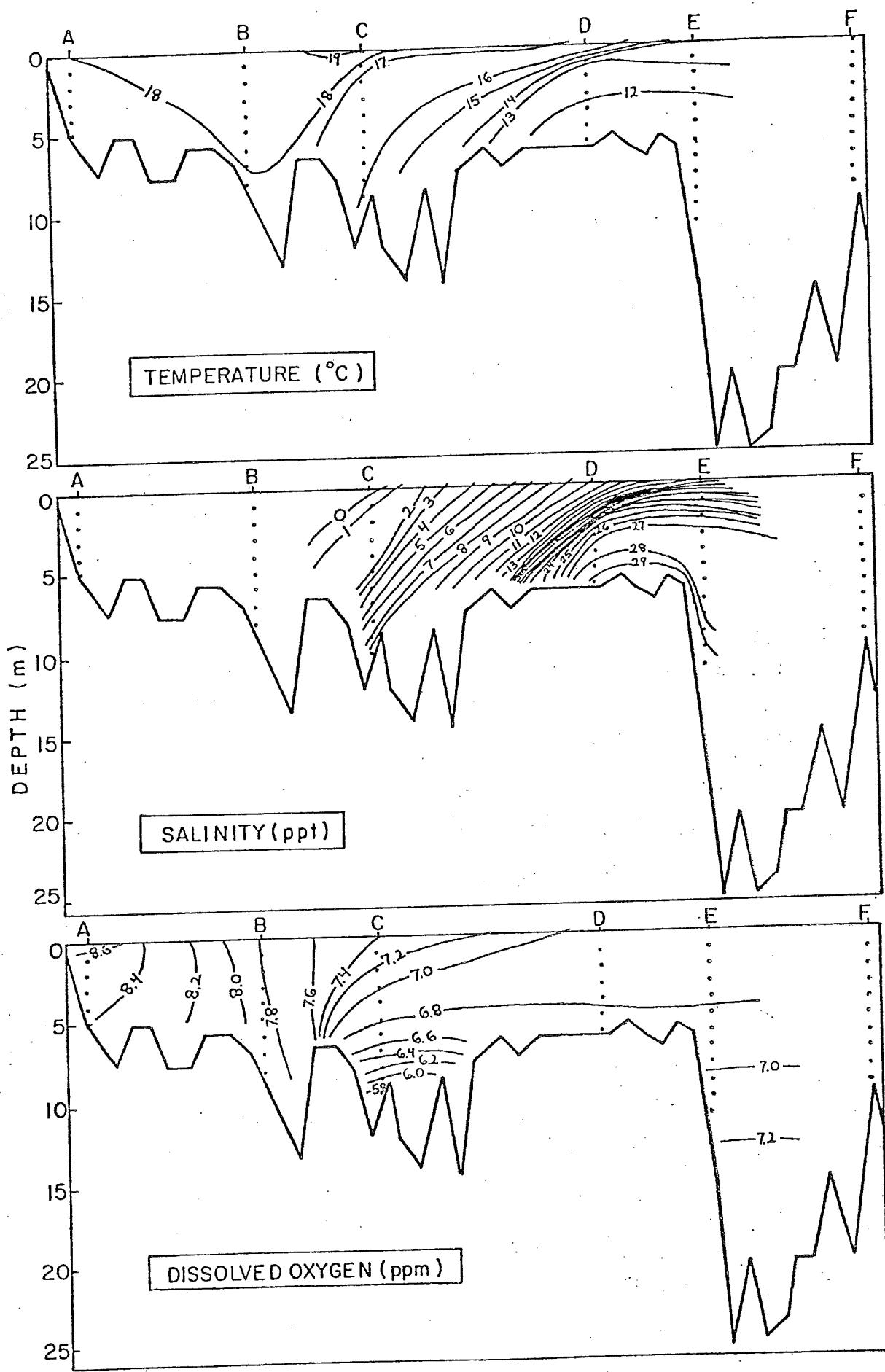
17, 18, 19 July 1972



Date: 13 September 1972

Station- Depth (m)	A			B			C			D			E		
	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm
0	18.0	0	8.6	18.4	0	7.8	19.0	0	7.4	17.3	10.08	6.9	15.2	15.40	6.9
1	17.7	0	-	18.2	0	-	18.0	0.60	-	16.0	13.28	-	13.9	20.48	-
2	17.7	0	-	18.0	0	-	17.4	1.36	-	12.8	24.52	-	13.0	24.00	-
3	17.8	0	8.5	18.0	0	-	17.4	1.76	-	12.1	26.32	-	12.4	27.24	-
4	17.8	0	-	18.0	0	-	17.4	1.76	-	12.0	27.72	-	12.0	26.68	-
5	17.8	0	-	18.0	0	-	17.5	1.68	-	11.8	28.00	6.8	12.0	27.12	-
6	17.8	0	8.4	18.0	0	7.8	17.0	3.08	-	11.8	28.28	-	12.0	27.36	-
7				18.0	0	-	16.8	4.20	6.6	11.4	29.36	-	12.0	27.40	-
8				18.0	0	-	16.3	6.76	-	11.4	29.88	-	12.0	27.40	-
9				17.9	0	-	16.5	6.96	-	11.4	29.88	-	11.8	28.00	7.0
10				17.9	0	-	16.2	7.12	-	-	-	6.8	11.8	29.00	-
11				17.9	0	7.8									
12															
13															
14															
15													11.5	29.00	-
18													11.4	29.00	7.2
Time:	1030			1130			1220			1345			1410		

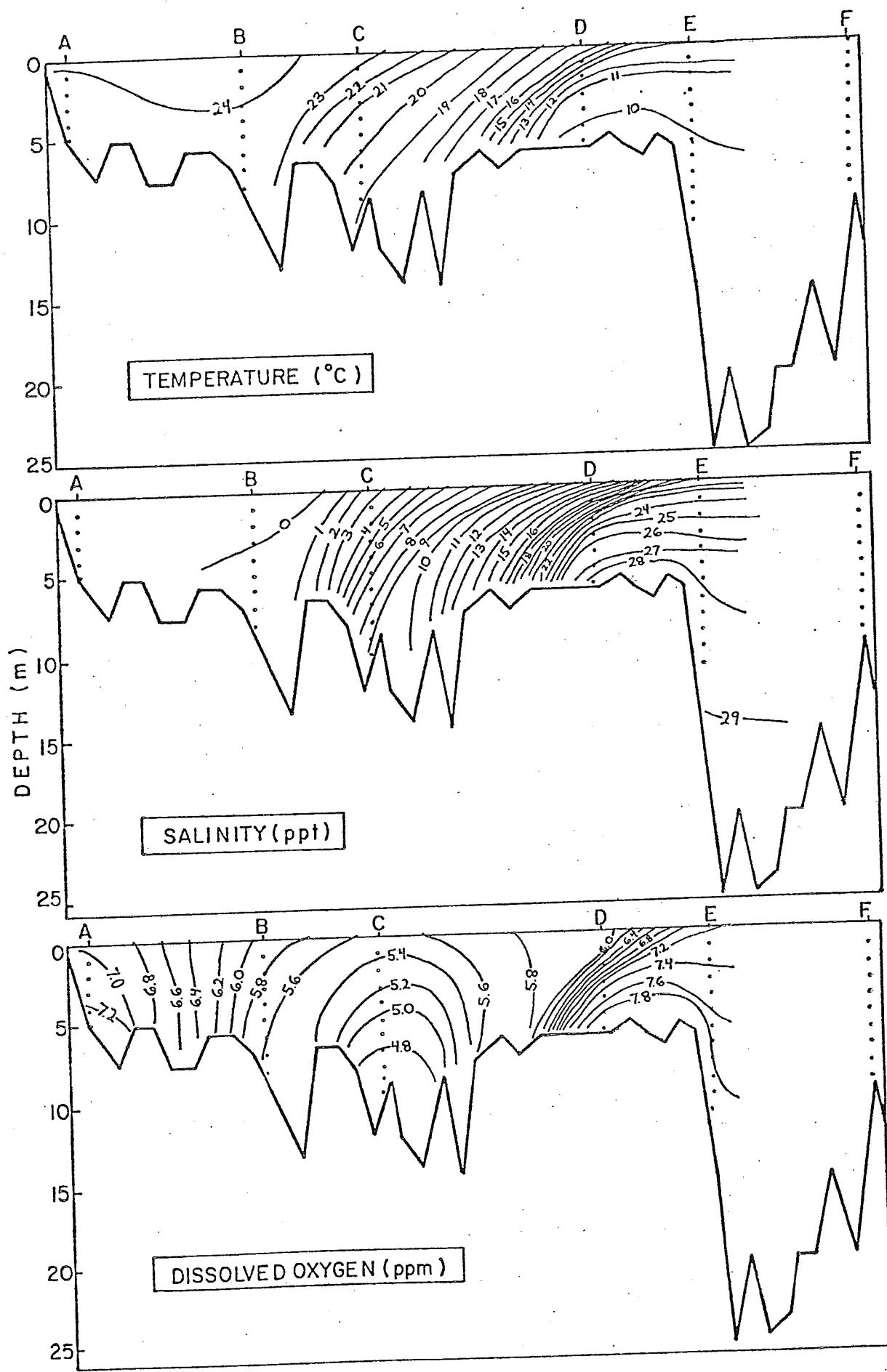
13 September 1972



18 July 1973 D + E
 Date: 19 July 1973 A, B, + C

Station-	A			B			C			D			E		
	Temp. °C	Sal. ppt	DO ppm												
Depth (m)															
0	24.7	0	7.0	24.5	0	5.9	23.4	2.28	5.6	17.7	13.16	6.0	13.7	21.40	7.2
1	24.0	0	-	24.3	0	-	23.0	3.04	-	15.8	16.24	-	12.4	23.68	-
2	23.4	0	-	24.2	0	-	22.6	3.48	-	12.8	22.12	-	12.0	24.72	-
3	23.0	0	-	24.1	0	-	-	-	-	11.0	25.24	-	10.9	25.52	-
4	23.4	0	7.0	23.6	0.24	-	20.8	5.80	-	10.6	26.32	7.6	10.6	26.36	-
5	23.4	0	-	23.6	0.32	-	-	-	-	10.2	26.80	-	10.0	27.40	-
6	23.4	0	-	23.6	0.32	-	20.2	7.40	-	9.7	28.00	-	10.0	27.68	-
7	23.4	0	-	23.6	0.32	-	-	-	-	9.5	28.29	-	9.6	28.00	-
8	23.4	0	7.2	23.6	0.16	5.5	19.5	8.32	4.8	9.5	28.48	7.9	9.6	28.24	-
9				23.6	0.16	-	-	-	-	9.4	28.48	-	9.1	28.52	-
10				23.6	0.48	-	19.1	8.64	-				9.3	28.92	-
11				23.7	0.60	-	-	-	-				9.1	28.92	8.0
12				23.5	0.40	-	18.6	9.80	-						
13				23.6	0.52	-	-	-	-						
14				23.5	0.44	-	18.9	10.20	4.7						
15				23.5	0.52	5.5									
16															
22															
Time:	1300			1355			1420			1305			1347		

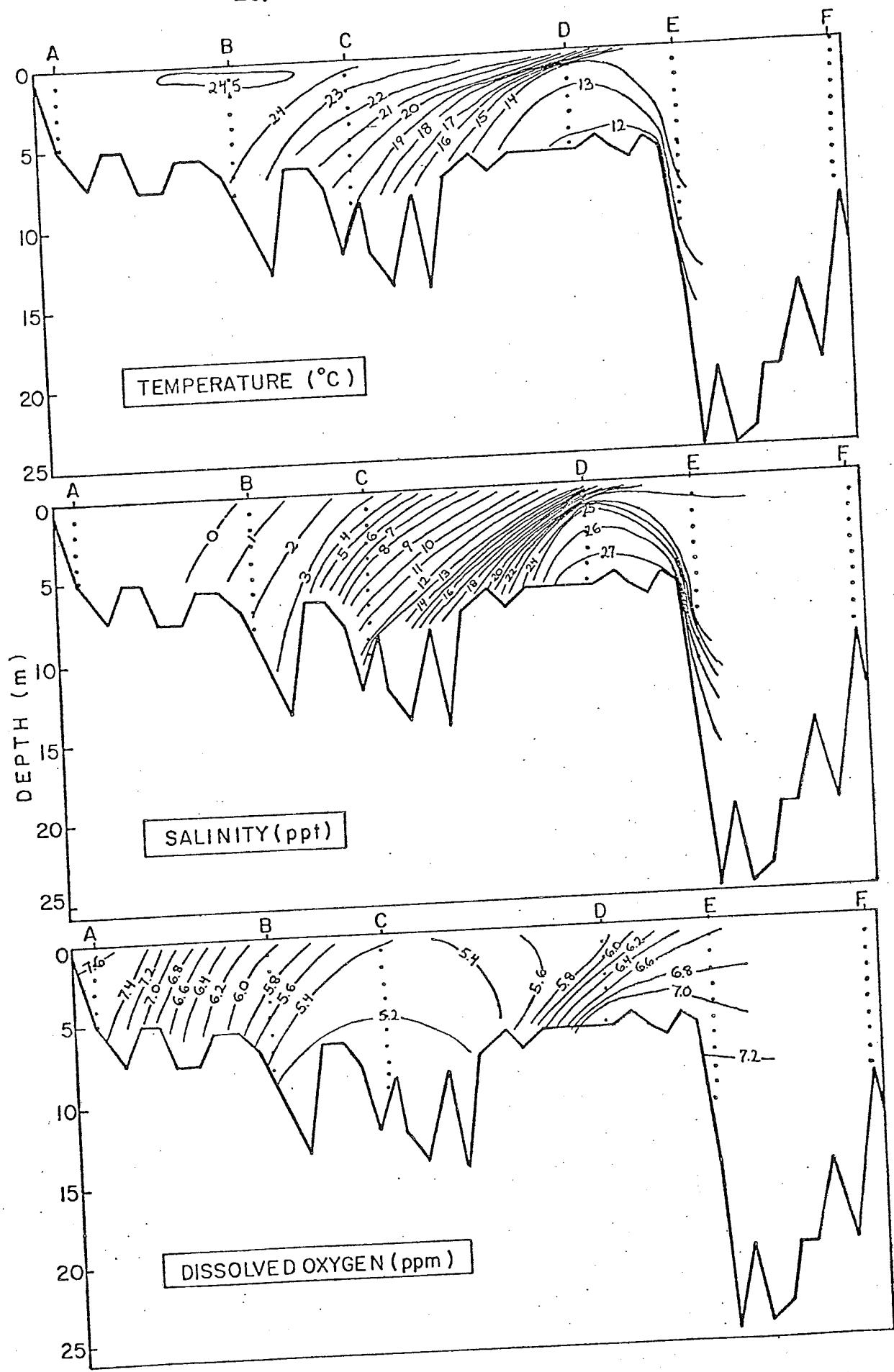
18,19 July 1973



20 August 1973 D + E
 Date: 21 August 1973 A, B, + C

Station-	A			B			C			D			E			
	Depth (m)	Temp. °C	Sal. ppt	DO ppm												
0	24.4	0	7.6	24.4	0.80	6.0	24.2	2.56	5.4	22.4	13.2	5.8	14.8	21.68	6.6	
1	24.3	0	-	24.5	0.88	-	23.6	3.76	-	13.5	24.68	-	14.7	22.00	-	
2	24.2	0	-	24.4	0.90	-	23.3	3.80	-	13.2	25.20	-	14.7	22.00	-	
3	24.2	0	-	-	-	-	-	-	-	12.7	26.08	-	-	-	-	
4	24.1	0	7.5	24.4	1.12	-	21.7	7.12	-	12.4	26.68	-	14.5	22.00	-	
5	24.1	0	-	-	-	-	-	-	-	12.2	27.16	6.9	-	-	-	
6	24.1	0	-	24.0	1.20	5.5	20.5	9.08	0	12.1	27.16	-	14.8	22.08	-	
7	24.1	0	-	-	-	-	-	-	-	11.7	28.12	-	-	-	-	
8	24.0	0	7.4	23.6	2.16	-	19.8	11.28	5.1	11.6	28.14	-	14.8	22.08	-	
9	-	-	-	-	-	-	-	-	-	11.4	28.44	7.0	-	-	-	
10	-	23.3	2.40	-	19.3	11.76	-	-	-	-	-	-	13.4	24.28	7.3	
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12	-	23.1	3.32	5.1	18.9	13.44	-	-	-	-	-	-	-	-	-	
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
14	-	-	-	-	18.6	13.40	-	-	-	-	-	-	-	-	-	
15	-	-	-	-	-	-	-	-	-	-	-	-	12.7	27.08	7.1	
16	-	-	-	-	18.5	13.64	5.1	-	-	-	-	-	-	-	-	
Time:	1350	1630	1650	1445	1445	1445	1445	1445	1445	1445	1445	1445	1445	1445	1445	1445

20,21 August 1973



Date: 26 April 1974

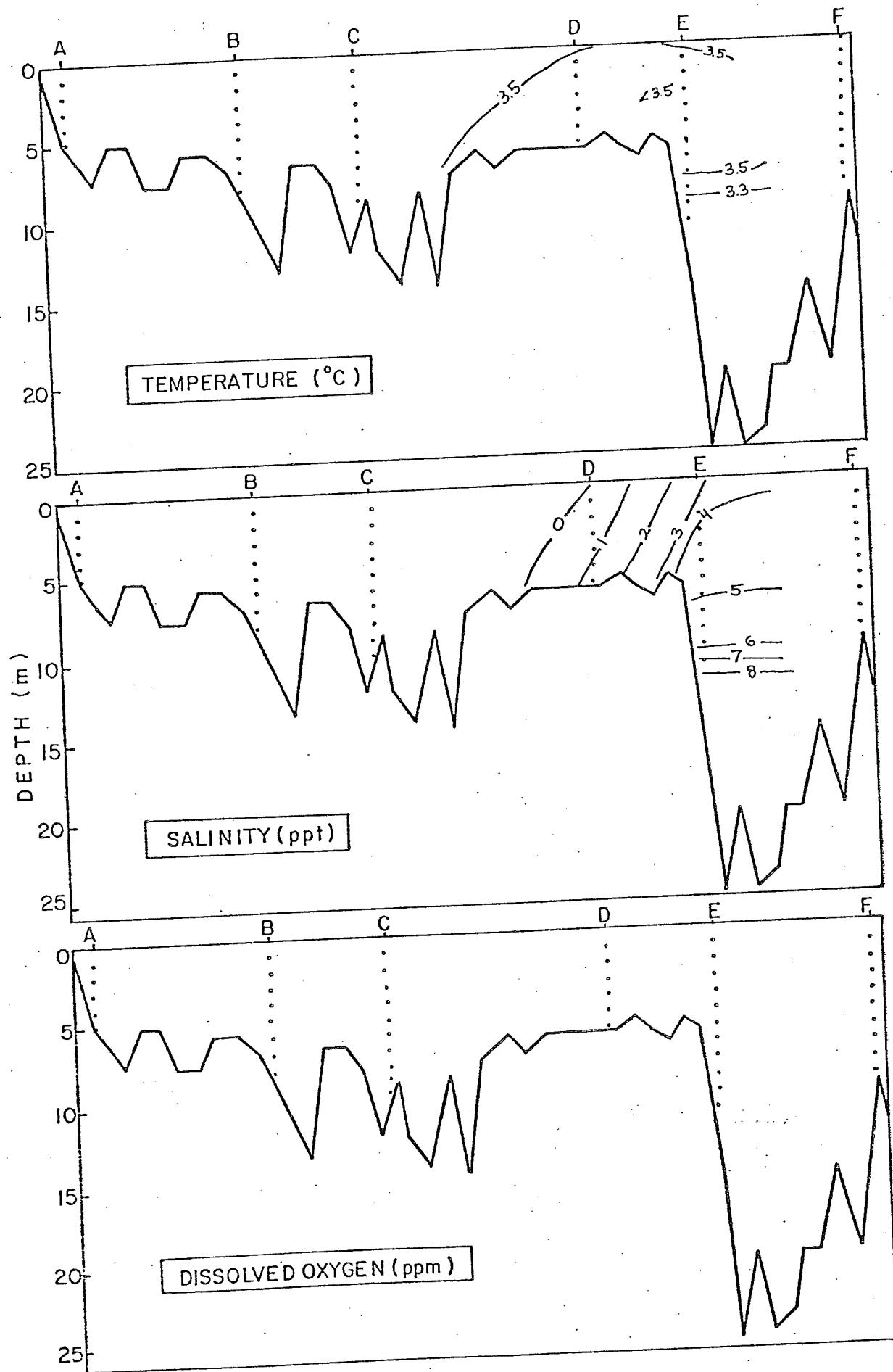
1400

1140 .

0955

0960

26 April 1974



Date: 10 May 1974

Station- Depth (m)	A			B			C			D			E		
	Temp. °C	Sal. ppt	DO ppm												
0	6.7	0	13.7	6.8	0	13.4	6.8	0	13.3	6.8	0	12.7	7.2	1.76	12.8
1	6.8	0	13.7	6.8	0	13.4	6.8	0	13.3	6.9	0	13.1	7.0	2.20	12.8
2	6.8	0	13.7	6.8	0	13.4	6.8	0	13.4	6.9	0	13.1	6.8	3.40	13.0
3	6.8	0	13.7	6.8	0	13.4	6.8	0	13.1	6.7	2.88	13.1	6.8	3.80	12.8
4	6.6	0	13.7	6.8	0	13.6	6.8	0	13.1	6.8	3.68	13.2	6.6	4.44	12.8
5	6.6	0	13.7	6.8	0	13.6	6.8	0	13.1	6.8	4.48	13.1	6.6	5.00	13.0
6	6.6	0	13.7	6.8	0	13.7	6.8	0	13.2	6.8	5.28	13.2	6.5	5.28	12.8
7	6.9	0	13.8	6.8	0	13.1	6.8	0	13.1	6.4	5.52	13.0			
8	6.8	0	13.8	6.8	0	13.2	6.8	0	13.2	6.4	5.64	12.8			
9				6.8	0	13.3	6.8	0	13.3	6.4	6.12	12.7			
10				6.8	0	13.3	6.8	0	13.3	6.4	6.32	12.2			
11				6.8	0	13.3	6.8	0	13.3	6.1	7.32	11.8			
12										5.6	12.76	11.5			
13										5.3	16.16	11.5			
14										4.4	27.40	-			
15										4.4	27.28	-			

Time: 1320

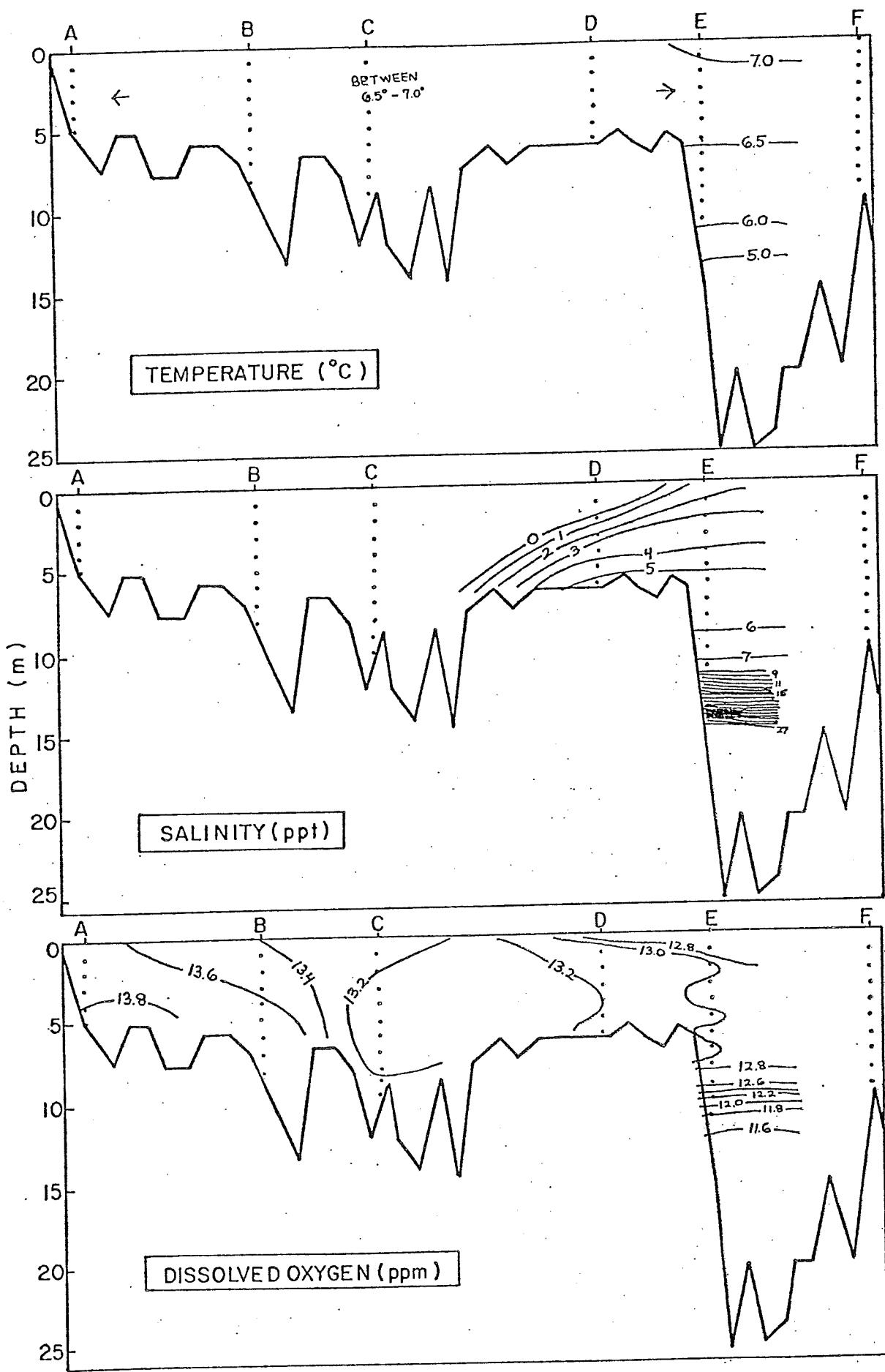
1230

1130

1030

0852

10 May 1974

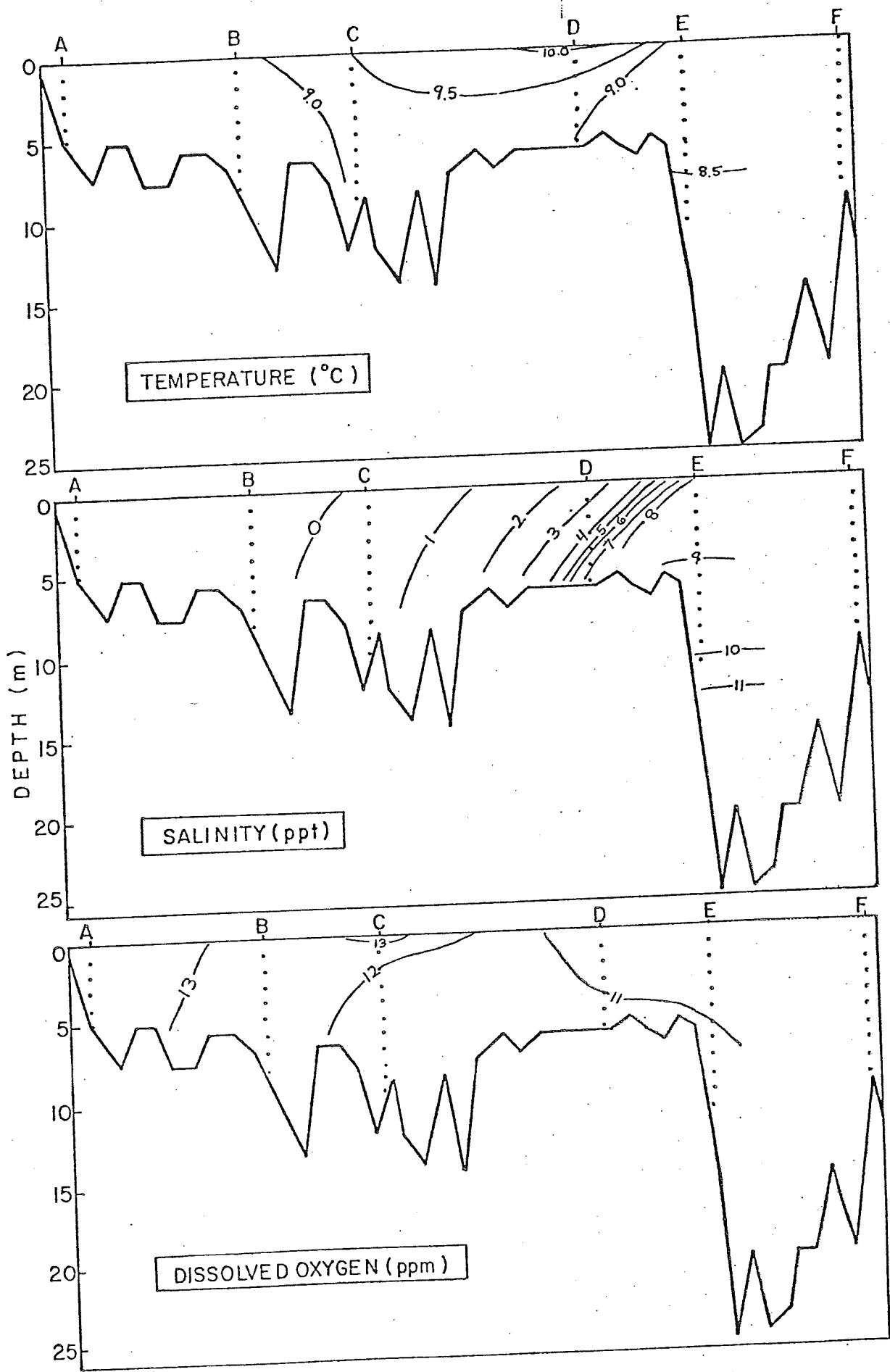


28 May 1974 A, B, + C
 Date: 29 May 1974 D + E

Station- Depth (m)	A			B			C			D			E		
	Temp. °C	Sal.	DO ppm	Temp. °C	Sal. ppt	DO ppm									
0	9.0	0	13.6	9.0	0	12.6	9.5	0.56	13.8	10.0	2.12	11.4	8.9	8.00	10.7
1	9.0	0	13.7	9.0	0	12.6	9.5	0.48	12.9	9.8	2.52	11.5	8.9	7.80	10.8
2	9.0	0	13.7	9.0	0	12.5	9.4	0.60	11.9	9.7	3.24	11.5	8.8	8.00	10.7
3	9.0	0	13.6	9.0	0	12.6	9.4	0.56	11.7	9.4	3.76	11.4	8.7	8.40	10.9
4	9.0	0	13.7	9.0	0	12.4	9.3	0.56	11.9	9.4	5.08	11.2	8.7	8.40	10.8
5	9.0	0	13.7	9.0	0	12.6	9.3	0.56	11.8	9.0	6.76	10.9	8.6	8.68	10.8
6	9.0	0	13.6			9.2	0.60	11.9					8.6	9.80	10.4
7	9.0	0	13.5			9.2	0.48	11.9					8.6	8.92	10.9
8						9.3	0.60	11.8					8.6	9.52	11.1
9						9.2	0.56	11.9					8.6	9.28	10.9
10						9.3	0.60	11.8					8.6	9.36	11.0
11						9.2	0.56	11.8					8.3	10.04	11.1
12						9.2	0.56	11.8					8.3	10.80	11.1
13						9.2	0.60	11.7					8.2	11.00	11.0
14						9.2	0.60	11.8							
15															

Time: 1025 1135 1250 1145
 1035

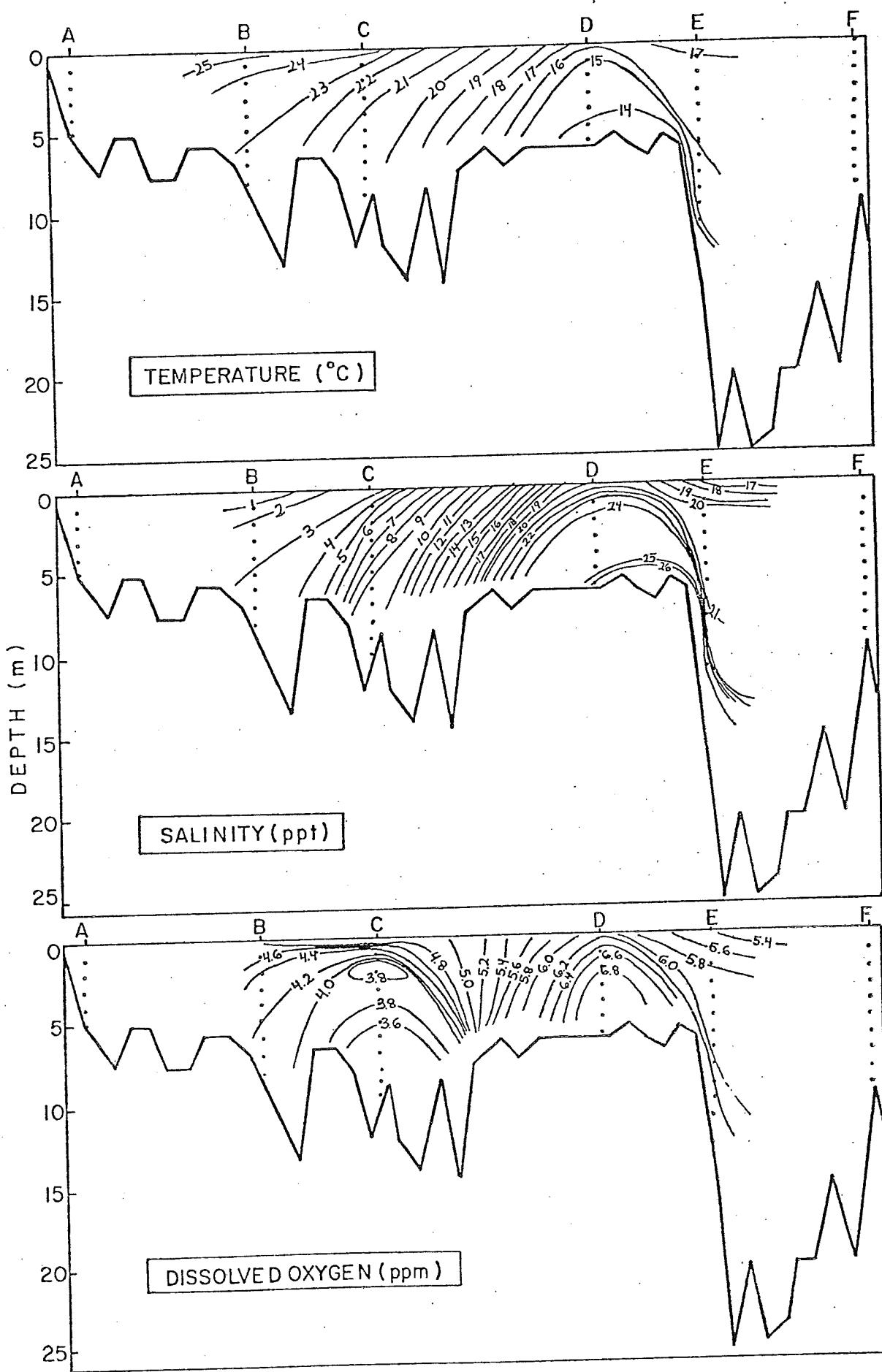
28,29 May 1974



Date: 6 August 1974

Station-	A	B	C	D	E								
Depth (m)	Temp. °C	Sal. ppt	DO ppm										
0	not sampled	25.4	0.56	4.8	24.9	2.64	4.8	16.9	20.28	6.0	17.0	16.76	5.4
1	24.3	1.80	4.7	23.1	4.40	4.3	15.3	23.52	6.4	17.0	18.64	5.5	
2	23.6	2.32	4.4	22.1	6.32	3.8	14.5	24.28	6.7	16.5	20.20	5.8	
3	23.5	2.40	4.3	21.8	6.84	4.0	14.3	24.44	6.9	16.3	20.00	5.8	
4	23.4	2.60	4.3	21.4	7.28	3.9	14.2	24.44	6.9	16.1	20.60	5.9	
5	23.2	3.24	4.2	20.6	9.04	3.7	14.1	24.88	6.9	16.1	20.12	5.9	
6	22.9	3.56	4.2	20.2	9.60	3.5	14.0	25.12	6.9	16.1	20.48	5.9	
7	22.9	3.56	4.1				13.3	26.40	7.3	16.0	20.60	5.9	
8	22.9	3.56	4.1				13.2	26.72	7.4	15.8	20.40	6.0	
9							13.1	26.72	7.4	15.7	21.00	5.9	
10										15.7	21.51	6.1	
11										15.4	21.64	6.2	
12										13.2	27.36	-	
13										13.2	27.24	-	
14										13.3	27.24	-	
15										13.0	27.40	-	
23										13.0	27.68	-	
												1045	
												Time:	
												1140	
												1311	
												1337	

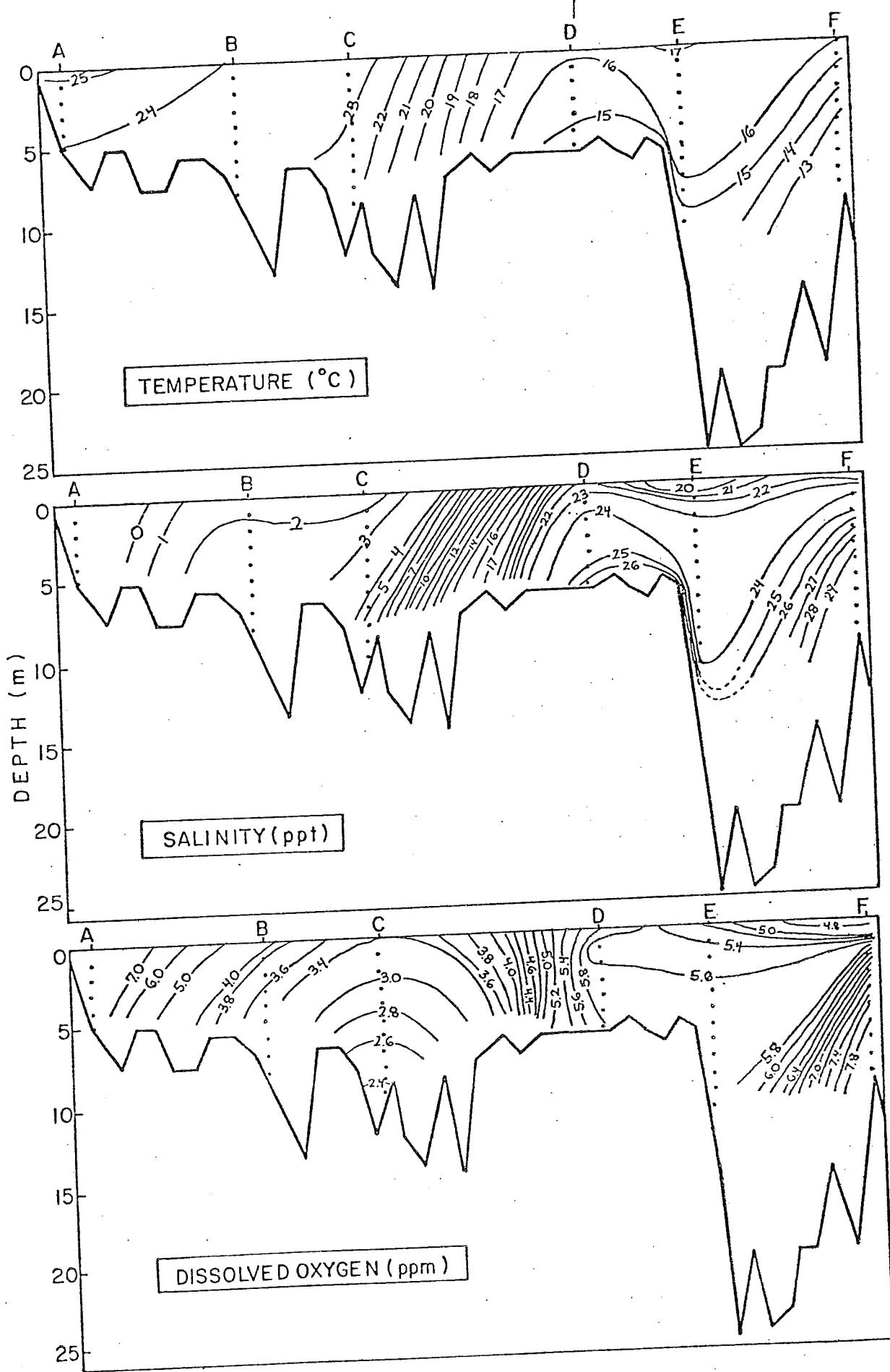
6 August 1974



Date: 19 August 1974, A, B, + C; 21 August 1974, D + E

Station- Depth (m)	A			B			C			D			E			F		
	Temp. °C	Salt. ppt	DO ppm															
0	25.1	0	7.8	23.9	1.60	4.2	23.4	1.60	3.4	16.3	22.80	5.8	17.1	19.96	5.1	16.5	21.76	4.7
1	24.9	0	7.6	23.5	1.84	3.8	23.1	2.00	3.3	16.0	23.44	5.5	16.4	20.96	5.4	15.9	23.56	5.0
2	24.6	0	7.7	23.2	2.44	3.6	23.0	2.40	3.2	15.6	24.12	5.5	16.1	22.76	5.4	15.3	24.72	5.8
3	24.4	0	7.7	23.1	2.70	3.6	23.0	3.08	2.9	15.4	24.36	5.6	16.0	23.24	5.6	14.3	26.92	6.5
4	24.3	0	7.7				22.8	3.40	2.7	15.3	24.68	5.6	16.0	23.24	5.5	14.0	26.92	6.6
5	24.2	0	7.8				22.8	3.50	2.8	15.1	24.80	5.7	16.0	23.24	5.5	13.3	28.16	7.2
6	24.1	0	7.8				22.6	3.80	2.8	14.9	25.16	5.8	16.0	23.24	5.5	12.6	29.60	7.7
7	24.0	0	7.8				22.5	4.00	2.6	14.8	25.36	5.9	16.0	23.24	5.5	12.5	29.76	7.9
8	24.0	0	7.7				22.5	4.12	2.5	14.2	26.56	6.2	15.9	23.52	5.6			
9							22.4	4.16	2.5				15.9	23.52	5.6			
10							22.3	4.64	2.4				15.9	23.52	5.7			
11																		
12																		
13																		
14																		
15																		
Time:	1305			1110			0830			1230			1130			1010		

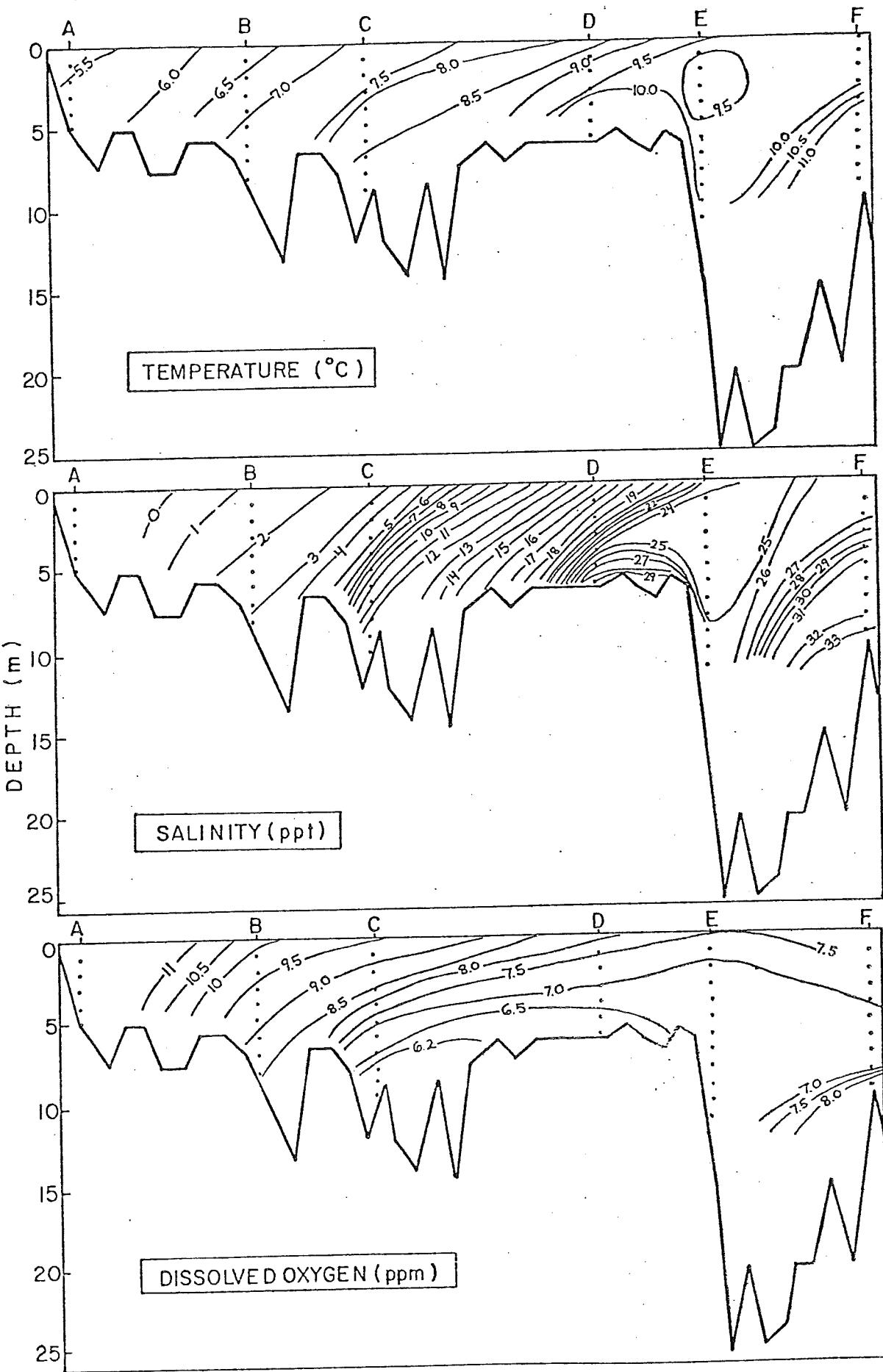
19,21 August 1974



Date: 21 October 1974

Station- Depth (m)	A			B			C			D			E			F		
	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm
0	5.5	0	11.5	6.3	1.36	10.4	7.1	2.60	9.7	8.2	15.80	8.4	9.4	23.28	7.5	9.5	26.92	7.8
1	5.5	0	11.2	6.4	1.36	10.1	7.2	3.60	9.3	8.5	17.00	7.6	9.6	24.76	7.3	9.7	26.96	7.6
2	5.6	0	11.1	6.5	1.68	9.8	7.2	4.08	8.9	9.0	18.28	7.3	9.5	24.76	7.0	9.7	26.96	7.5
3	5.7	0	11.1	6.8	1.84	9.4	7.2	4.72	8.7	9.2	21.28	7.1	9.5	24.76	7.0	9.8	27.52	7.4
4	5.7	0	11.2	6.9	2.04	9.1	8.0	4.28	8.0	10.0	24.48	6.6	9.5	24.76	7.0	10.1	29.12	7.1
5	5.8	0	11.2	7.0	2.04	9.1	8.0	9.28	7.5	10.0	26.24	6.5	9.5	24.12	7.0	11.0	31.76	6.7
6				7.0	2.24	9.0	8.3	9.84	6.8	10.1	27.60	6.4	9.7	24.12	7.0	11.0	31.76	6.7
7				7.0	2.36	9.0	8.5	10.60	6.6	10.3	28.48	6.4	9.7	24.38	7.0	11.0	31.76	6.6
8				7.1	3.60	8.6	8.7	12.28	6.2	10.3	29.04	6.3	9.8	24.96	7.0	11.0	31.76	6.6
9				7.1	3.68	8.4				10.3	29.12	6.3	9.8	25.88	7.0	11.0	33.32	8.0
10				7.1	3.88	8.4							9.9	25.84	7.0			
11																		
12																		
13																		
14																		
15																		
Time:	1010			1105			1145			1319			1405		1500			

21 October 1974



Date: 30 June 1975

Station- Depth (m)	A			B			C			D			E			F		
	Temp. °C	Sal. ppt	DO ppm															
0	24.5	0	7.5	25.0	0.60	6.2	25.0	2.00	6.2	21.0	10.24	6.6	19.0	13.52	6.6	16.2	19.00	7.5
1	24.5	0	7.0	24.2	1.00	6.3	24.3	2.36	6.4	20.0	11.68	6.5	17.7	15.08	6.6	15.0	19.92	7.2
2	24.5	0	7.0	24.0	1.20	6.3	24.3	2.40	6.3	17.4	15.12	6.4	14.5	20.08	7.0	14.1	22.16	7.6
3	24.5	0	6.9	24.0	1.52	6.3	23.0	4.20	6.0	16.0	17.68	6.4	13.0	23.24	7.3	11.8	26.20	7.9
4	24.5	0	6.8	23.8	1.80	6.3	19.1	11.52	5.4	13.8	21.20	6.7	13.0	23.24	7.3	11.4	26.24	7.9
5	24.5	0	6.9	23.8	1.84	6.2	18.9	12.20	5.2	12.5	24.00	7.1	12.5	27.88	7.3	11.0	27.28	8.2
6	24.5	0	6.9	23.3	2.28	6.2	18.6	13.00	5.4	11.6	25.60	7.4	12.5	24.32	7.3	8.8	30.16	8.2
7	24.5	0	6.9	23.3	2.52	6.2	18.8	12.48	5.5	11.5	25.60	7.4	10.4	27.28	7.7	8.7	30.16	8.2
8				23.2	2.80	6.0	18.5	13.48	5.5	11.3	25.72	7.5	10.0	27.81	7.9			
9				23.0	3.28	5.8	18.3	13.48	5.4				10.0	28.68	8.0			
10							18.1	13.60	5.3				9.8	28.84	8.0			
11							18.0	13.60	5.5				9.8	29.00	8.0			
12																		
13																		
14																		
15																		

Time:

1640

1500

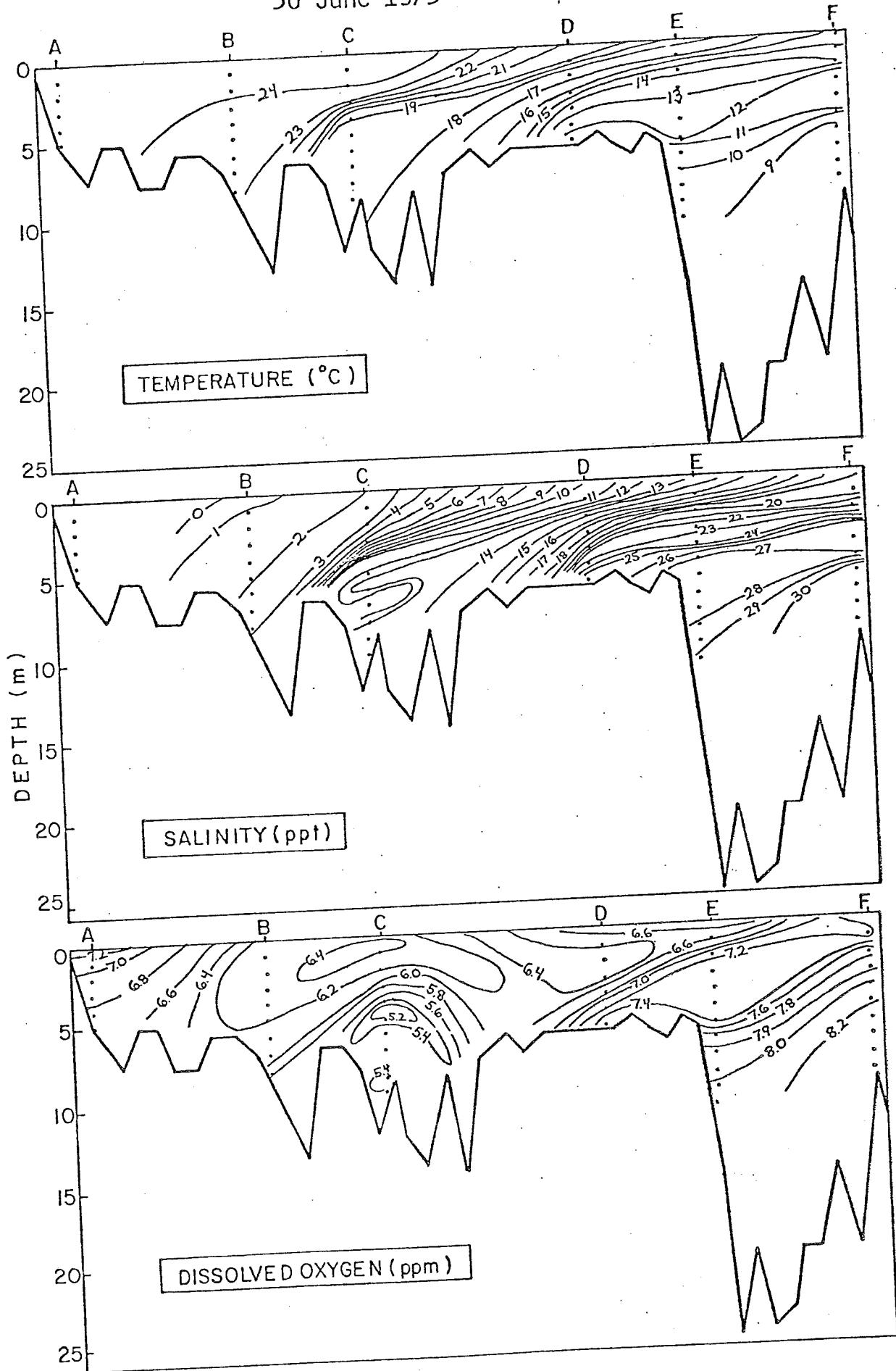
1435

1400

1335

1230

SU June 1975



Date: 17 July 1975

Station- Depth (m)	A			B			C			D			E		
	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm
0	25.1	0	7.0	24.5	0.36	6.1	24.5	2.00	5.9	19.9	19.38	5.9	16.4	23.82	6.5
1	25.0	0	7.2	24.2	0.36	6.1	24.1	2.64	5.8	17.9	18.64	6.0	16.1	28.26	6.4
2	24.9	0	7.2	24.2	0.36	6.1	23.3	3.72	5.5	15.7	22.48	6.1	15.8	28.32	6.4
3	24.8	0	7.1	24.2	0.52	6.1	22.8	4.32	5.4	14.0	24.96	6.1	15.4	28.20	6.5
4	24.8	0	7.0	24.2	0.52	6.0	22.3	5.32	5.2	14.0	25.08	6.2	15.4	28.26	6.5
5	24.8	0	7.0	24.0	0.56	6.0	21.5	6.52	5.2	13.8	25.48	6.2	15.4	28.26	6.5
6	24.7	0	6.8	24.0	0.60	6.0	21.2	7.60	5.1	13.5	25.80	6.3	15.3	28.50	6.5
7				24.0	0.60	6.0	21.0	8.60	4.9	13.0	26.24	6.6	15.3	28.62	6.6
8				24.0	0.60	6.0	20.5	8.96	4.7	12.8	26.60	6.6	15.3	28.80	6.6
9				24.0	0.60	5.9	20.1	9.20	4.8				14.9	29.10	6.7
10				24.0	0.88	5.8	20.0	10.28	4.9				14.8	29.70	6.7
11				24.0	1.08	5.7	19.9	10.60	4.8				14.0	30.48	6.7
12				24.0	1.08	5.6	19.9	10.64	4.8				14.0	30.60	6.8
13															
14															
15															

Time: 1450

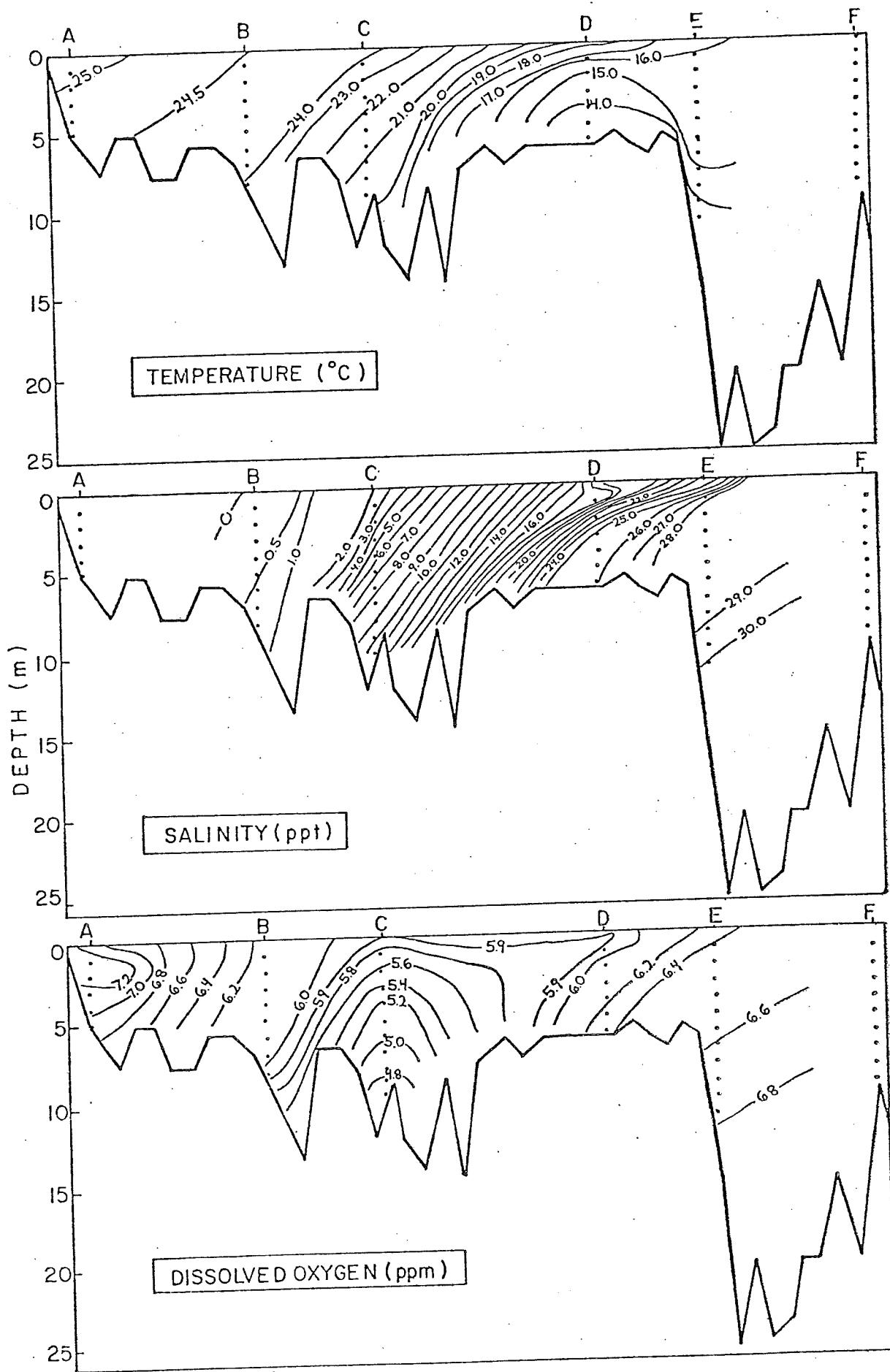
Time: 1835

Time: 1900

Time: 1800

Time: 1730

17 July 1975



Date: 6 August 1975

Station- Depth (m)	A			B			C			D			E			F		
	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm
0	24.9	0.22	7.1	23.5	4.20	5.5	22.2	8.38	5.3	16.0	22.46	6.4	16.5	24.30	6.4	14.5	26.06	7.3
1	24.9	0.22	7.1	23.5	5.11	5.4	22.1	8.68	5.3	15.9	22.46	6.3	14.8	24.30	6.6	14.0	26.06	7.3
2	24.9	0.22	7.2	23.5	5.36	5.2	22.1	8.72	5.3	15.6	22.55	6.2	14.5	24.30	6.6	13.7	26.06	7.3
3	24.9	0.22	7.1	23.4	5.64	5.1	21.0	11.76	5.0	15.5	22.40	6.2	14.5	24.30	6.6	13.7	26.06	7.4
4	24.9	0.22	7.1	23.1	6.14	4.8	20.5	12.36	5.0	15.5	22.46	6.3	14.0	25.22	6.8	13.5	26.50	7.4
5	24.9	0.22	7.1	23.0	7.12	4.7	20.4	12.38	5.0	14.5	24.34	6.4	14.0	25.22	6.8	13.5	26.50	7.4
6	24.9	0.22	7.1	22.8	7.50	4.6	20.0	12.72	4.9	14.0	24.74	6.4	14.0	25.22	6.8	13.5	26.64	7.4
7	24.8	0.22	7.0	22.8	7.50	4.6	20.0	13.54	4.8	13.9	24.92	6.4	14.0	25.50	6.8	13.5	26.66	7.4
8	24.8	0.22	7.0	22.7	7.74	4.6	20.0	13.54	4.8	13.6	25.24	6.3	14.0	25.50	6.8	13.5	28.50	7.4
9	24.8	0.22	6.8	22.5	8.08	4.5	20.0	13.54	4.8	14.0	22.50	6.8	14.0	25.50	6.8	12.0	28.50	7.6
10							20.0	13.54	4.9									
11							20.0	13.54	4.7									
12																		
13																		
14																		
15																		

Time:

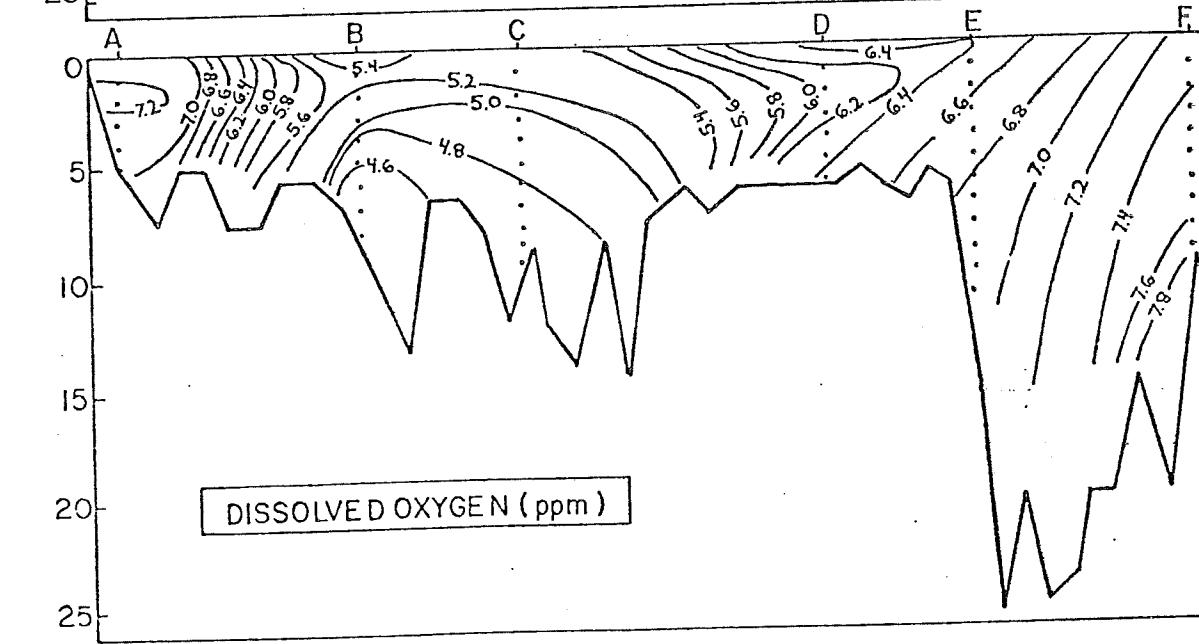
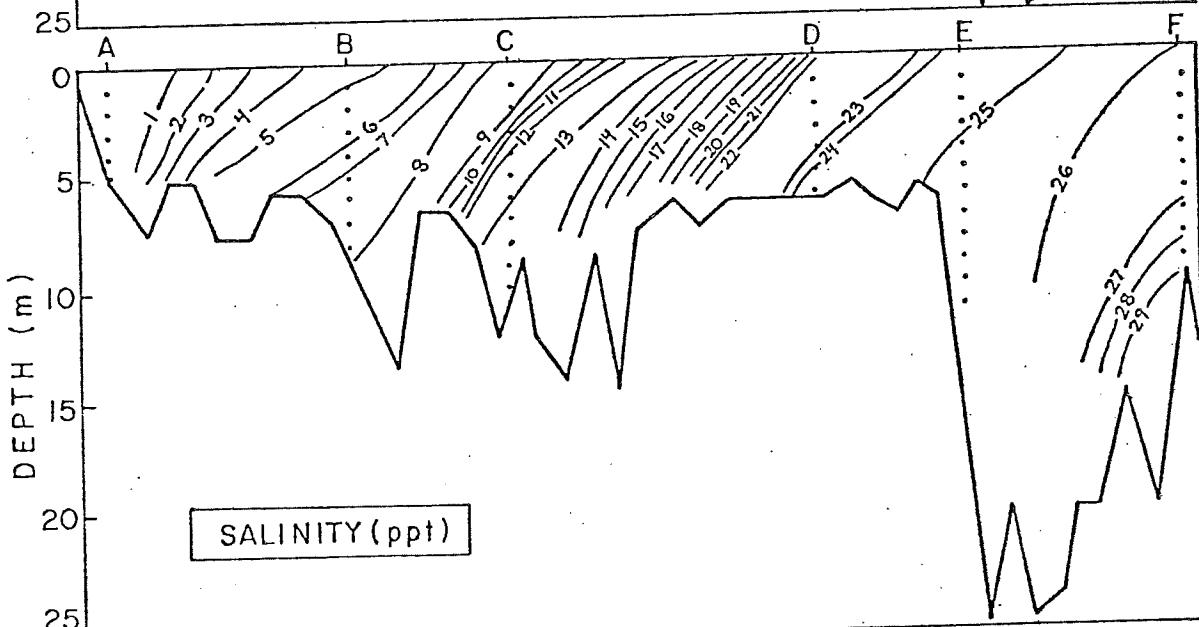
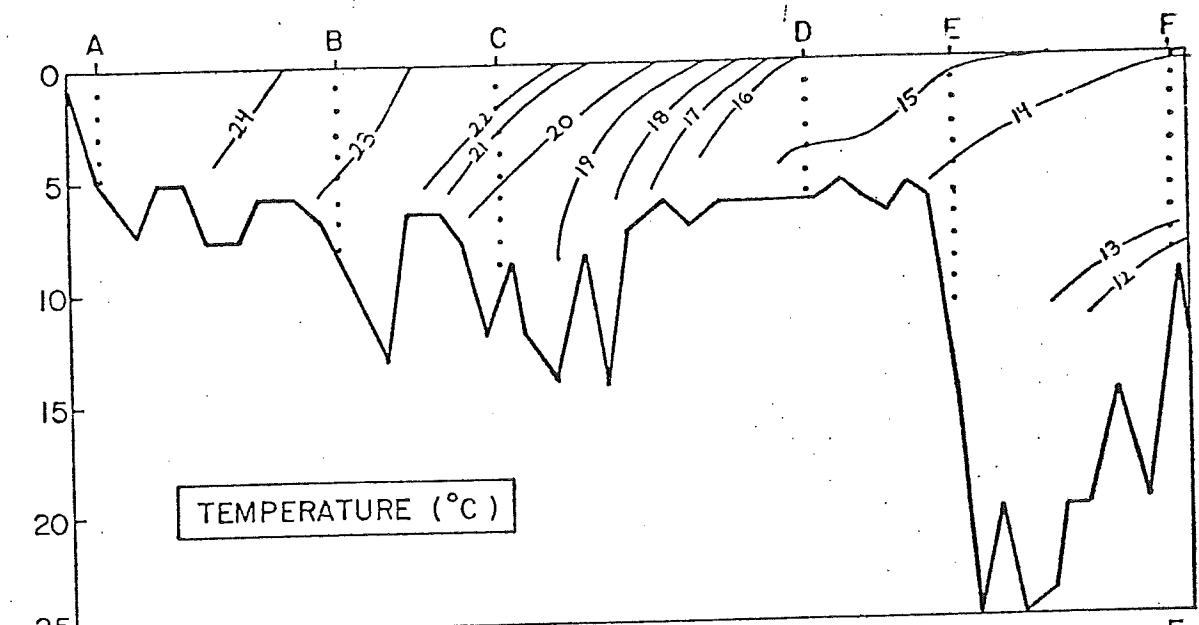
1000

1135

1210

1355

1230

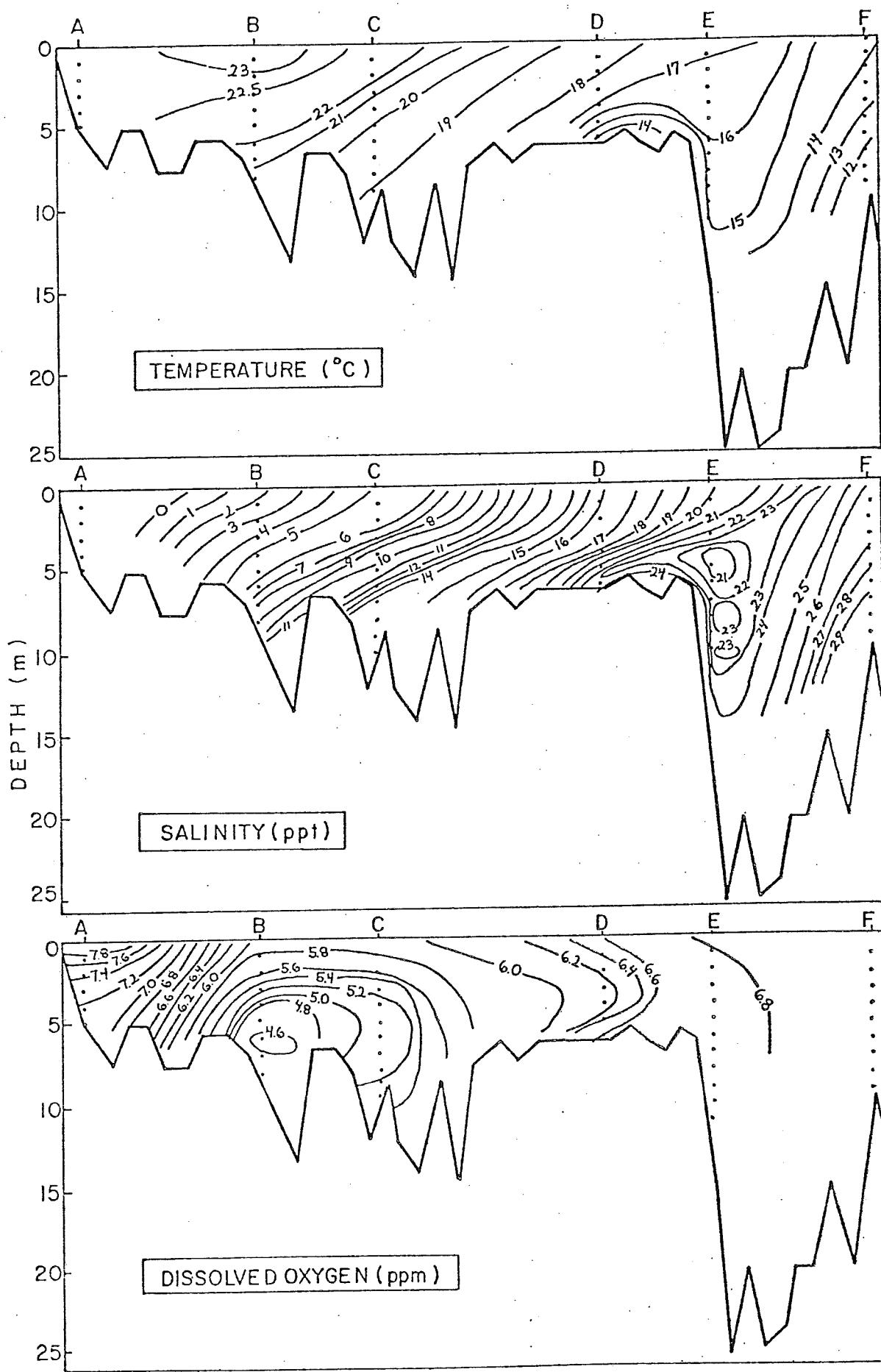


Date: 20 August 1975

Station- Depth (m)	A			B			C			D			E			F		
	Temp. °C	Sal.	DO ppm															
0	22.8	0	7.8	23.2	2.0	5.9	22.2	5.2	5.8	18.2	16.9	6.6	17.0	20.4	6.9	14.5	26.5	10.3
1	22.9	0	7.6	23.0	2.6	5.7	22.2	5.4	5.8	18.2	16.9	6.4	17.0	20.8	6.8	14.0	26.5	10.1
2	22.9	0	7.4	23.0	3.0	5.6	22.2	5.5	5.7	18.2	16.9	6.3	16.5	21.2	6.8	14.0	26.7	9.9
3	22.8	0	7.3	22.5	4.2	5.2	21.2	8.3	5.3	17.8	17.9	6.2	16.5	23.0	6.8	13.5	26.9	9.8
4	22.7	0	7.1	22.3	5.5	4.7	20.8	9.3	5.2	16.8	19.8	6.2	16.5	20.8	6.8	13.2	27.6	9.6
5	22.7	0	7.1	22.2	5.8	4.7	20.5	10.4	5.1	15.2	23.1	6.5	16.5	20.9	6.7	12.7	28.5	9.1
6	22.7	0	7.1	22.0	7.0	4.6	19.5	13.1	5.1	14.5	24.8	6.6	15.8	21.9	6.7	12.5	28.8	9.1
7	22.7	0	7.0	21.5	8.3	4.7	19.2	14.3	5.2	14.0	25.9	6.9	15.5	23.3	6.7	12.0	29.6	9.1
8	22.8	0	7.0	21.0	9.2	4.7	19.2	14.5	5.2				15.5	23.3	6.7			
9	22.8	0	7.0	21.0	11.2	4.7	19.0	14.5	5.4				15.5	22.8	6.7			
10				20.5	11.2	4.7	19.0	14.5	5.4				15.5	23.2	6.8			
11				20.5	11.2	4.7	19.0	14.6	5.4				15.5	23.0	6.7			
12				20.5	11.3	4.9	19.0	14.9	5.5				15.5	23.0	6.7			
13				20.5	11.3	4.8												
14																		
15																		

Time:	1210	1310	1405	1330	1405	1510	1540
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20 August 1975

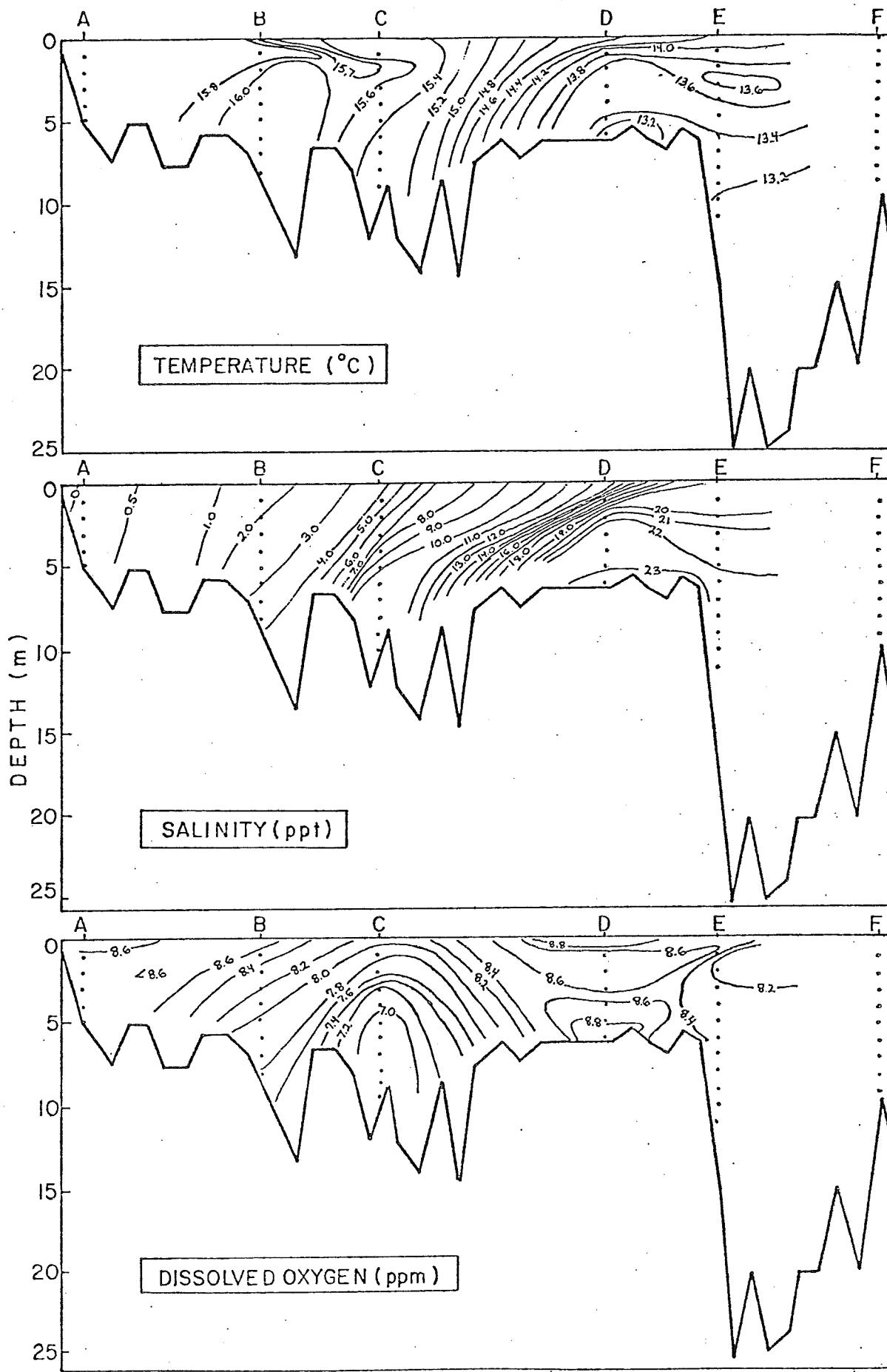


Date: 18 September 1975

Station- Depth (m)	A			B			C			D			E		
	Temp. °C	Sal. ppt	DO ppm												
0	15.8	0.48	8.6	15.7	1.36	8.7	15.5	3.80	8.1	14.5	12.84	8.8	14.2	19.16	8.7
1	15.8	0.48	8.7	15.9	1.52	8.4	14.0	4.40	8.6	14.0	18.92	8.6	14.0	19.92	8.2
2	15.8	0.48	8.7	16.0	2.08	8.3	15.7	5.60	7.7	13.5	22.20	8.6	13.8	20.60	8.2
3	15.8	0.48	8.7	16.0	2.08	8.2	15.5	6.08	7.1	13.5	22.20	8.6	13.5	21.68	8.4
4	15.8	0.48	8.7	16.0	2.56	8.1	15.5	8.24	7.1	13.5	22.48	8.7	13.7	21.68	8.4
5	15.8	0.48	8.7	16.0	2.56	8.0	15.5	9.32	7.0	13.4	22.68	8.7	13.5	21.88	8.4
6	15.8	0.48	8.7	16.0	2.80	8.0	15.3	10.40	7.0	13.2	23.28	8.8	13.5	22.44	8.5
7	15.8	0.48	8.7	16.0	3.28	7.9	15.5	10.40	7.0	13.1	23.44	8.8	13.4	22.56	8.4
8				16.0	3.48	7.7	15.5	10.56	7.0	13.0	23.44	8.7	13.4	22.56	8.4
9				16.0	3.68	7.7							13.3	22.56	8.5
10				16.0	4.28	7.6							13.2	22.96	8.5
11				16.0	4.28	7.5							13.2	22.96	8.5
12				16.0	4.28	7.5							13.1	23.24	8.5
13													13.1	23.24	8.6
14															
15															

Time: 0945 0815 0840 0935 0840 0815 0935 0900

18 September 1975



Date: 16 October 1975

Station- Depth (m)	A			B			C			D			E		
	Temp. °C	Sal. ppt	DO ppm												
0	12.0	0	10.5	11.5	1.00	10.3	11.5	3.56	9.6	11.5	16.00	8.0	11.5	19.68	7.9
1	12.0	0	10.6	11.5	1.52	10.2	11.5	3.68	9.6	11.5	19.24	7.9	11.5	20.76	7.8
2	11.8	0	10.6	11.5	1.96	10.1	11.3	3.84	9.6	11.4	22.44	7.8	11.5	22.48	7.8
3	11.7	0	10.5	11.5	2.60	10.0	11.5	10.00	8.6	11.4	22.88	7.8	11.5	23.16	7.8
4	11.5	0	10.6	11.3	4.32	9.6	11.5	12.16	8.1	11.4	23.40	7.7	11.5	23.52	7.7
5	11.5	0	10.5	11.5	7.48	8.7	11.5	12.20	7.8	11.3	23.92	7.5	11.5	23.60	7.7
6	11.5	0	10.6	11.5	8.88	8.6	11.5	12.48	7.8	11.3	23.92	7.6	11.5	24.00	7.7
7	11.5	0	10.6	11.5	9.20	8.6				11.3	23.92	7.6	11.5	24.08	7.6
8	11.4	0	10.6	11.5	10.00	8.4				11.3	24.36	7.4	11.5	24.08	7.7
9	11.4	0	10.6	11.5	10.20	8.4							11.5	24.84	7.6
10					11.5	11.92	8.2						11.5	24.90	7.5
11					11.5	11.92	8.1						11.5	25.08	7.5
12													11.4	25.16	7.4
13													11.3	25.28	7.4
14															
15															

Time: 1210

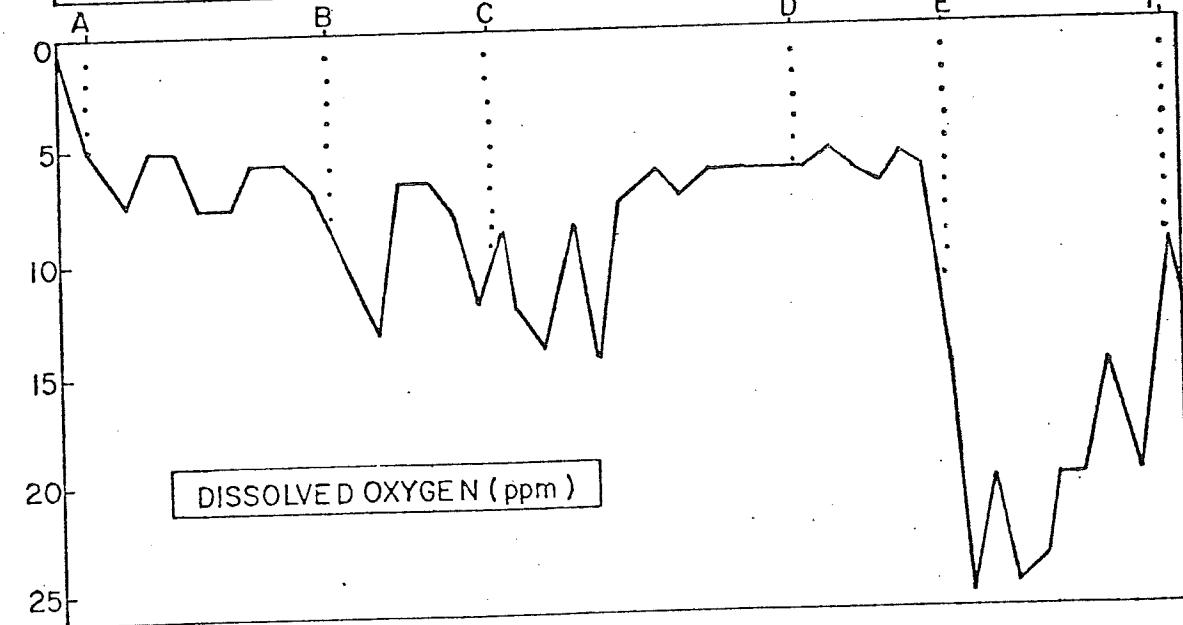
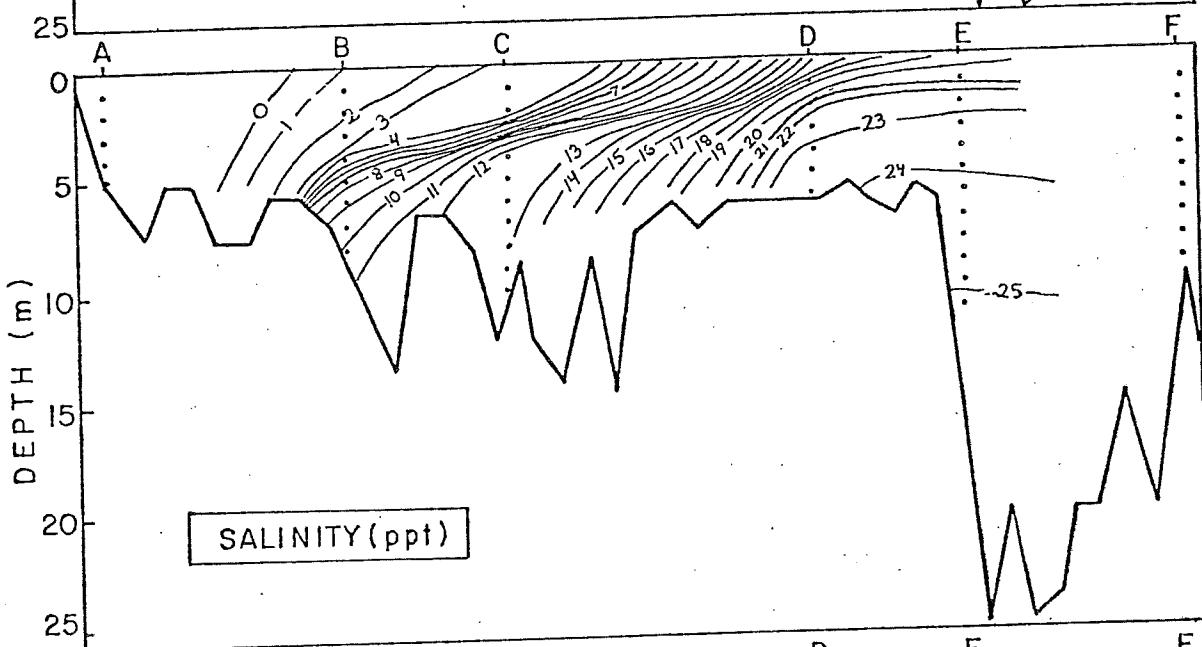
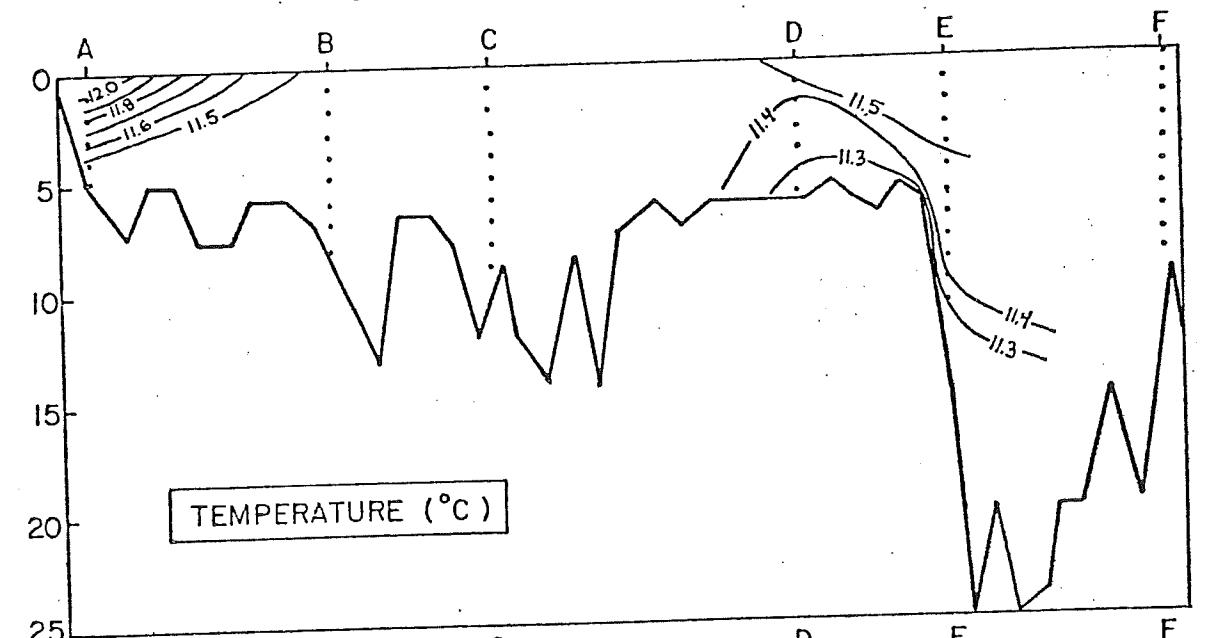
1110

1045

1005

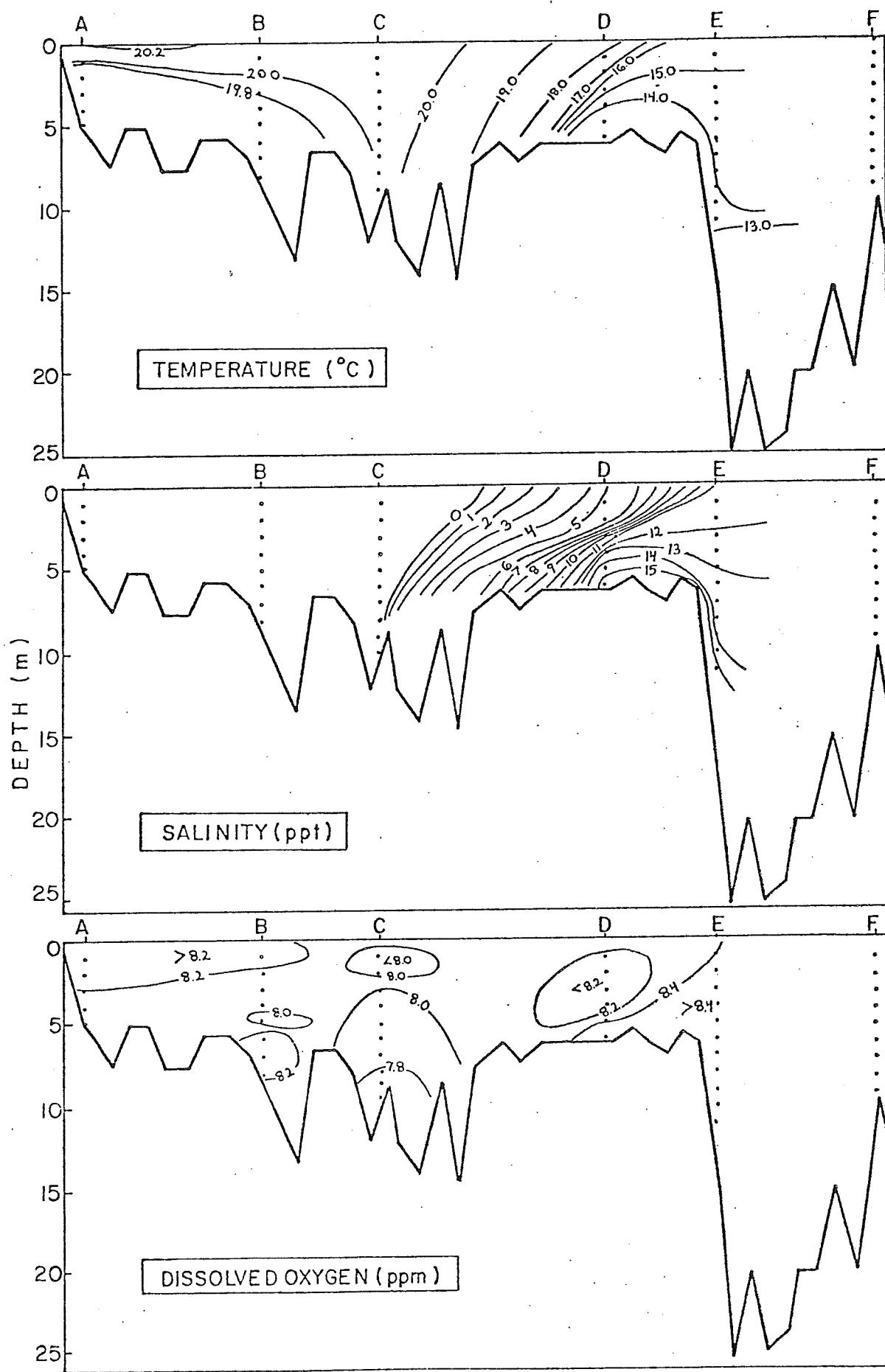
0920

16 October 1975



Date: 8 June 1976

8 June 1976

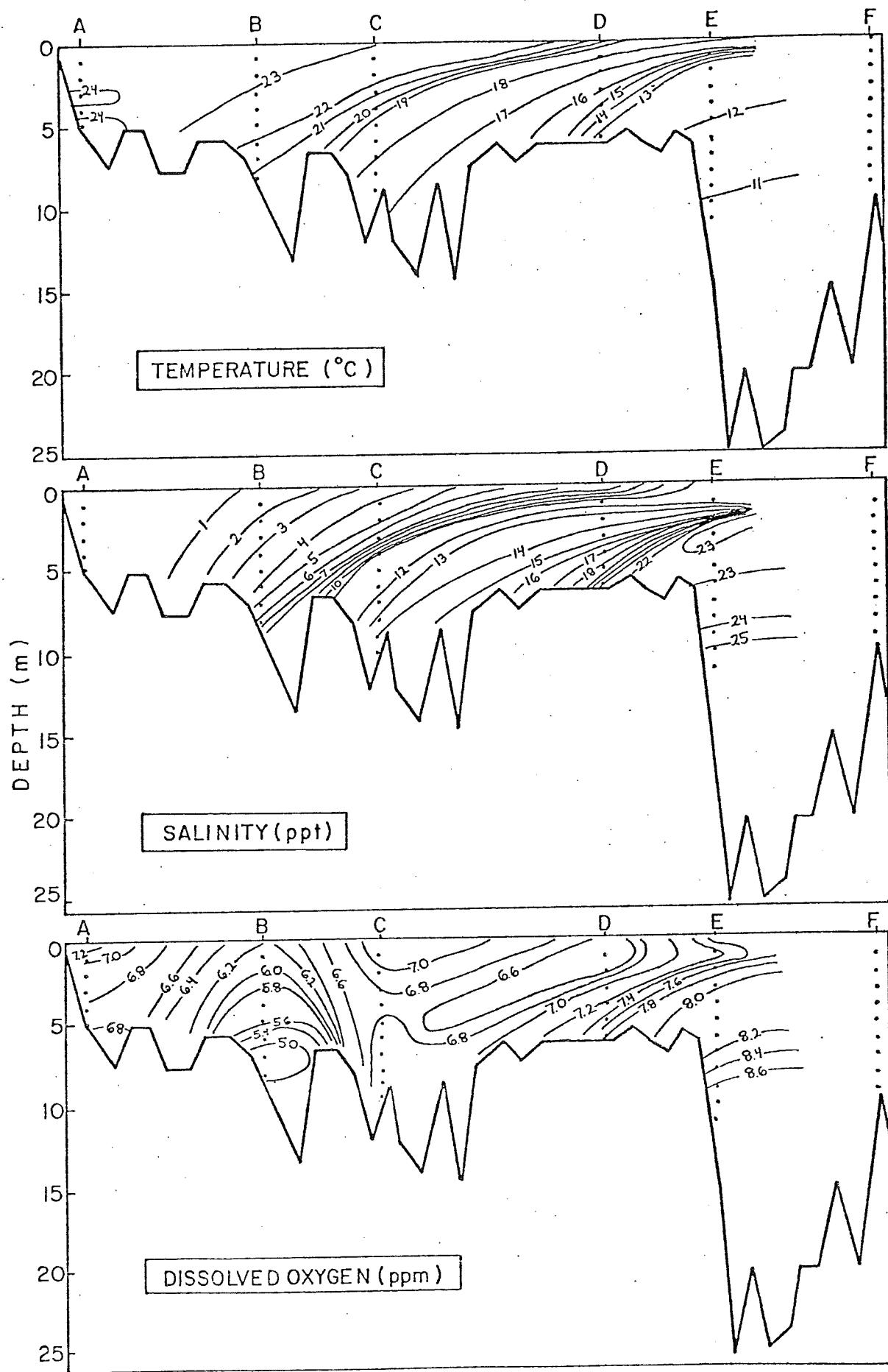


Date: 21 June 1976

Station-	A			B			C			D			E		
Depth (m)	Temp. °C	Sal. ppt	DO ppm												
0	23.9	0.20	7.2	23.8	1.44	6.2	23.2	3.28	21.8	8.12	6.6	19.1	12.44	7.4	
1	23.9	0.28	7.1	23.3	1.92	6.1	22.5	4.24	18.6	11.60	6.6	18.5	12.60	7.2	
2	23.9	0.24	6.8	23.5	2.48	6.0	22.2	4.48	17.6	13.04	6.6	12.4	22.84	7.7	
3	24.0	0.24	6.9	22.9	2.80	5.8	21.4	6.16	16.8	14.72	7.0	12.2	23.00	8.0	
4	23.9	0.28	6.7	22.8	3.12	5.7	20.4	11.92	15.4	17.08	7.2	12.2	22.88	8.0	
5	24.0	0.24	6.7	22.4	3.56	5.8	18.8	11.08	14.8	19.04	7.6	12.1	22.92	8.0	
6	24.0	0.32	6.8	22.0	4.44	5.2	18.4	11.76	12.7	21.92	7.8	11.8	23.04	8.0	
7	24.0	0.24	6.8	21.5	5.64	5.1	18.0	12.28	12.7	22.08	7.6	11.8	23.52	8.2	
8	24.1	0.28	6.9	20.8	6.92	5.0	17.6	13.12	12.6	22.36	7.7	11.6	23.76	8.5	
9				20.1	8.12	5.0	17.2	14.04	12.6	22.32	7.7	11.2	24.80	8.6	
10				23.9	8.32	5.0	17.2	13.76				11.0	25.32	8.4	
11				19.8	8.72	5.2	16.8	13.88				11.0	25.80	8.5	
12							16.9	14.40				11.0	25.40	8.6	
13												11.0	25.28	8.6	
14															
15															

Time: 1845 1905 1930 1615 1545

21 June 1976



Date: 9 July 1976

Station-	A			B			C			D			E		
Depth (m)	Temp. °C	Sal. ppt	DO ppm												
0	24.28	1.6	7.5	23.8	2.4	7.4	25.0	3.2	6.7	22.6	4.84	6.4	20.6	8.88	8.4
1	24.24	2.0	7.2	27.9	2.4	7.2	24.8	3.2	6.7	22.6	5.00	6.5	19.8	9.88	6.8
2	24.20	2.0	6.7	23.8	2.4	7.2	24.6	2.8	6.7	21.8	5.68	6.3	19.2	11.92	6.5
3	24.20	2.0	6.8	27.9	2.4	7.2	24.4	2.8	6.6	21.1	7.12	6.4	18.4	12.64	6.4
4				27.7	2.0	7.1	24.4	3.2	6.6	20.6	8.04	6.4	17.4	15.12	6.9
5				27.8	2.0	7.1	24.3	2.4	6.6	20.4	8.76	6.4	15.1	19.92	7.4
6				27.8	2.4	7.1	24.3	2.8	6.6	19.7	9.92	6.5	14.3	20.8	7.3
7				27.9	2.4	7.1	24.2	2.8	6.6	18.3	12.64	6.5	14.2	20.92	7.4
8				27.8	2.4	7.1	24.4	2.8	6.6				13.8	21.72	7.6
9							24.2	2.8	6.6				13.2	22.92	7.7
10							24.4	2.4	6.6				13.1	23.24	7.8
11							24.4	3.2	6.6				12.8	23.16	7.6
12							24.3	2.8	6.6						
13															
14															
15															

Time: 1930

1900

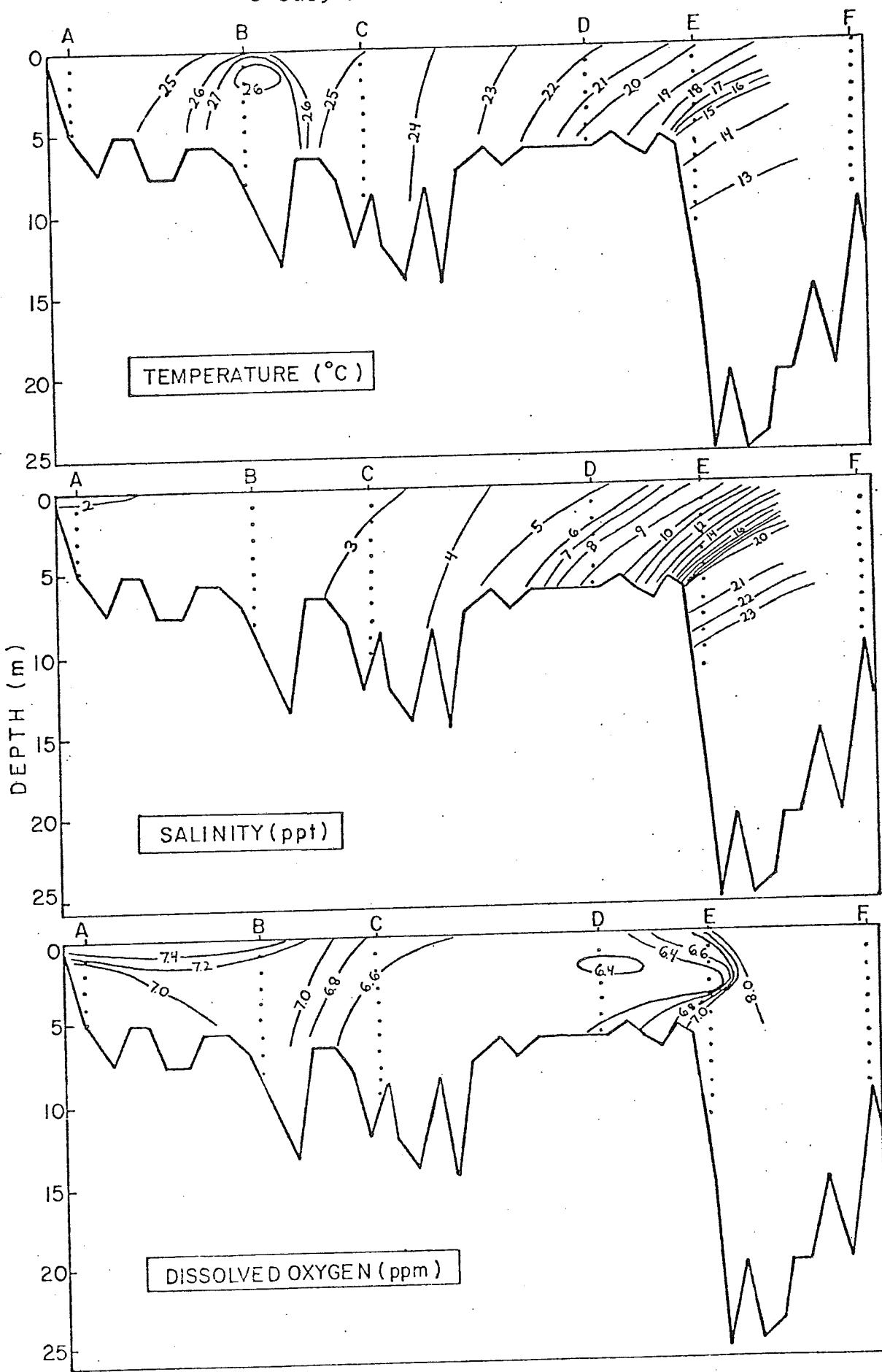
1836

1700

1735

1700

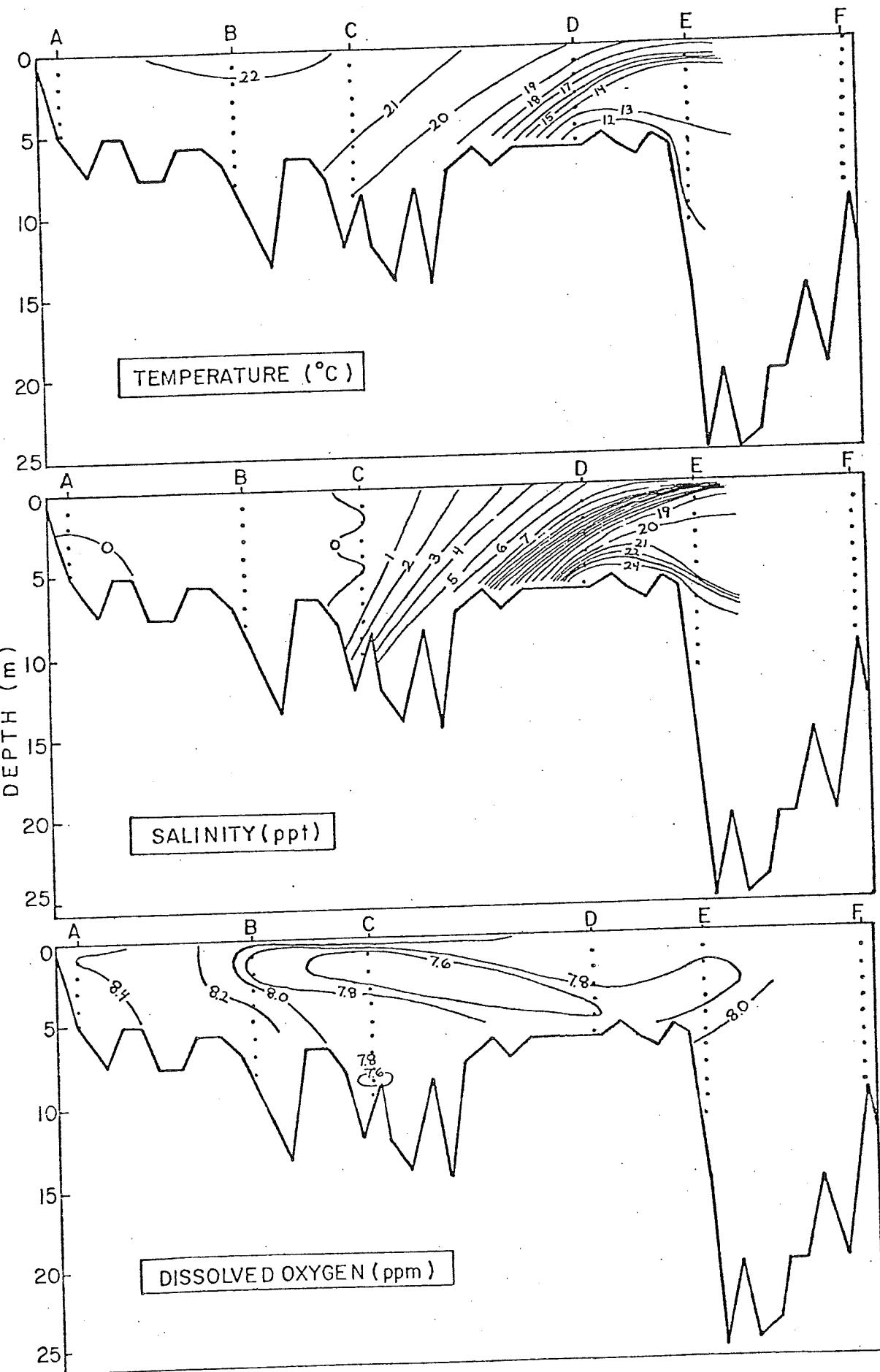
9 July 1976



Date: 19 July 1976

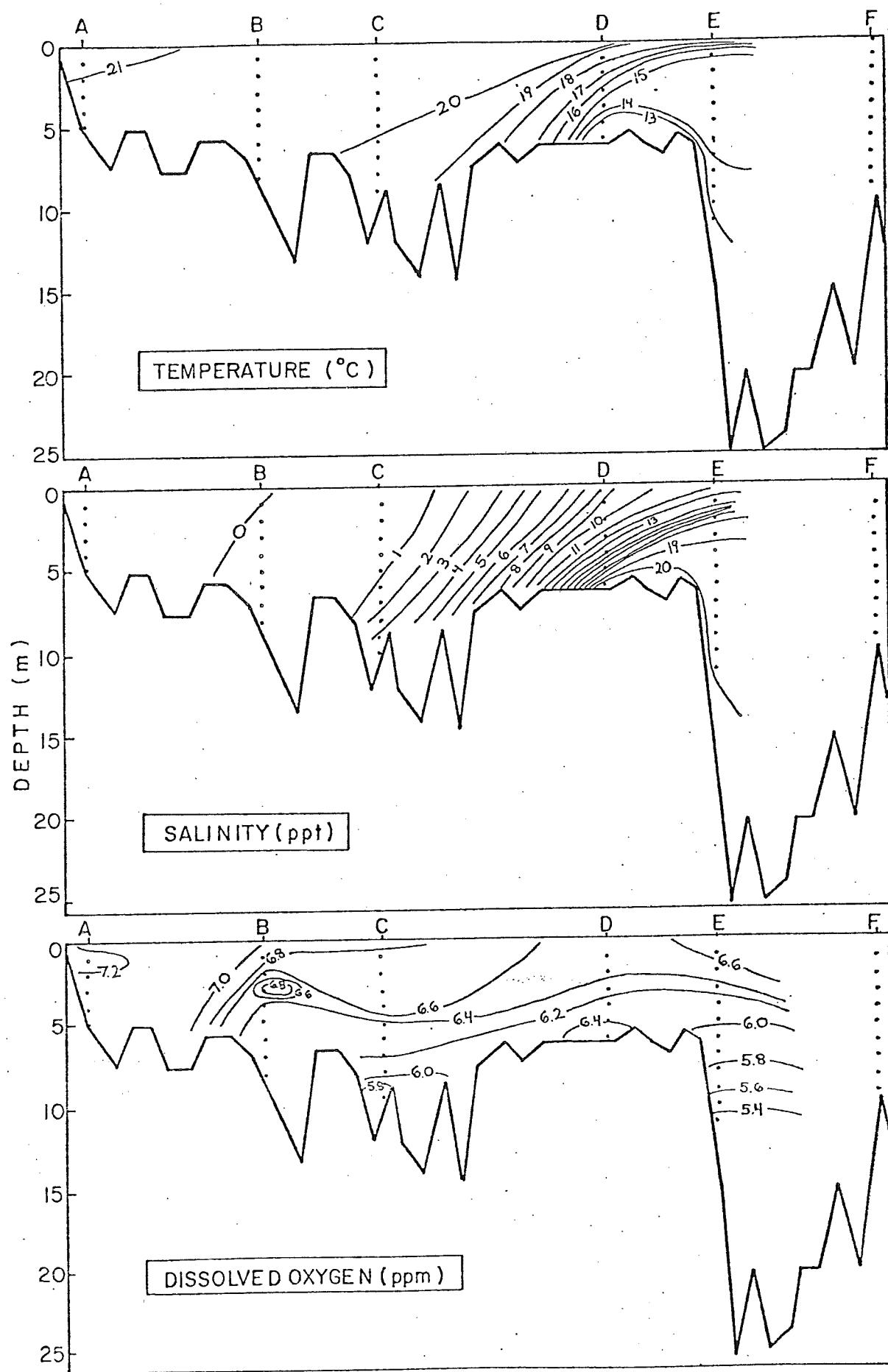
Station-	A	B	C	D	E							
Depth (m)	Temp. °C	Sal. ppt	DO ppm									
0	21.7	0	8.4	22.8	0	8.0	21.8	0.44	8.1	20.0	6.00	7.9
1	21.7	0	8.3	22.2	0	7.8	21.8	0.52	7.6	19.8	6.12	8.0
2	21.6	0	8.4	22.0	0	7.8	21.7	0	7.6	18.2	8.08	8.0
3	21.6	0	8.4	21.8	0	8.1	21.5	0.32	7.6	16.0	15.04	7.9
4	21.8	0	8.4	21.4	0	8.2	21.2	0.44	7.9	14.3	18.36	7.7
5	21.6	0	8.4				21.4	0	7.9	12.6	22.72	7.6
6				21.0	0.60	7.7			11.6	25.96	7.8	12.9
7				20.9	0.28	8.0			11.5	26.00	7.8	12.2
8				20.8	0.88	7.8			11.2	26.36	7.8	12.2
9				20.6	1.76	7.6			11.2	26.76	7.9	12.1
10							19.8	3.40	7.8			12.1
11							19.4	5.04	7.6			11.8
12							19.0	5.80	7.6			11.9
13												25.20
14												8.1
15												
				1645			1615			1515		1445

19 July 1976



Date: 3 August 1976

3 August 1976

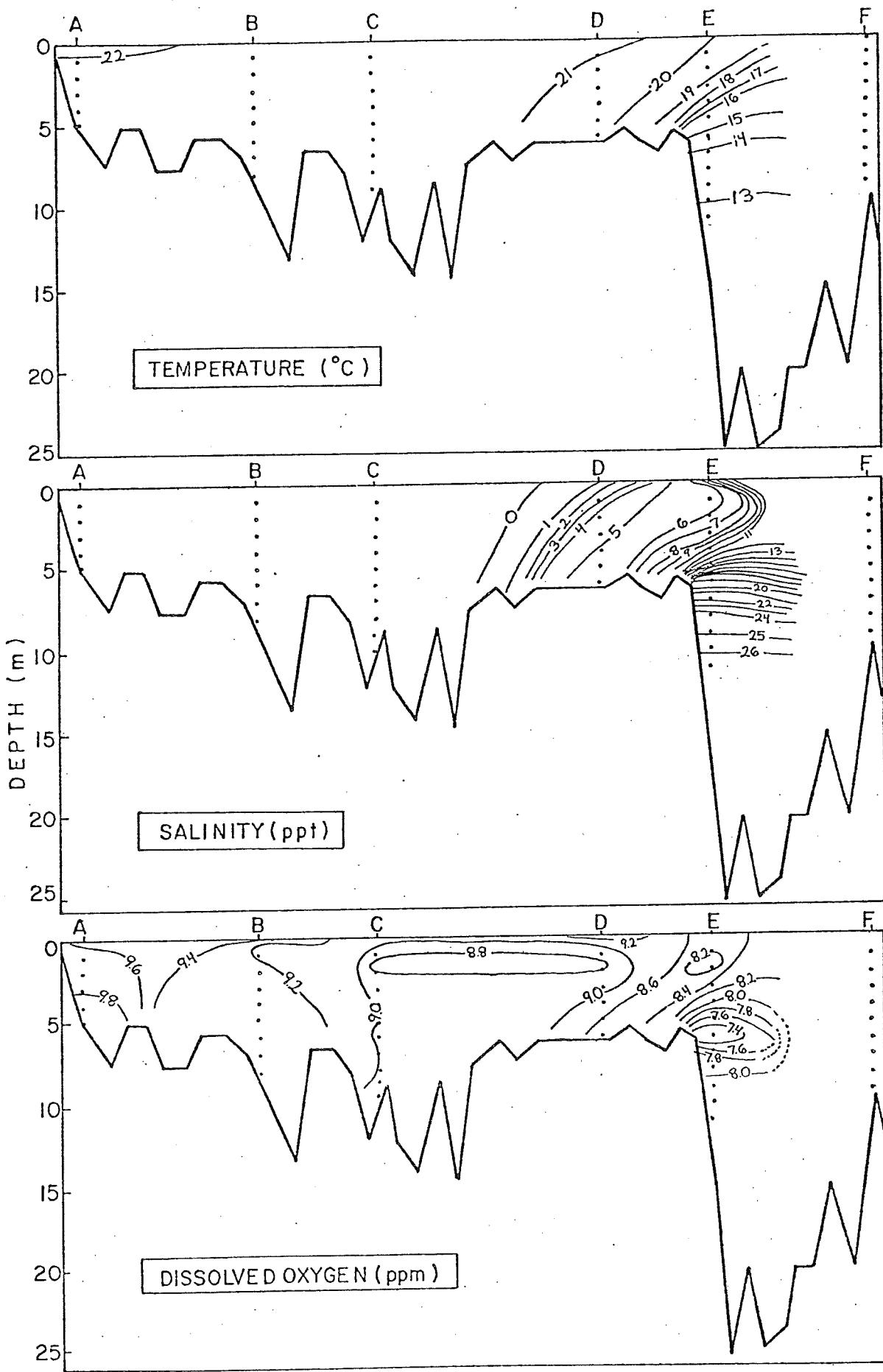


Date: 16 August 1976

Station- Depth (m)	A			B			C			D			E		
	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm									
0	22.0	0	9.6	21.8	0	9.5	22.0	0	9.1	22.1	0.84	9.2	20.5	11.80	8.4
1	21.8	0	9.7	21.7	0	9.2	21.9	0	8.9	21.2	2.20	9.0	20.0	6.40	8.5
2	21.7	0	9.7	21.8	0	9.3	21.7	0	8.8	20.9	4.60	8.8	19.8	6.96	8.2
3	21.8	0	9.7	21.5	0	9.3	21.8	0	8.9	20.8	4.08	9.0	19.6	7.20	8.4
4	21.8	0	9.8				21.8	0	8.9	20.8	4.00	8.7	18.9	8.00	8.1
5							21.9	0	9.0	20.7	5.16	8.7	16.0	11.40	7.8
6							21.8	0	8.9	20.4	4.96	8.6	15.1	19.20	7.4
7							21.7	0	9.1	18.1	5.72	8.9	14.2	21.72	7.8
8							21.6	0	9.0				12.6	23.72	7.9
9							21.7	0	9.1				13.4	24.12	8.0
10							21.7	0	9.1				13.2	25.16	8.1
11													12.6	26.12	8.1
12															
13															
14															
15															

Time: 1400 1317 1255 1225 1130

16 August 1976

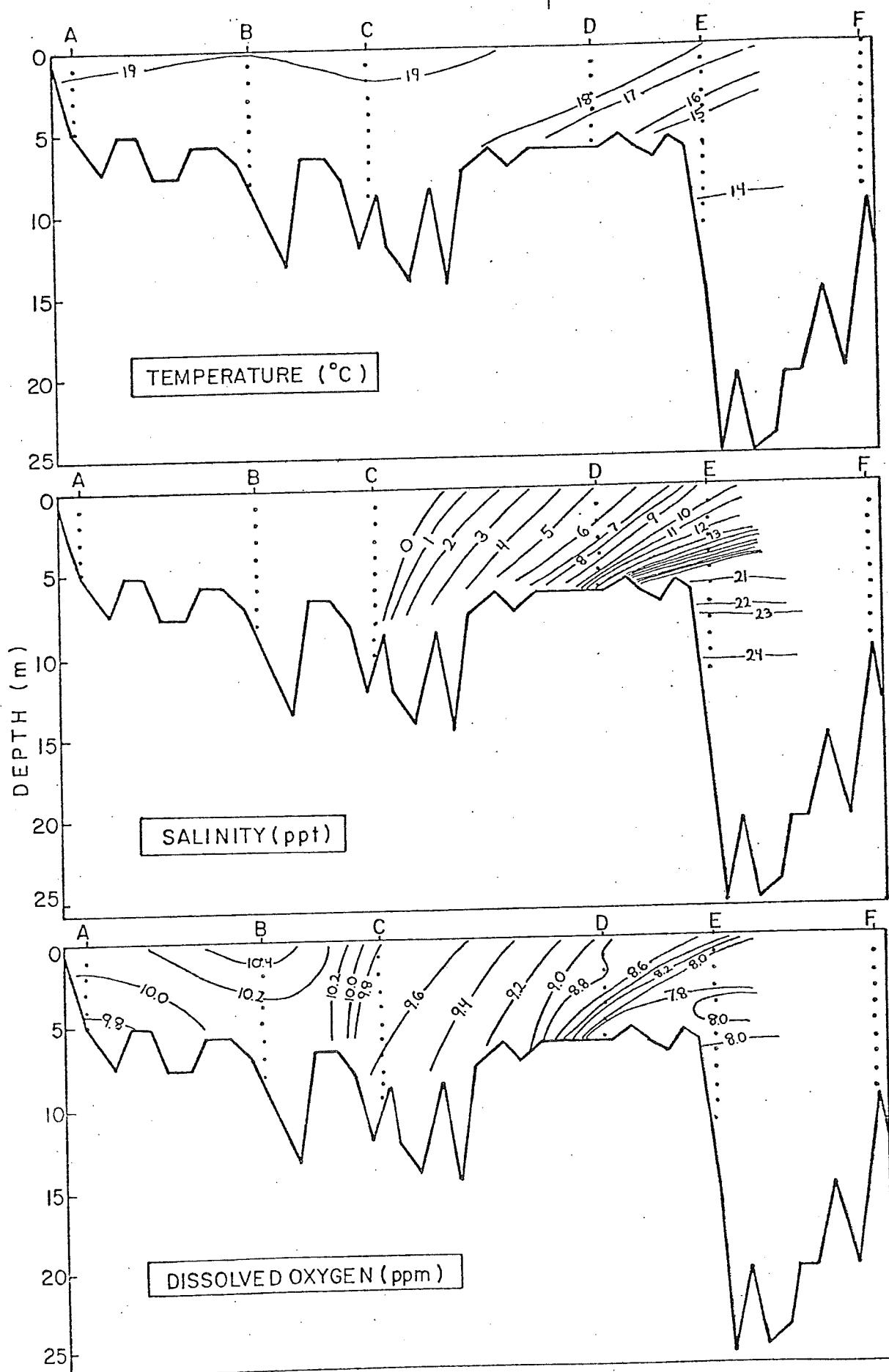


Date: 2 September 1976

Station- Depth (m)	A			B			C			D			E		
	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm
0	19.2	0	10.0	19.0	0	10.5	19.2	0	9.8	18.8	5.20	8.8	18.0	0.20	8.4
1	19.0	0	10.0	19.0	0	10.4	19.2	0	9.7	18.4	5.24	8.6	17.2	10.00	8.0
2	18.9	0	9.9	18.8	0	10.3	19.0	0	9.7	18.3	6.28	8.8	17.0	11.40	7.9
3	18.8	0	9.9	18.8	0	10.3	18.9	0	9.7	18.2	6.40	8.7	16.2	12.72	7.9
4	18.8	0	9.9	18.8	0	10.2	18.9	0	9.7	17.7	7.16	8.3	15.2	17.24	8.1
5	18.7	0	9.7	18.8	0	10.2	18.8	0	9.7	16.8	9.20	7.9	14.8	20.00	8.0
6				18.8	0	10.2	18.9	0	9.7	16.6	12.96	7.6	14.8	21.20	7.9
7							18.9	0	9.6	16.2	13.92	7.5	14.2	21.32	8.2
8							18.9	0	9.7				14.3	23.20	8.1
9							18.8	0	9.6				14.2	23.68	8.1
10							18.9	0	9.6				13.8	23.80	8.1
11							18.8	0	9.6				13.8	24.68	8.0
12							18.9	0	9.6						
13							19.0	0	9.6						
14															
15															

Time: 1545 1610 1455 1415 1350

2 September 1976

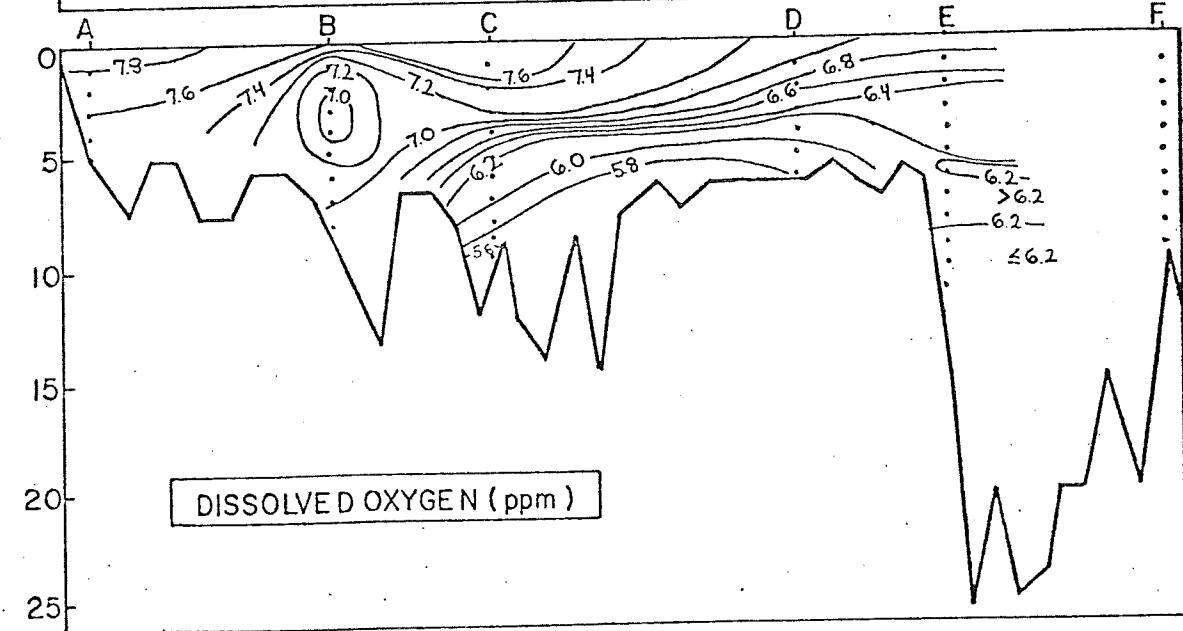
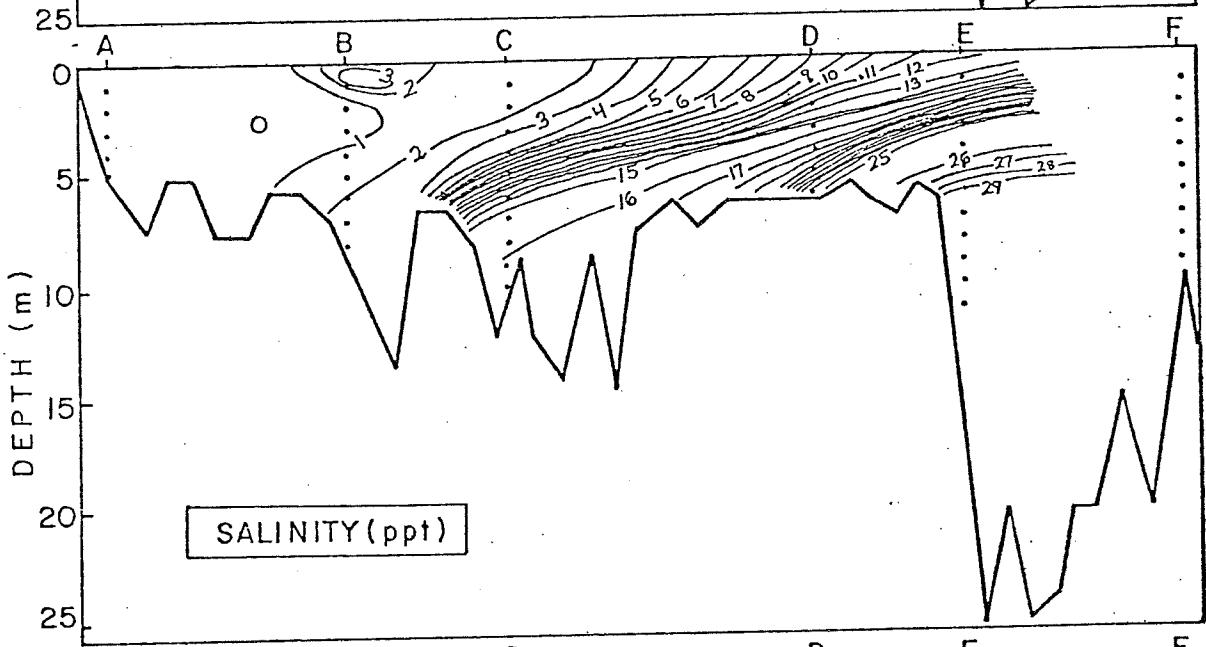
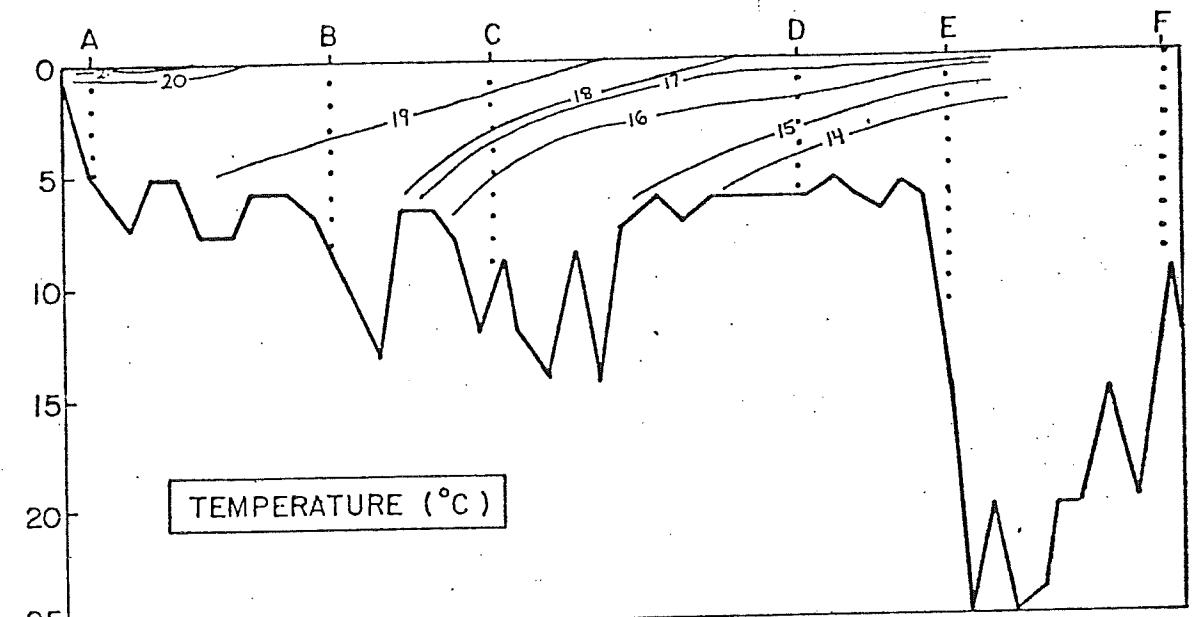


Date: 16 September 1976

Station- Depth (m)	A			B			C			D			E		
	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm	Temp. °C	Sal.	DO ppm
0	21.1	0	7.9	19.8	2.80	7.6	19.7	1.60	7.8	17.6	24.56		17.2	23.72	6.3
1	19.7	0	7.8	19.9	3.20	7.2	19.2	1.36	7.7	16.5	10.16		15.6	12.64	6.8
2	19.4	0	7.7	19.6	0.56	7.2	18.8	1.92	7.6	16.0	12.76		14.2	17.48	6.6
3	19.4	0	7.6	19.0	0.72	7.4	18.3	2.08	7.3	15.6	15.44		13.5	24.28	6.3
4				18.6	1.64	7.4	16.8	3.56	6.8	14.4	16.84		13.6	26.16	6.3
5				18.6	1.92	7.3	16.0	9.24	6.4	13.6	22.84		13.5	26.00	6.3
6				18.4	2.00	7.1	15.7	13.28	6.1	13.8	25.64		13.7	29.56	6.1
7				18.5	1.80	7.0	15.6	15.68	6.1	13.6	26.08		13.5	25.36	6.3
8							15.5	15.68	6.1	13.7	26.28		13.5	25.88	6.3
9							15.4	16.08	5.9	13.6	26.48		13.4	26.68	6.2
10							15.4	16.72	5.8				13.6	26.08	6.2
11							15.3	16.92	5.6				13.4	26.68	6.2
12							15.4	17.04	5.6				13.4	25.92	6.2
13							15.2	17.08	5.6				13.2	27.24	6.2
14															
15															

Time:	1605	1525	1500	1425	1355

09 SEPTEMBER 1970



Date: 13 June 1977

Station- Depth (m)	A			B			C			D			E		
	Temp. °C	Sal. ppt	DO ppm												
0	15.9	0	10.1	16.5	0	9.2	16.0	0	10.2	13.4	6.16	9.3	12.8	10.20	9.6
1	15.7	0	10.1	15.3	0	9.4	15.2	0	10.5	13.6	5.84	9.6	12.8	10.70	9.6
2	15.7	0	10.1	15.3	0	9.6	15.0	0	10.4	13.2	6.36	9.6	12.9	10.80	9.4
3	15.7	0	10.1	15.3	0	9.6	14.9	0	10.4	12.4	9.92	9.2	12.8	11.20	9.4
4	15.7	0	10.1	15.3	0	9.6	14.9	0.28	10.4	11.7	12.52	9.2	12.8	11.10	9.4
5				15.3	0	9.6	15.1	0.40	10.4	11.2	13.48	9.0	12.8	11.20	9.3
6				15.3	0	9.7	15.0	0.44	10.4	11.0	16.48	8.7	12.7	11.10	9.2
7				15.4	0	9.6	15.1	0.52	10.4	10.9	16.00	8.8	12.7	11.20	9.1
8				15.4	0	9.6	15.0	0.56	10.3				12.7	11.60	9.3
9				15.3	0	9.6	14.5	1.72	10.3				12.3	12.30	9.2
10				15.3	0	9.6	13.3	7.12	10.1				11.7	14.20	9.2
11				—	—	—	—	—	—				—	—	—
12				—	—	—	—	—	—				—	—	—
13	15.2	0	9.6	12.8	7.68	9.8							10.2	16.60	9.0
14	—	—	—	—	—	—							—	—	—
15	15.2	0	9.6	12.8	8.28	9.4							9.9	18.60	9.1

20

Time: 1345

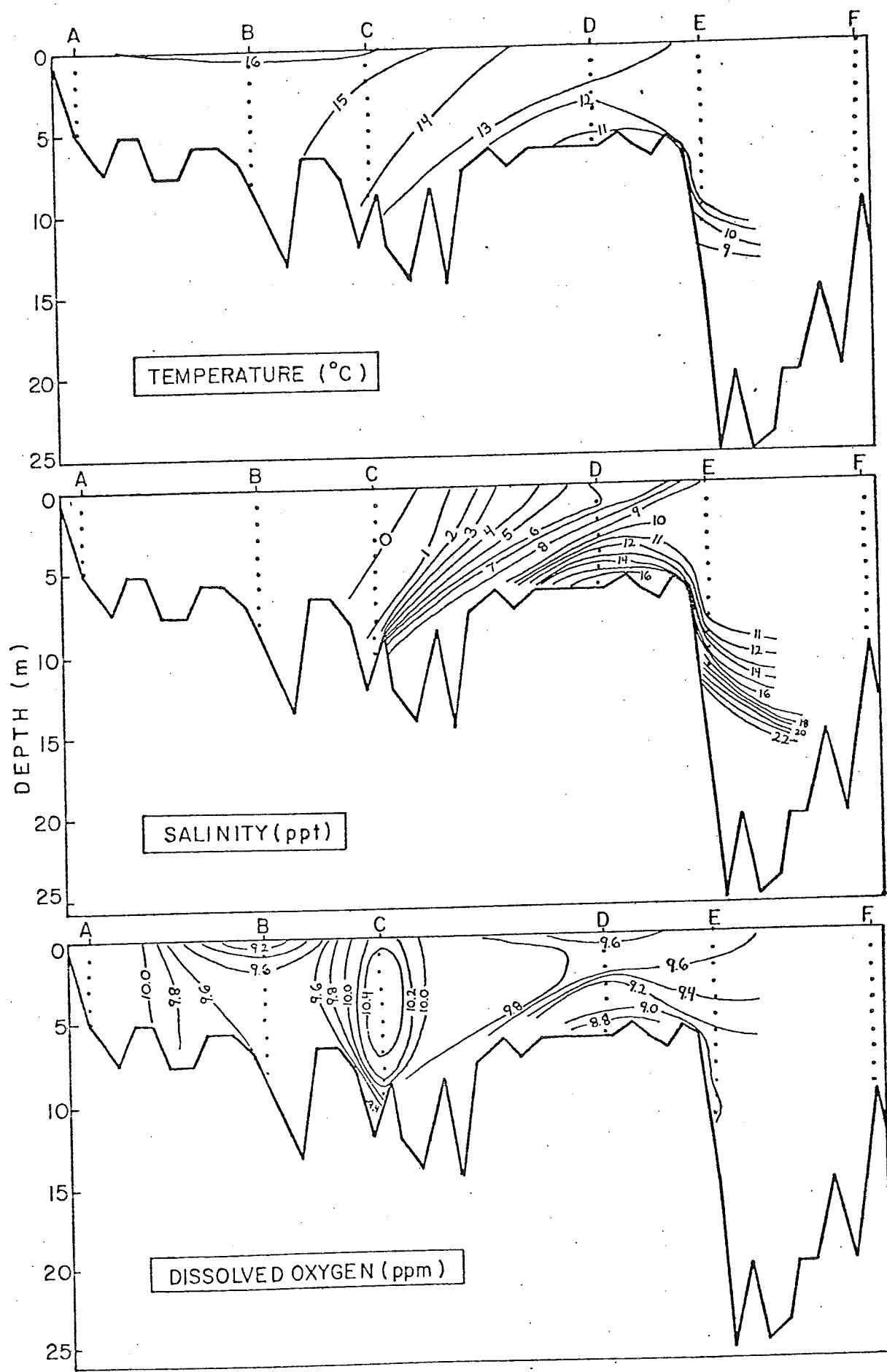
1300

1130

1150

100

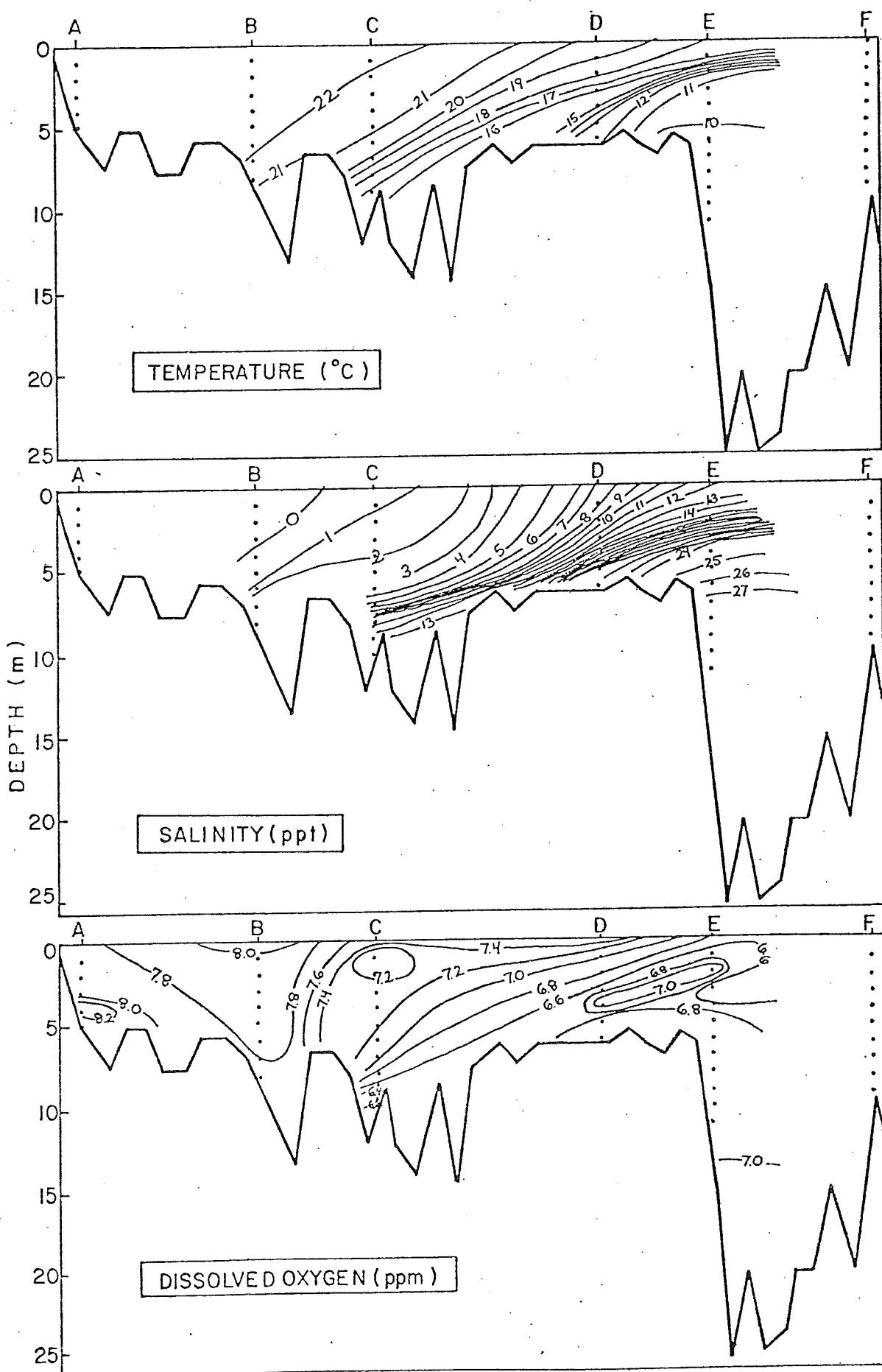
13 June 1977



Date: 11 July 1977

Station-	A			B			C			D			E		
	Depth (m)	Temp. °C	Sal. ppt	DO ppm	Temp. °C	Sal. ppt									
0	22.6	0	7.8	22.8	0	8.0	22.6	0.88	7.4	19.8	7.76	7.6	17.9	12.00	6.7
1	22.4	0	7.8	22.3	0	8.0	22.4	0.96	7.1	19.1	8.76	7.0	17.7	12.08	6.6
2	22.4	0	7.8	22.5	0	8.0	21.8	1.60	7.0	18.2	10.52	6.9	12.2	15.16	7.0
3	22.3	0	7.8	22.4	0	8.0	21.9	1.60	7.2	16.9	12.88	6.6	10.8	24.80	6.6
4	22.1	0	8.2	22.4	0	8.0	21.5	1.84	7.2	15.6	15.08	7.1	10.8	24.80	6.6
5	22.1	0	8.1	22.6	0.32	8.0	21.5	2.60	7.3	12.8	20.64	6.8	-	-	-
6				22.6	0.36	7.6	20.7	3.56	7.2	12.5	21.12	6.8	10.3	25.52	6.8
7				22.3	0.80	7.7	20.1	4.76	7.2	11.4	23.20	6.7	-	-	-
8				20.2	4.84	7.4	18.2	8.88	6.9	11.1	24.10	6.7	-	-	-
9				19.5	6.84	6.9	17.2	11.40	6.6	10.9	24.52	6.8	9.8	26.44	6.8
10							16.3	13.24	6.4	-	-	-	-	-	-
11							16.1	13.88	6.2	-	-	-	-	-	-
12							15.9	14.24	6.2	9.6	27.04	6.9			
13							15.5	14.44	6.3	-	-	-	-	-	-
14							15.2	13.24	6.2	-	-	-	-	-	-
15										9.4	27.12	7.0			
17															
Time:	1445			1400			1540			1620			1645		

11 July 1977

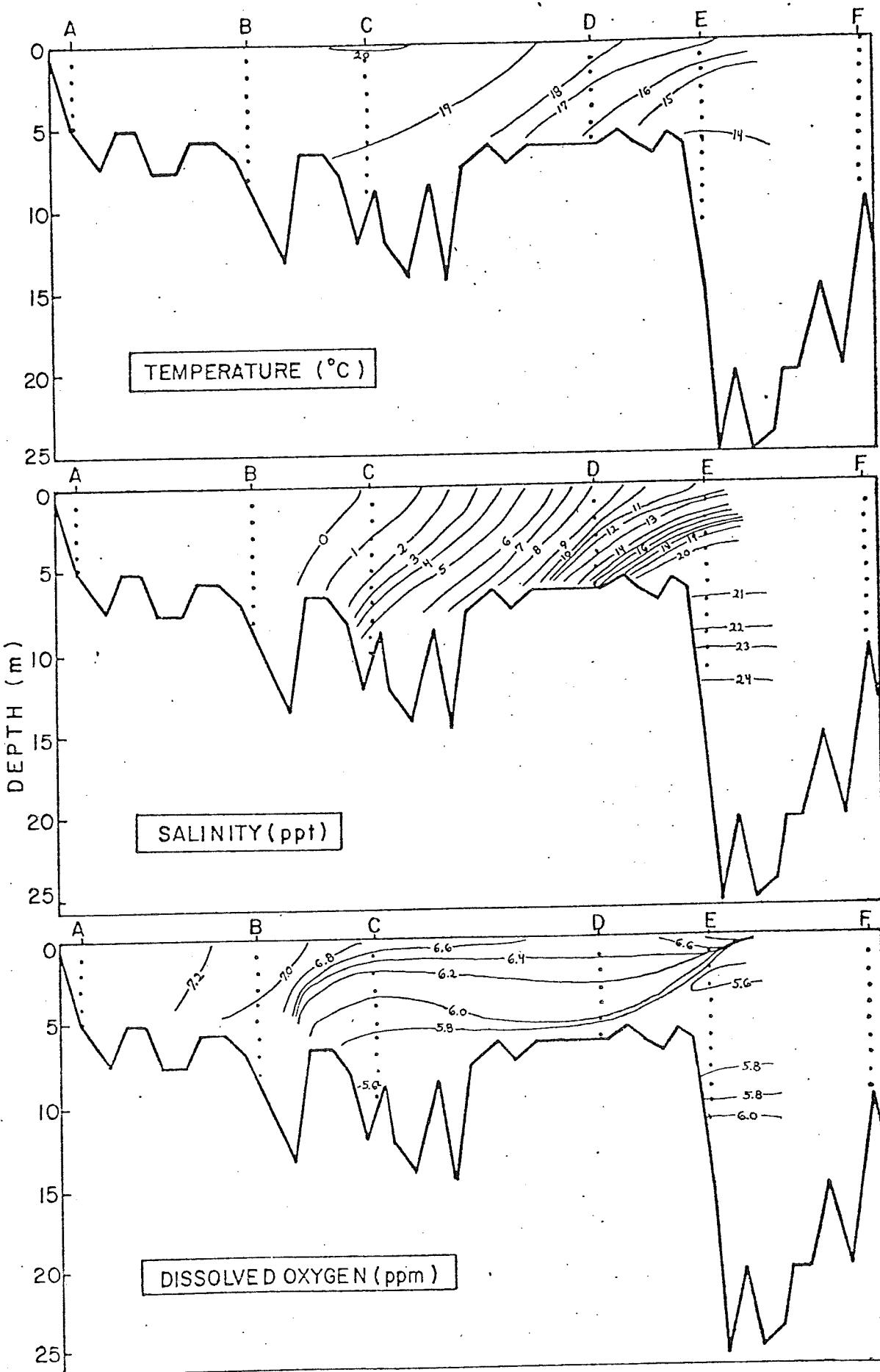


Date: 23 August 1977

Station- Depth (m)	A			B			C			D			E		
	Temp. °C	Sal. ppt	DO ppm												
0	19.6	0	7.3	19.8	0	7.3	20.0	0.60	7.2	18.4	8.32	7.0	17.3	11.92	6.3
1	19.5	0	7.3	19.6	0	7.2	20.0	0.56	7.0	18.2	8.60	6.6	16.2	13.80	6.8
2	19.4	0	7.3	19.7	0	7.2	19.8	0.68	6.8	17.6	9.76	6.2	15.6	15.40	5.8
3	9.4	0	7.3				19.7	1.00	6.8	16.9	11.28	6.0	14.3	19.72	5.6
4							19.6	1.60	6.6	16.6	12.12	5.9	14.0	20.48	5.7
5							19.4	1.84	6.6	16.4	13.12	5.8	14.2	20.92	5.7
6							19.2	2.60	6.5	15.4	16.04	5.6	14.0	20.84	5.7
7							18.9	4.44	6.2	15.1	17.04	5.5	14.0	21.08	5.7
8							18.9	4.76	6.2				13.8	21.52	5.7
9							18.8	5.08	6.1				13.6	22.48	5.8
10							18.4	5.20	6.1				13.3	23.20	5.8
11							18.6	5.28	6.0				13.1	23.40	5.9
12													13.1	24.00	6.0
13													13.1	24.00	6.0
14													13.0	24.16	6.0
15															

Time: 1542 1518 1500 1430 1405

23 August 1977

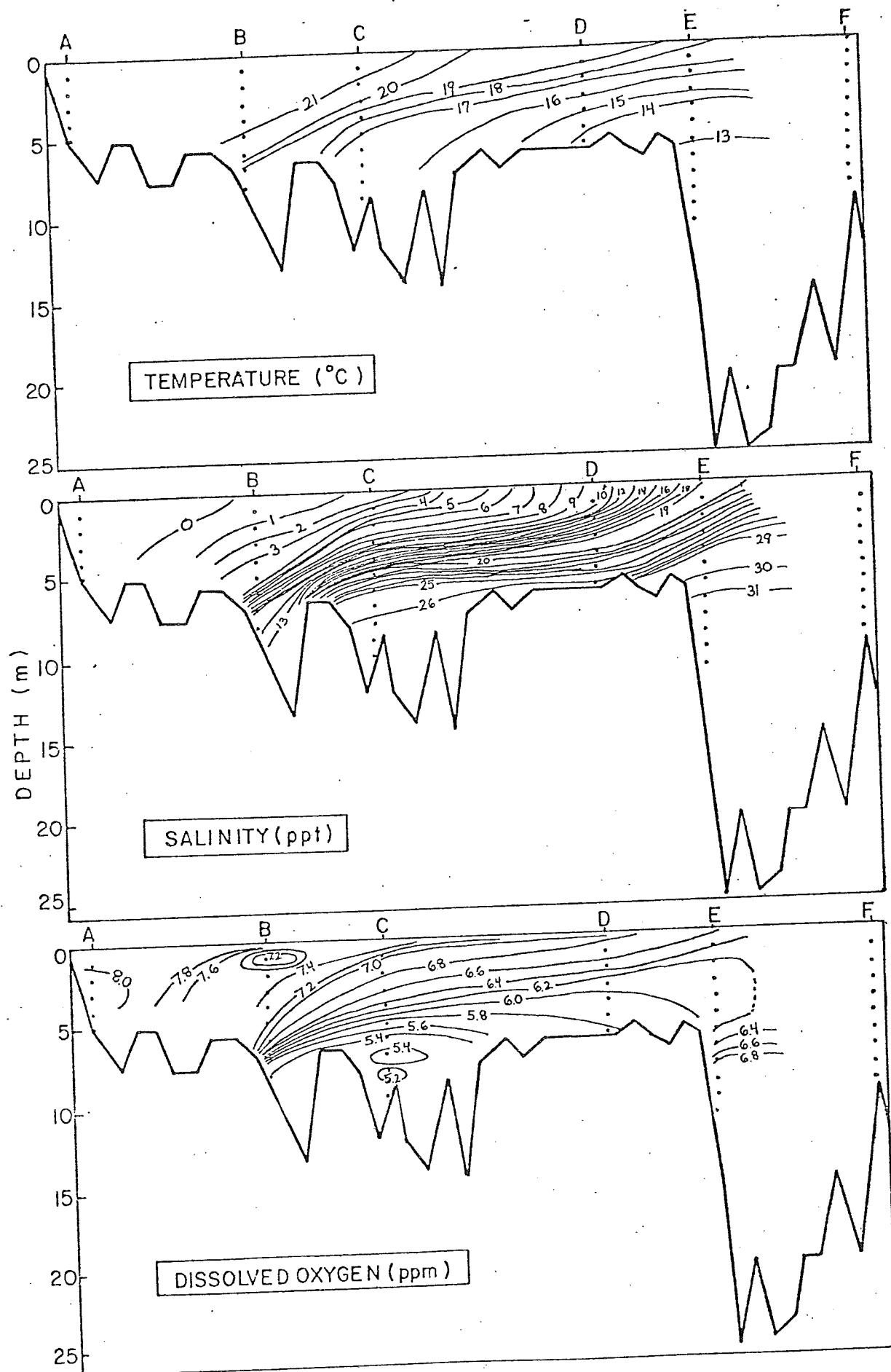


Date: 6 September 1977

Station- Depth (m)	A			B			C			D			E		
	Temp. °C	Sal. ppt	DO ppm												
0	21.8	0	7.9	22.0	0.76	7.8	21.5	1.96	7.6	19.4	10.68	7.0	18.2	13.80	6.6
1	21.6	0	7.9	21.4	0.92	7.2	21.1	3.28	7.0	19.2	11.04	6.7	17.2	14.24	6.4
2	21.6	0	8.1	21.3	1.68	7.5	20.9	6.36	6.8	18.0	13.56	6.6	16.9	16.32	6.2
3				21.3	2.24	7.2	20.6	8.16	6.6	16.2	17.80	6.2	15.3	20.00	6.0
4				21.0	3.44	7.3	19.2	14.64	6.4	15.3	20.28	5.8	14.0	23.56	6.1
5				20.7	3.92	7.2	17.7	20.70	5.7	14.2	23.24	5.9	13.7	24.12	6.1
6				20.2	6.80	6.6	16.8	25.14	5.3	13.6	24.56	5.9	13.2	25.84	6.3
7				18.6	11.44	5.6	16.6	25.92	5.4	13.4	25.00	6.0	12.9	25.88	6.4
8				18.2	12.68	5.4	16.5	26.16	5.2				12.7	26.36	6.8
9				18.1	12.84	5.3	16.4	26.52	5.5				12.6	26.52	6.8
10				18.2	12.88	5.4	16.4	26.70	5.3				12.7	26.68	6.7
11				18.2	13.00	5.2							12.6	26.80	6.7
12															
13															
14															
15															

Time:	1505	1438	1415	1350	1325
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6 September 1977



Date: 20 September 1977

Station-	A			B			C			D			E		
	Depth (m)	Temp. °C	Sal. ppt	DO ppm	Temp. °C	Sal. ppt									
0	15.4	0	9.2	15.8	0.36	9.2	15.5	0.60	8.7	14.2	7.80	8.2	13.6	13.64	6.6
1	15.4	0	9.2	15.8	0.40	9.1	15.5	0.36	8.4	14.3	7.80	8.0	13.5	13.24	6.6
2							15.5	1.36	8.2	14.4	9.24	7.6	13.2	16.60	6.2
3							15.5	1.36	8.4	14.0	9.36	7.4	12.9	19.16	6.2
4							15.4	1.80	8.2	13.8	12.16	7.2	12.8	20.16	6.0
5							15.4	2.24	8.3	13.4	13.84	6.8	12.7	21.76	6.2
6							15.4	2.56	8.0	13.4	16.32	6.6	12.2	22.00	6.2
7							15.4	2.76	8.1	13.0	17.56	6.0	12.3	25.08	6.2
8							15.2	3.12	8.0				12.3	25.64	6.2
9							15.2	3.92	7.8				12.2	25.20	6.3
10							15.2	4.84	7.7				12.2	25.64	6.4
11							15.0	5.64	7.5				12.0	26.00	6.4
12							15.0	5.80	7.5				12.2	25.40	6.3
13							15.0	5.96	7.5						
14															
15															

Time: 1445

1355

1320

1245