

Louisiana Universities Marine Consortium
Data Report No. 8

Hydrographic, Biological, and Nutrient
Characteristics of the Water Column
on the Louisiana Shelf,
July, 1987

by

Nancy N. Rabalais¹, R. Eugene Turner²,
William J. Wiseman, Jr.³, and Donald F. Boesch¹

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Louisiana Universities Marine Consortium
Chauvin, Louisiana 70344

¹Louisiana Universities Marine Consortium, Chauvin, Louisiana 70344

²Coastal Ecology Institute, Center for Wetland Resources, Louisiana State University, Baton Rouge, Louisiana 70803

³Coastal Studies Institute and Department of Geology, Louisiana State University, Baton Rouge, Louisiana 70803

Introduction

Beginning in 1985, several research cruises were conducted by our research team to assess the spatial and temporal extent, intensity, and potential causes of oxygen depletion in the northern Gulf of Mexico. Hypoxic (<2.0 mg/l O₂) bottom waters were studied along two transects in and near the Mississippi River Delta Bight in 1985 and 1986 (Rabalais et al., 1985a, 1989a). In addition, shelf-wide cruises were conducted from the Mississippi River to the Texas border during July of both years (Rabalais et al., 1986b, 1989b). The intent of these cruises was to provide comparative information on the temporal variability of oxygen-depleted bottom waters on the Louisiana shelf.

The bi-weekly cruises along the southeastern Louisiana shelf were discontinued in 1987. A shelf-wide cruise, however, was conducted in July, 1987 to continue the studies of temporal variability on the Louisiana shelf. The cruise was conducted on the R/V *Pelican* from July 1 through July 5.

Methods

A SeaBird (91105/11105) CTD system was used to obtain water column profiles at all stations. The CTD was outfitted with a SBE 4-02/0 (S/N 264) conductivity sensor, a SBE 3-01/F (S/N 657) oceanographic thermometer, a Paroscientific Digitiquartz Model 2900-AS-002 (S/N 25512) depth sensor, and a SBE 13-01 (S/N 106) dissolved oxygen meter. All data were transmitted to the on board deck unit at a rate of one observation per second and stored on floppy disks through a micro-computer interface (GPIB, National Instruments, Inc.).

The CTD unit was mounted on a rosette sampler fitted with eleven 5-liter Niskin bottles for recovering water samples at discrete depths and a horizontally mounted Niskin bottle that triggered upon contact with the bottom. Water samples were collected primarily from the surface and bottom for routine analyses of chlorophyll *a*, phaeopigments, and nutrients. Water samples were collected to check the conductivity sensor against water of a known salinity. No correction was necessary for the conductivity measurements. Selected samples for dissolved oxygen analysis were collected from surface and bottom waters and analyzed according to a modified Winkler procedure (Strickland and Parsons, 1972).

Samples for nutrients were frozen on board ship for later analysis in the laboratory. Nitrogen and phosphorus were analyzed according to methods described in EPA publication EPA 600/4-79-020 (1979), method 350.1 for ammonia-N, method 353.2 for nitrate/nitrite-N, and method 365.1 for phosphate-P. Silicate was analyzed according to Technicon Industrial method 186-72 W/B (1977). Water for chlorophyll analysis was filtered on board ship through glass fiber filters which were then fixed in 90% aqueous acetone and held at 4°C, then analyzed within 24 hours on board ship. Analysis for chlorophyll and phaeopigment concentrations followed the fluorometric methods outlined in Strickland and Parsons (1972).

Results

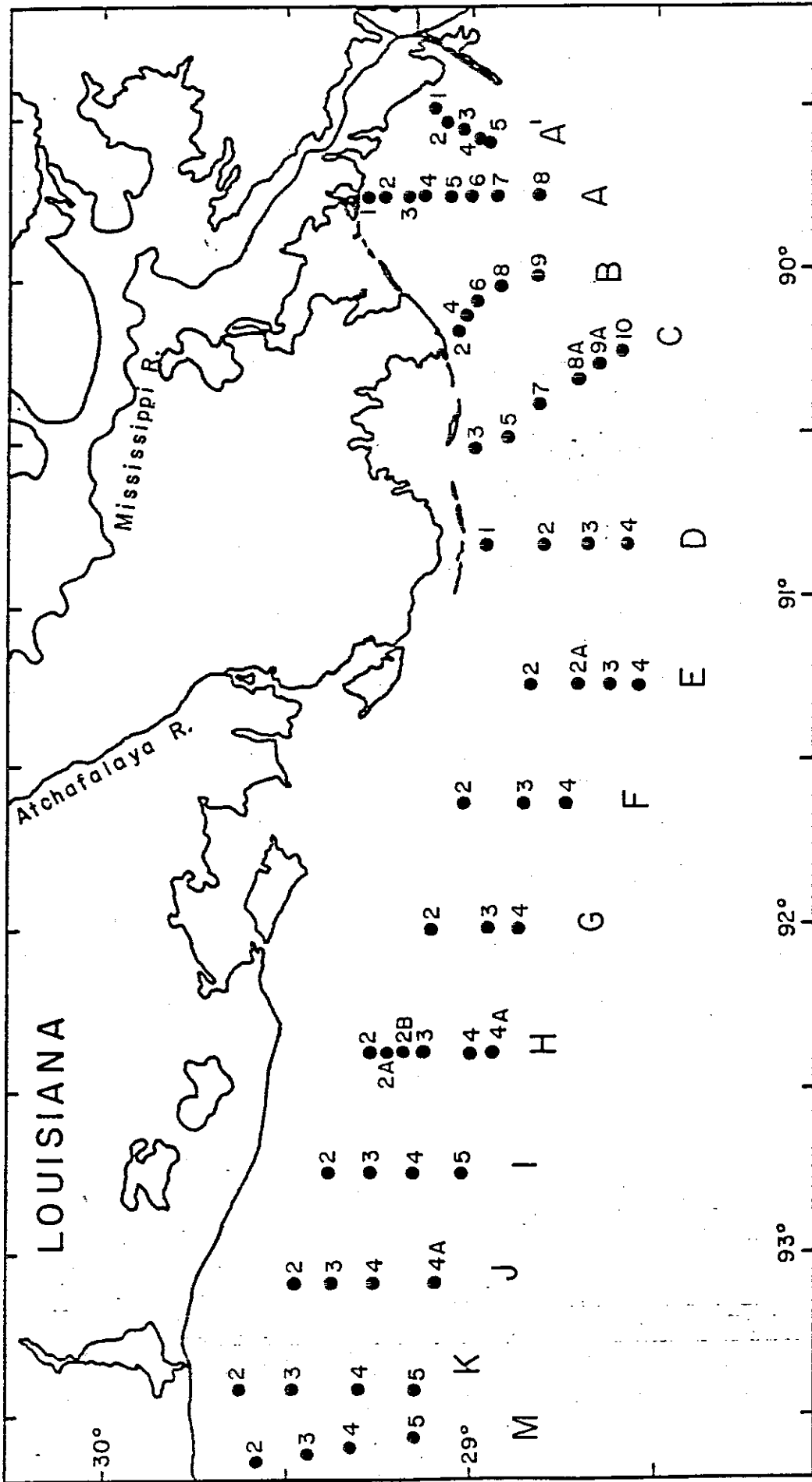
Selected parameters (dissolved oxygen and sigma-t) are illustrated for each transect. These and additional parameters are contoured for the entire shelf. Hydrographic, chlorophyll, and nutrient data for the cruises follow the figures.

Acknowledgements

Funds for this research were provided by the National Oceanic and Atmospheric Administration, Ocean Assessments Division, through the Louisiana Sea Grant Program and by the Louisiana Universities Marine Consortium. We acknowledge the help of L. Smith, G. Chmura, L. Bonvillain, and the captain and crew of the R/V *Pelican*. P. Swarzenski helped with the graphics.

Literature Cited

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List of Transects

- A' Off Tiger Pass towards Southwest Pass (named Z in 1988)
- A Off Barataria
- B Off Belle Pass, Port Fourchon
- C Off Cat Island Pass, Cocodrie
- D Off Isles Dernieres, Ship Shoal
- E Off Point au Fer Island, Fourleague Bay
- F Off Atchafalaya Bay
- G Off Vermilion Bay, Marsh Island
- H Off White Lake
- I Off Grand Lake
- J Off Creole
- K Off Cameron
- M Off Sabine

Transect A'

Off Tiger Pass towards Southwest Pass
(named Z in 1988)

<u>Station</u>	<u>Depth (ft)</u>	<u>Depth (m)</u>	<u>Latitude</u>	<u>Longitude</u>
1	15	4.6	29°08.00'N	89°28.50'W
2	30	9.1	29°05.50'N	89°30.00'W
3	48	14.6	29°02.00'N	89°32.00'W
4	90	27.4	28°59.00'N	89°34.00'W
5	180	54.8	28°57.00'N	89°34.50'W

Transect A
Off Barataria Bay

<u>Station</u>	<u>Depth (ft)</u>	<u>Depth (m)</u>	<u>Latitude</u>	<u>Longitude</u>
1	16	4.8	29°17.40'N	89°45.00'W
2	34	10.2	29°14.35'N	89°45.00'W
3	50	15.0	29°10.70'N	89°45.00'W
4	66	19.8	29°08.00'N	89°45.00'W
5	99	29.7	29°04.20'N	89°45.00'W
6	132	39.6	29°00.50'N	89°45.00'W
7	164	49.2	28°56.50'N	89°45.00'W
8	210	63.0	28°50.00'N	89°45.00'W

Transect B

Off Belle Pass, Port Fourchon

<u>Station</u>	<u>Depth (ft)</u>	<u>Depth (m)</u>	<u>Latitude</u>	<u>Longitude</u>
1	24-25	7.3	29°04.60'N	90°12.47'W
2 Chevron B.M. 30	30	9.0	29°04.30'N	90°11.41'W
4 Chevron GI 37Z	52.5	15.8	29°01.65'N	90°07.25'W
6	69.5	20.8	28°59.60'N	90°04.60'W
8	100.5	30.0	28°55.45'N	90°01.90'W
9	132	40.0	28°50.00'N	90°00.00'W
10	162	49.1	28°46.00'N	89°56.00'W

Transect C
Off Cat Island Pass, Cocodrie

<u>Station</u>	<u>Depth (ft)</u>	<u>Depth (m)</u>	<u>Latitude</u>	<u>Longitude</u>
1	1.8	5.5	29°03.40'N	90°31.90'W
2	25.5	7.6	29°01.20'N	90°29.67'W
3	35	10.6	28°59.44'N	90°31.25'W
4	42.5	12.8	28°57.00'W	90°31.46'W
5 KM-ST-34 A & B	51	15.5	28°54.88'N	90°29.35'W
6 Union ST-53 A & Aux	62	19.2	28°51.44'N	90°27.68'W
6A Union-ST-53 B	62	19.2	28°50.41'N	90°26.03'W
7 Exxon ST-54 A	66	20.1	28°49.93'N	90°23.53'W
8	80	24.4	28°47.30'N	90°16.60'W
8A	82	24.6	28°44.00'N	90°19.50'W
9 Odeco ST 86-3	97.5	29.2	28°45.50'N	90°14.00'W
9A	98	29.4	28°40.50'N	90°16.50'W
10	146	43.8	28°36.60'N	90°14.00'W
11	165	49.5	28°35.20'N	90°12.20'W

Transect D

Off Isles Desnieres, Ship Shoal

<u>Station</u>	<u>Depth (ft)</u>	<u>Depth (m)</u>	<u>Latitude</u>	<u>Longitude</u>
1	24	7.3	28°59.00'N	90°50.00'W
2	43.5	13.2	28°50.50'N	90°50.00'W
3	54	16.4	28°43.00'N	90°50.00'W
4	60	18.2	28°36.50'N	90°50.00'W

Transect E

Off Point au Fer Island, Fourleague Bay

<u>Station</u>	<u>Depth (ft)</u>	<u>Depth (m)</u>	<u>Latitude</u>	<u>Longitude</u>
1	18	5.4	28°58.00'N	91°15.00'W
2	21	6.3	28°51.50'N	91°15.00'W
2A	48	14.6	28°44.50'N	91°15.00'W
3	66	20.0	28°39.50'N	91°15.00'W
4	96	28.8	28°35.00'N	91°15.00'W
5	120	36.0	28°29.00'N	91°15.00'W

Transect F
Off Atchafalaya Bay

<u>Station</u>	<u>Depth (ft)</u>	<u>Depth (m)</u>	<u>Latitude</u>	<u>Longitude</u>
1	19.5	5.9	29°11.00'N	91°37.00'W
2	27	8.2	29°03.00'N	91°37.00'W
3	60	18.2	28°53.00'N	91°37.00'W
4	59	21.0	28°47.00'N	91°37.00'W

Transect G

Off Vermilion Bay, Marsh Island

<u>Station</u>	<u>Depth (ft)</u>	<u>Depth (m)</u>	<u>Latitude</u>	<u>Longitude</u>
1	24	7.2	29°15.50'N	92°00.00'W
2	30	9.0	29°08.00'N	92°00.00'W
3	60	18.0	28°59.00'N	92°00.00'W
4	81	24.3	28°54.00'N	92°00.00'W
5	99	29.7	28°47.50'N	92°00.00'W

Transect H
Off White Lake

<u>Station</u>	<u>Depth (ft)</u>	<u>Depth (m)</u>	<u>Latitude</u>	<u>Longitude</u>
1	28.5	8.7	29°24.50'N	92°23.00'W
2	24	7.3	29°18.50'N	92°23.00'W
2A	24	7.3	29°15.20'N	92°23.00'W
3	46.5	14.2	29°09.50'N	92°23.00'W
4	72	21.9	29°02.00'N	92°23.00'W
4A	79	23.9	28°58.40'N	92°23.00'W
5	93	28.3	28°54.50'N	92°23.00'W

Transect I
Off Grand Lake

<u>Station</u>	<u>Depth (ft)</u>	<u>Depth (m)</u>	<u>Latitude</u>	<u>Longitude</u>
1	34.5	40.0	29°32.00'N	92°45.00'W
2	48	14.4	29°24.50'N	92°45.00'W
3	54	16.2	29°17.70'N	92°45.00'W
4	60	18.0	29°10.50'N	92°45.00'W
5	81	24.3	29°03.00'N	92°45.00'W

Transect J
Off Creole

<u>Station</u>	<u>Depth (ft)</u>	<u>Depth (m)</u>	<u>Latitude</u>	<u>Longitude</u>
2	42	12.8	29°30.50'N	93°05.00'W
3	48	14.6	29°23.50'N	93°05.00'W
4	54	16.4	29°17.50'N	93°05.00'W
4A	55	18.0	29°12.30'N	93°05.00'W
5	60	18.3	29°07.00'N	93°05.00'W
6	78	23.8	28°58.00'N	93°05.00'W

Transect K
Off Cameron

<u>Station</u>	<u>Depth (ft)</u>	<u>Depth (m)</u>	<u>Latitude</u>	<u>Longitude</u>
2	33	9.9	29°38.50'N	93°25.00'N
3	33.6	10.1	29°29.30'N	93°25.00'W
4	48	14.4	29°19.50'N	93°25.00'W
4A	47	14.0	29°14.50'N	93°33.50'W
5	60	18.0	29°10.00'N	93°25.00'W

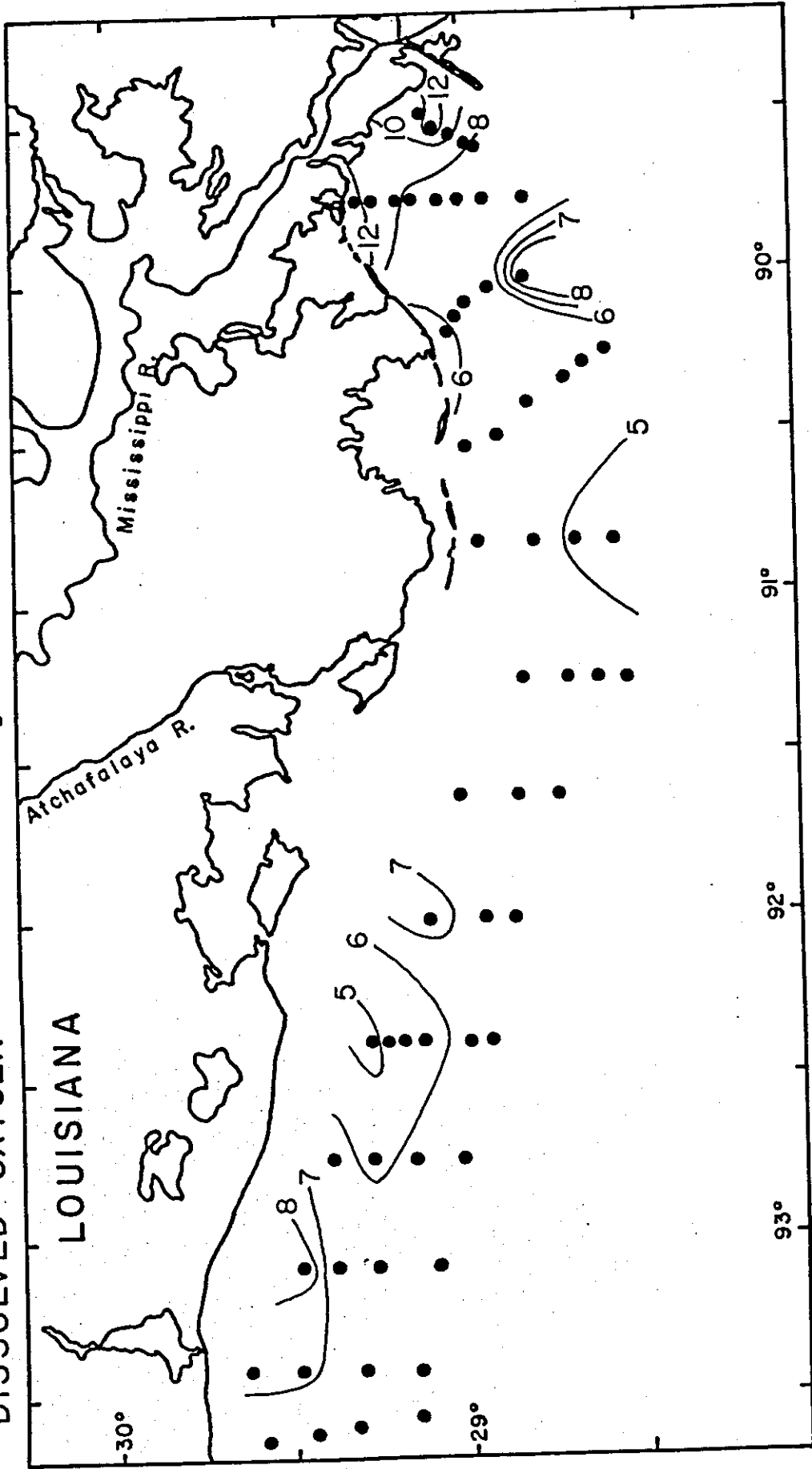
Transect M

Off Sabine

<u>Station</u>	<u>Depth (ft)</u>	<u>Depth (m)</u>	<u>Latitude</u>	<u>Longitude</u>
2	36	10.8	29°35.80'N	93°37.75'W
3	39	11.7	29°27.00'N	93°36.20'W
4	36	10.8	29°20.00'N	93°34.70'W
5	60	18.0	29°09.50'N	93°32.50'W

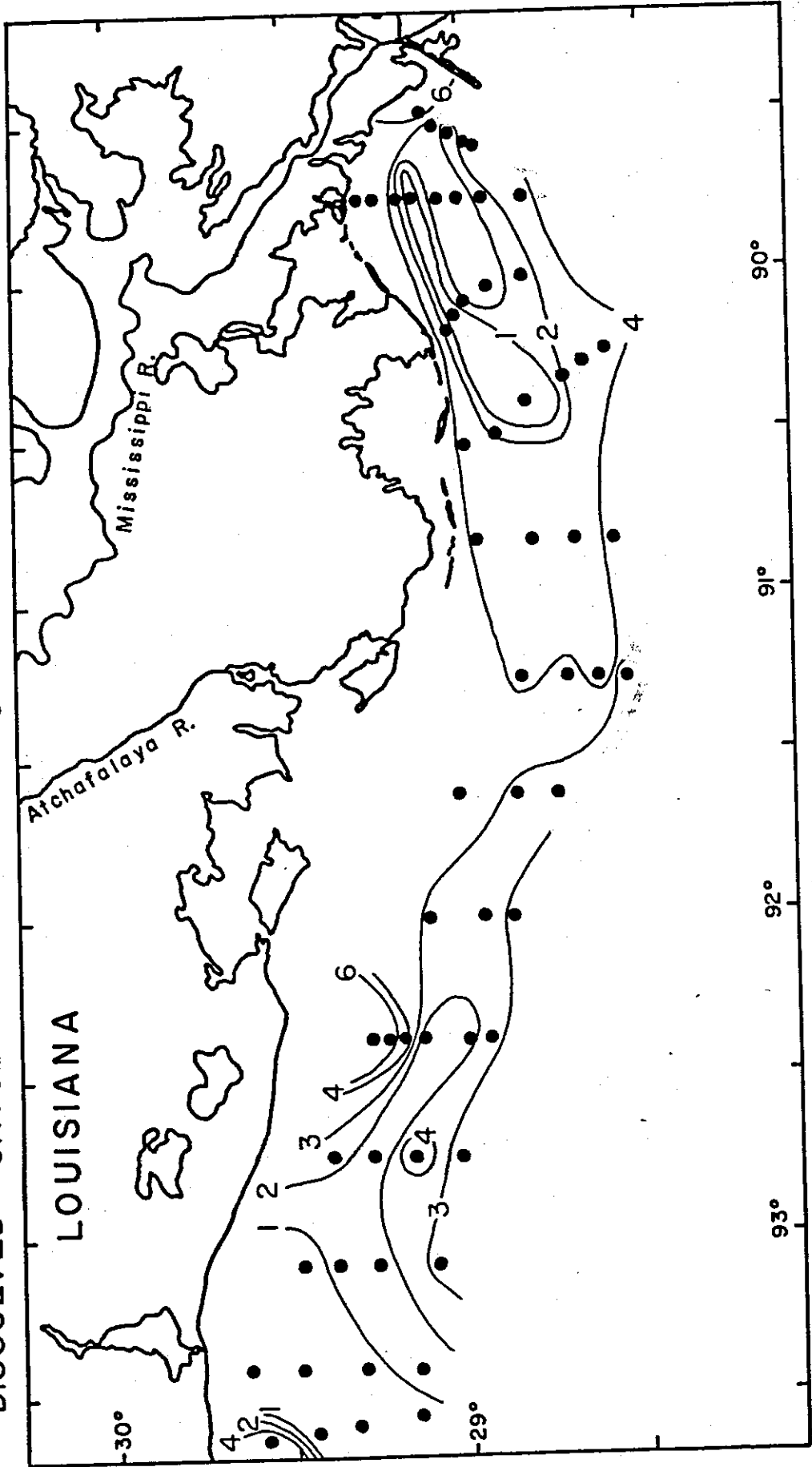
7/1-5/87

DISSOLVED OXYGEN - SURFACE (mg/l)



7/1-5/87

DISSOLVED OXYGEN - BOTTOM (mg/l)



LOUISIANA

30°

4

2

1

2

3

4

6

29°

93°

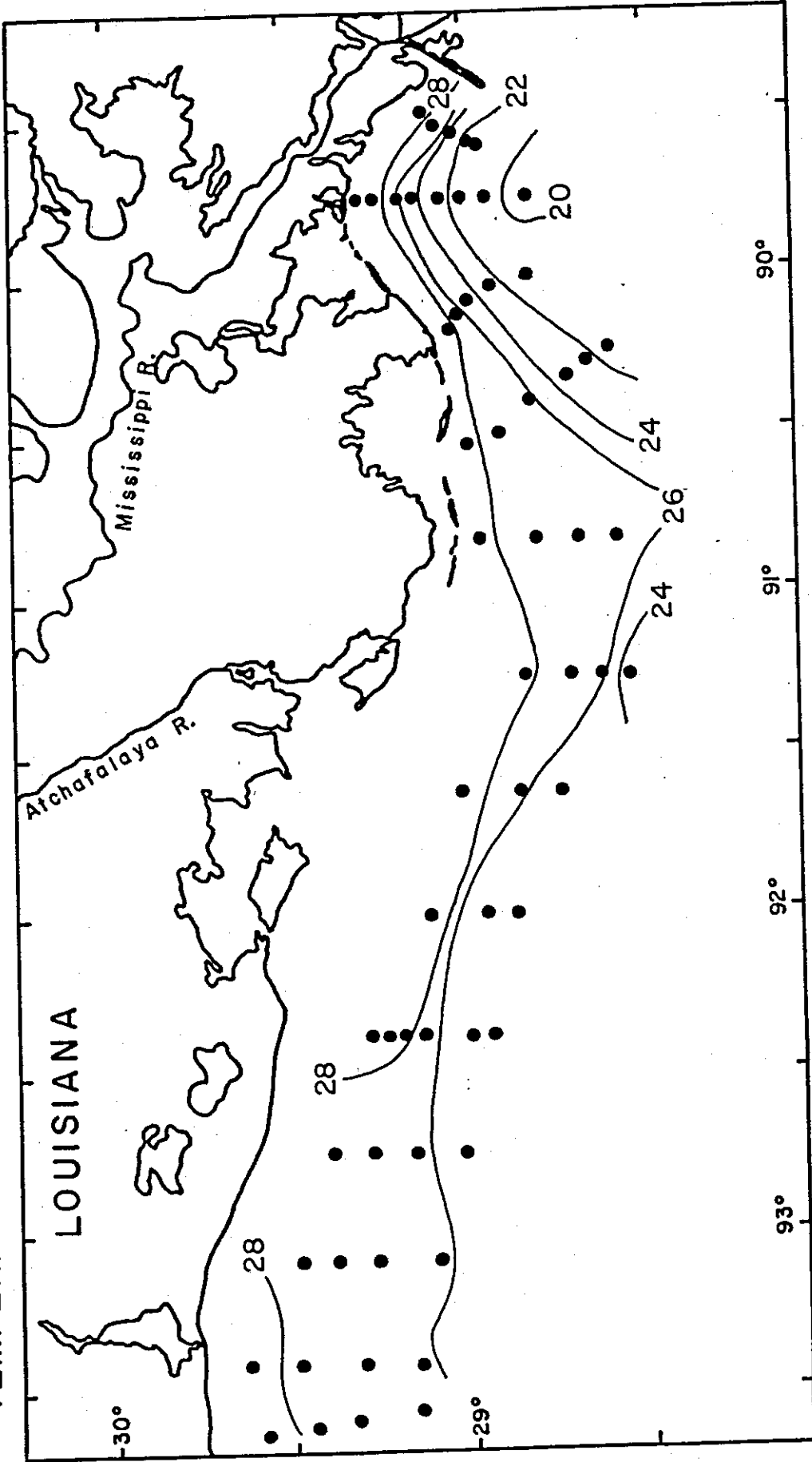
92°

91°

90°

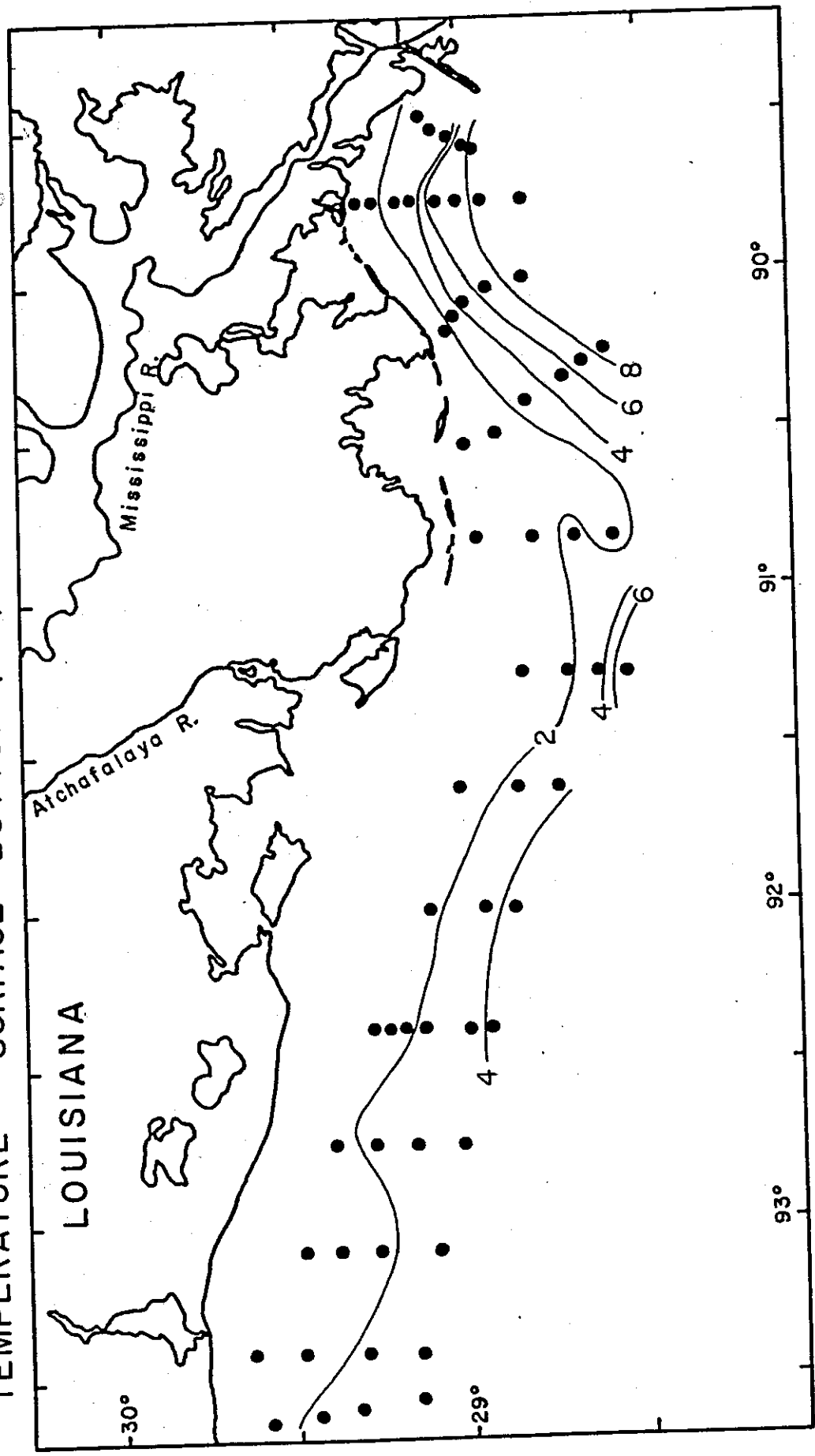
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TEMPERATURE - BOTTOM (°C)



7/1-5/87

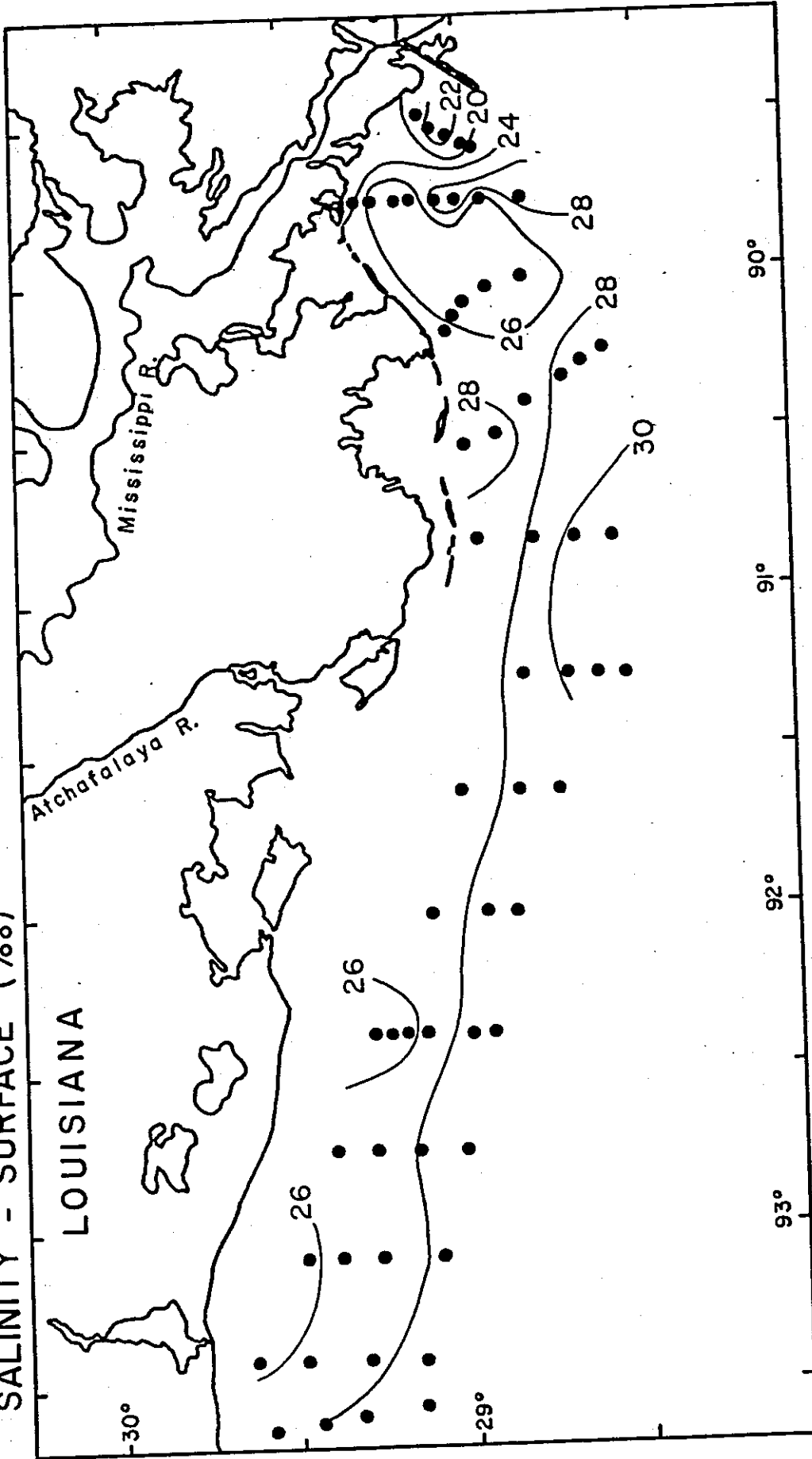
TEMPERATURE SURFACE - BOTTOM ($\Delta^{\circ}\text{C}$)



7/1-5/87

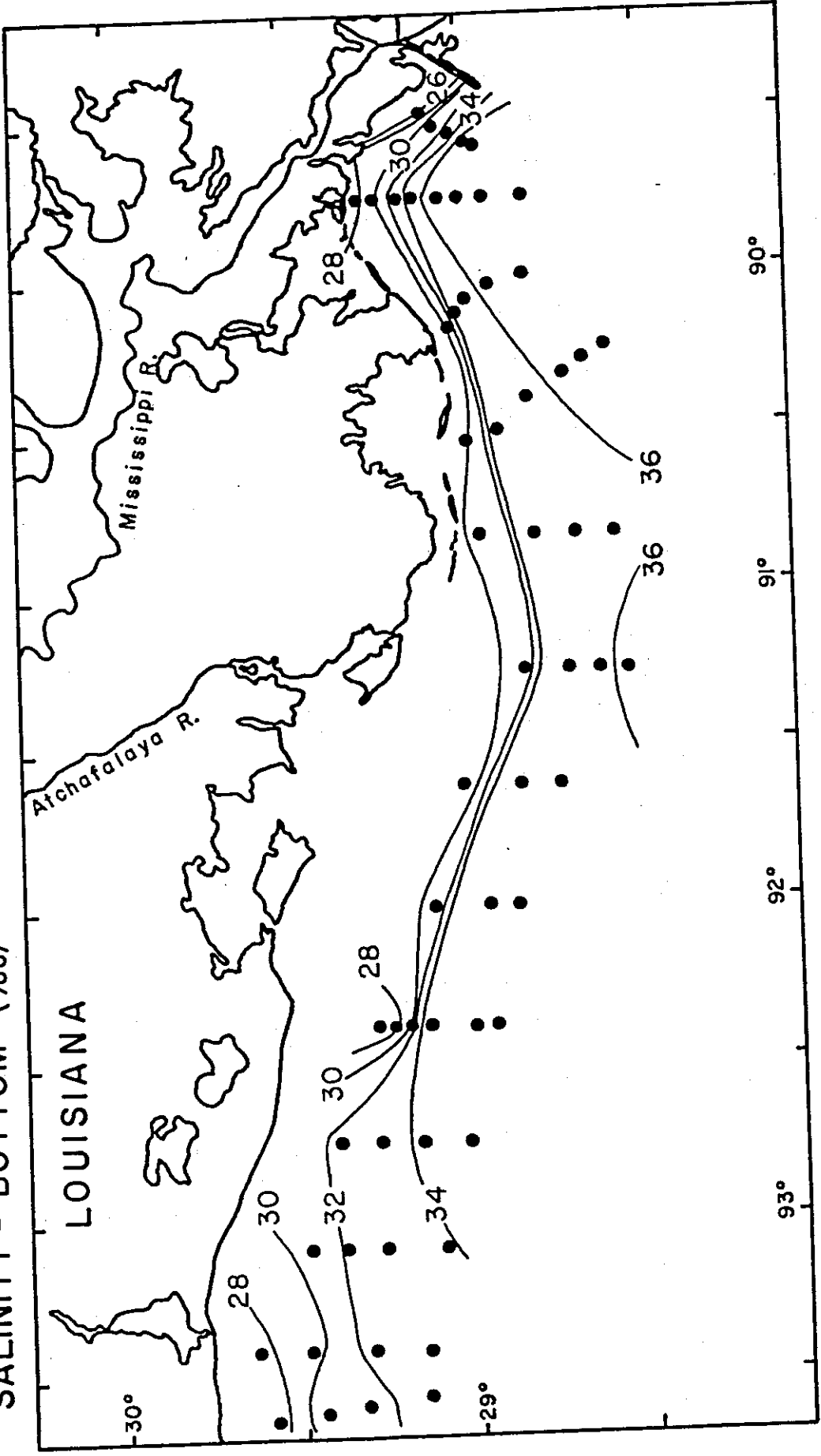
SALINITY - SURFACE (‰)

LOUISIANA



7/1-5/87

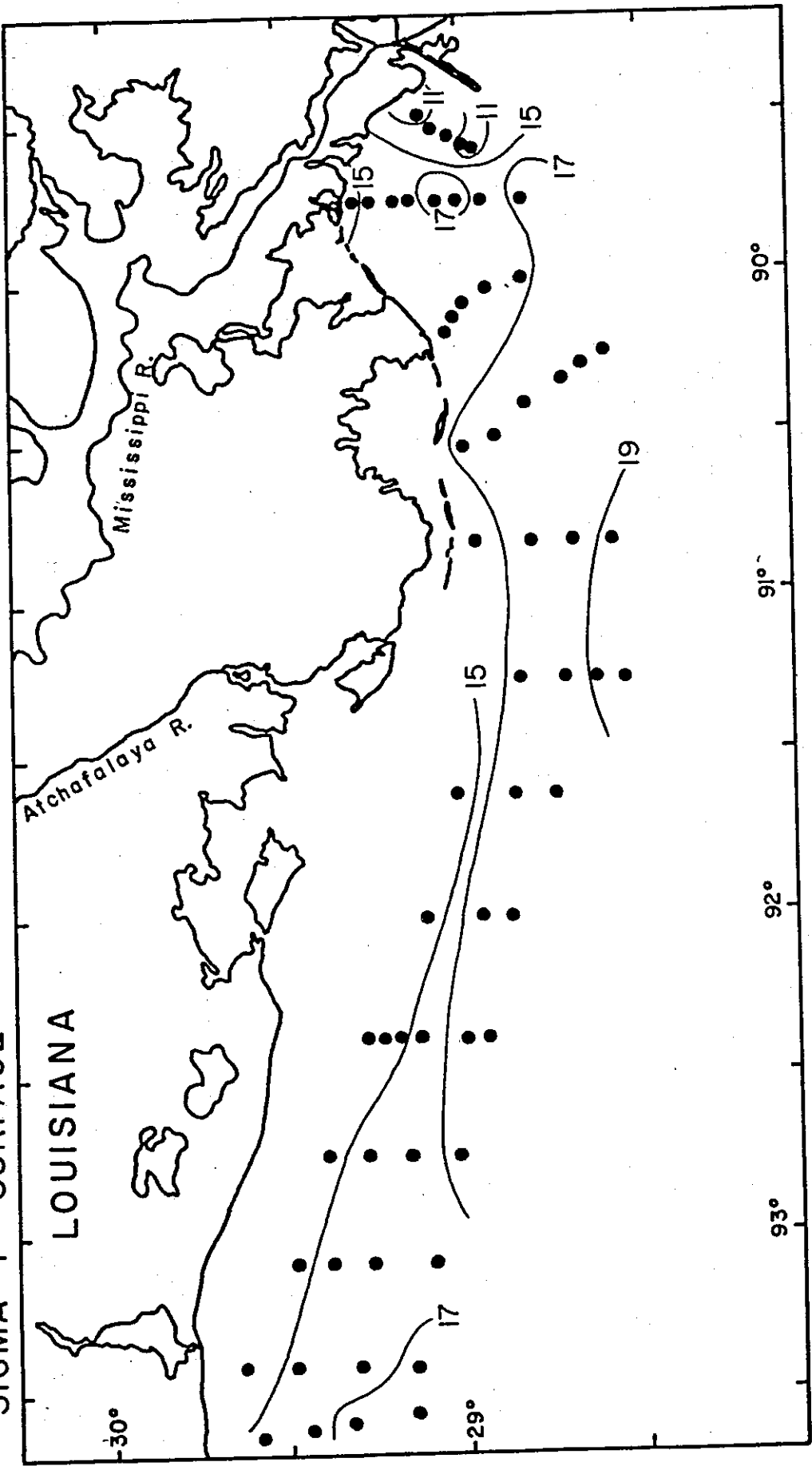
SALINITY - BOTTOM (% σ)



7/1-5/87

SIGMA - T - SURFACE

LOUISIANA



30°

29°

93°

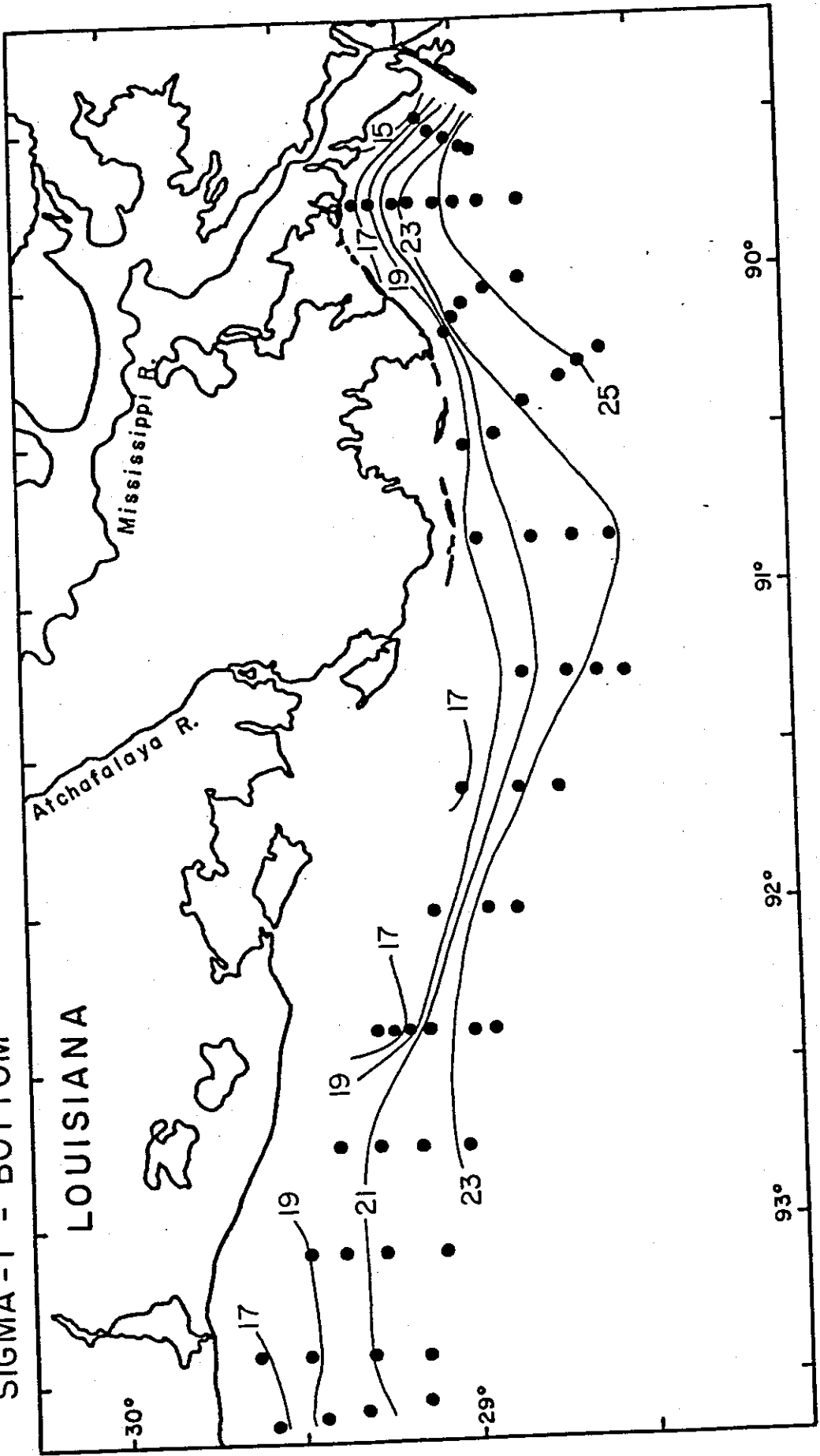
92°

91°

90°

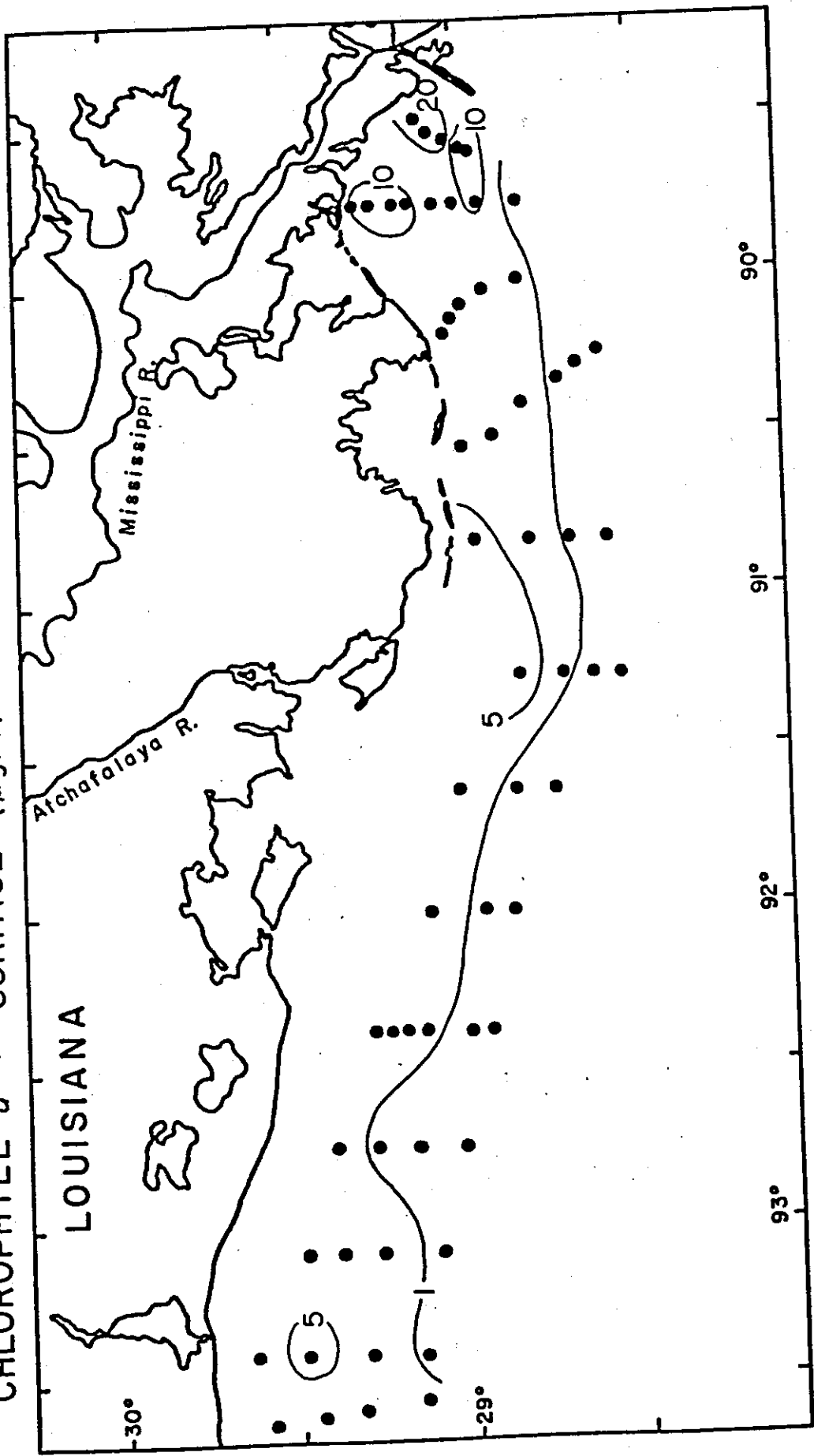
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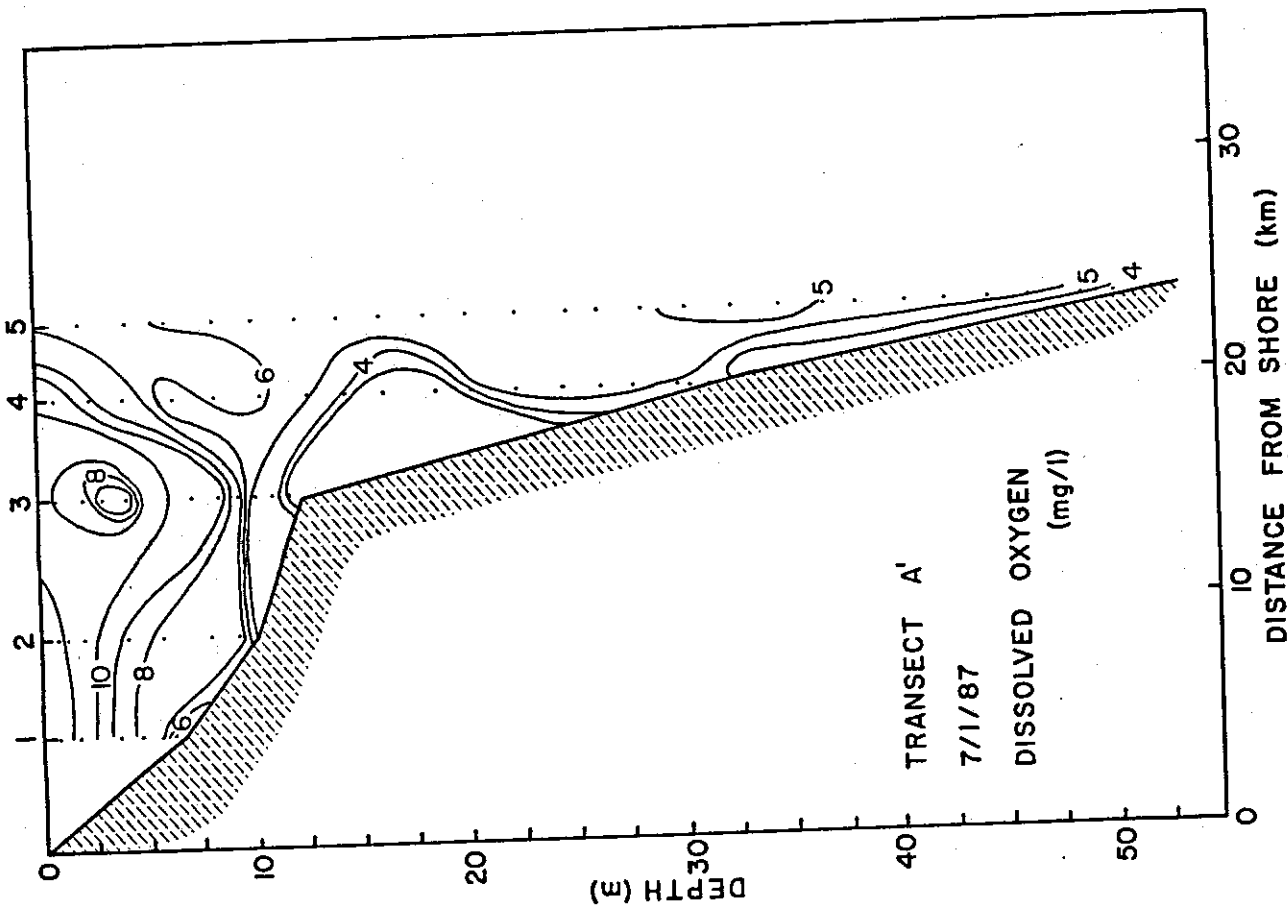
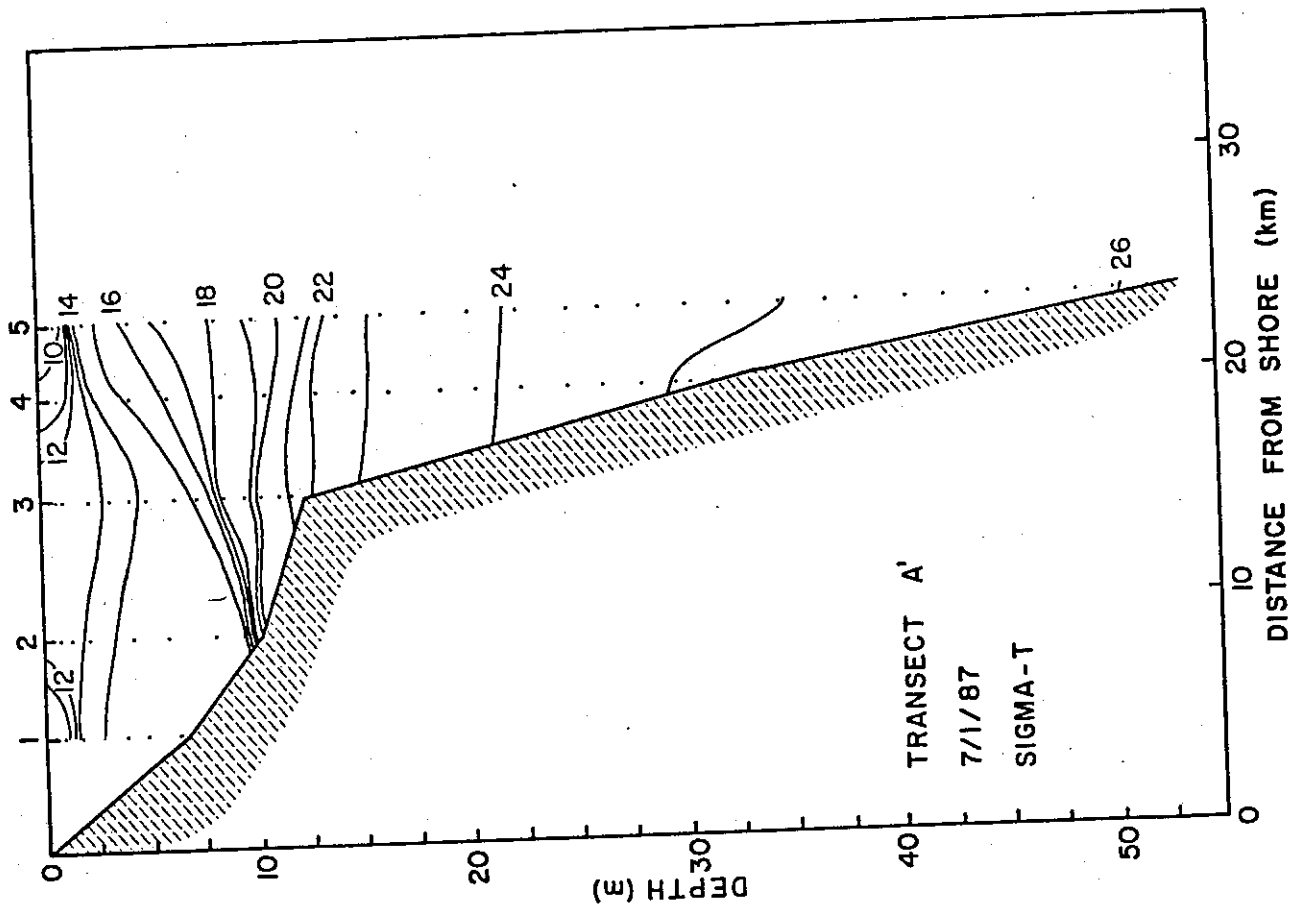
SIGMA-T - BOTTOM

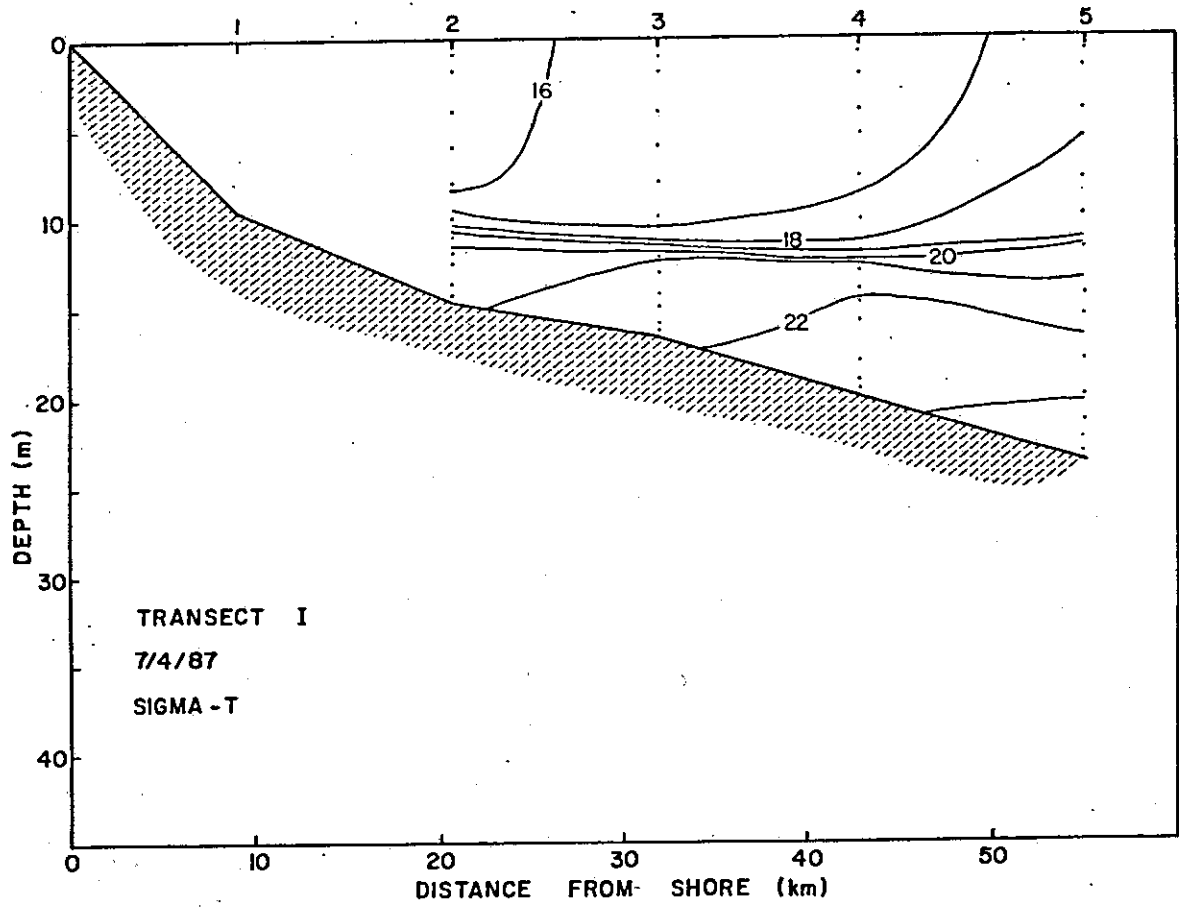
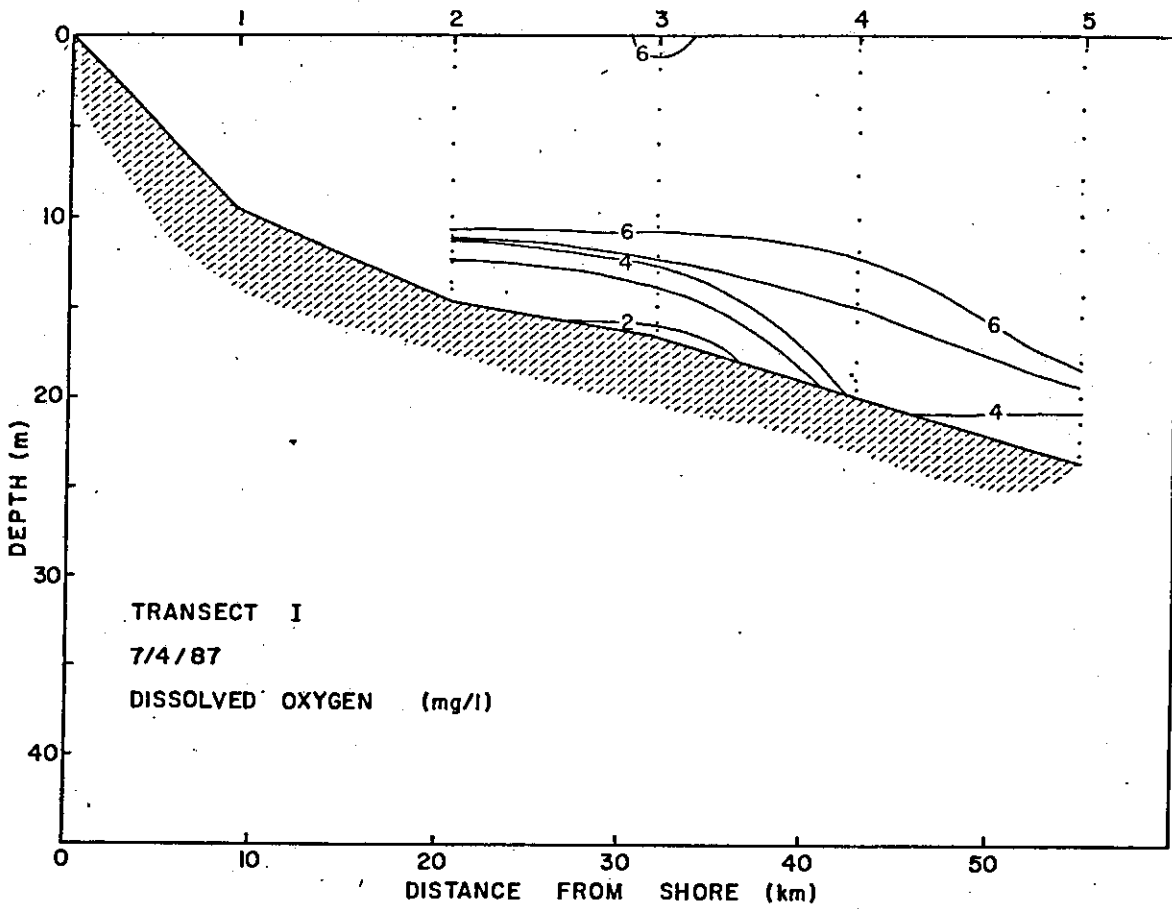


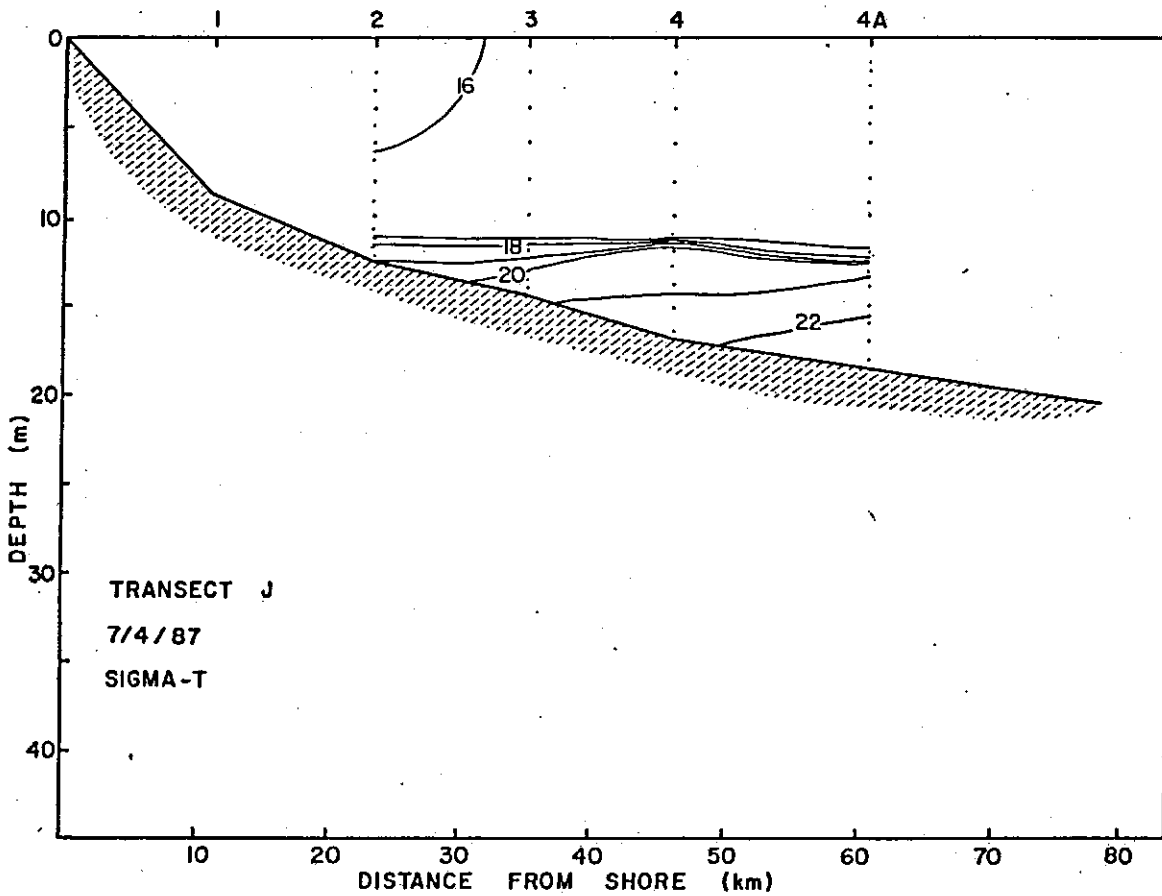
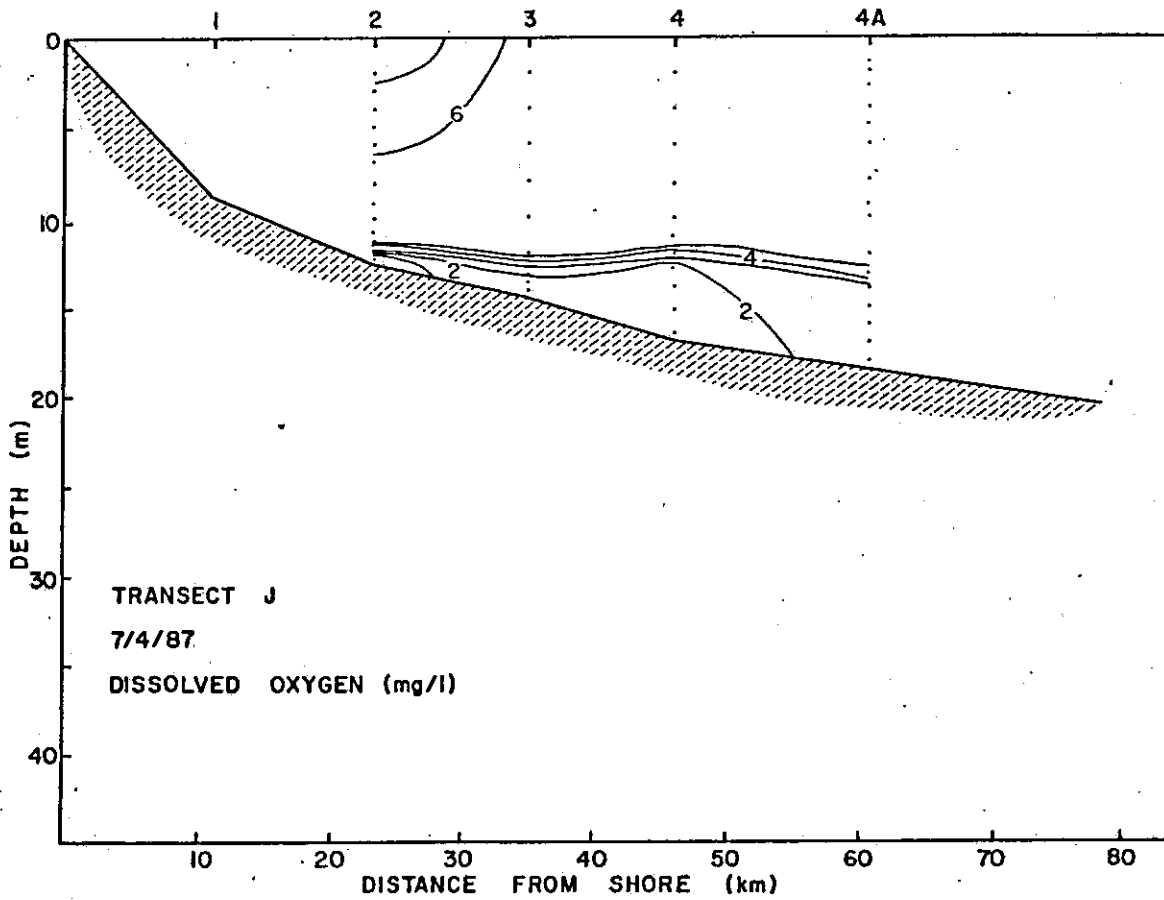
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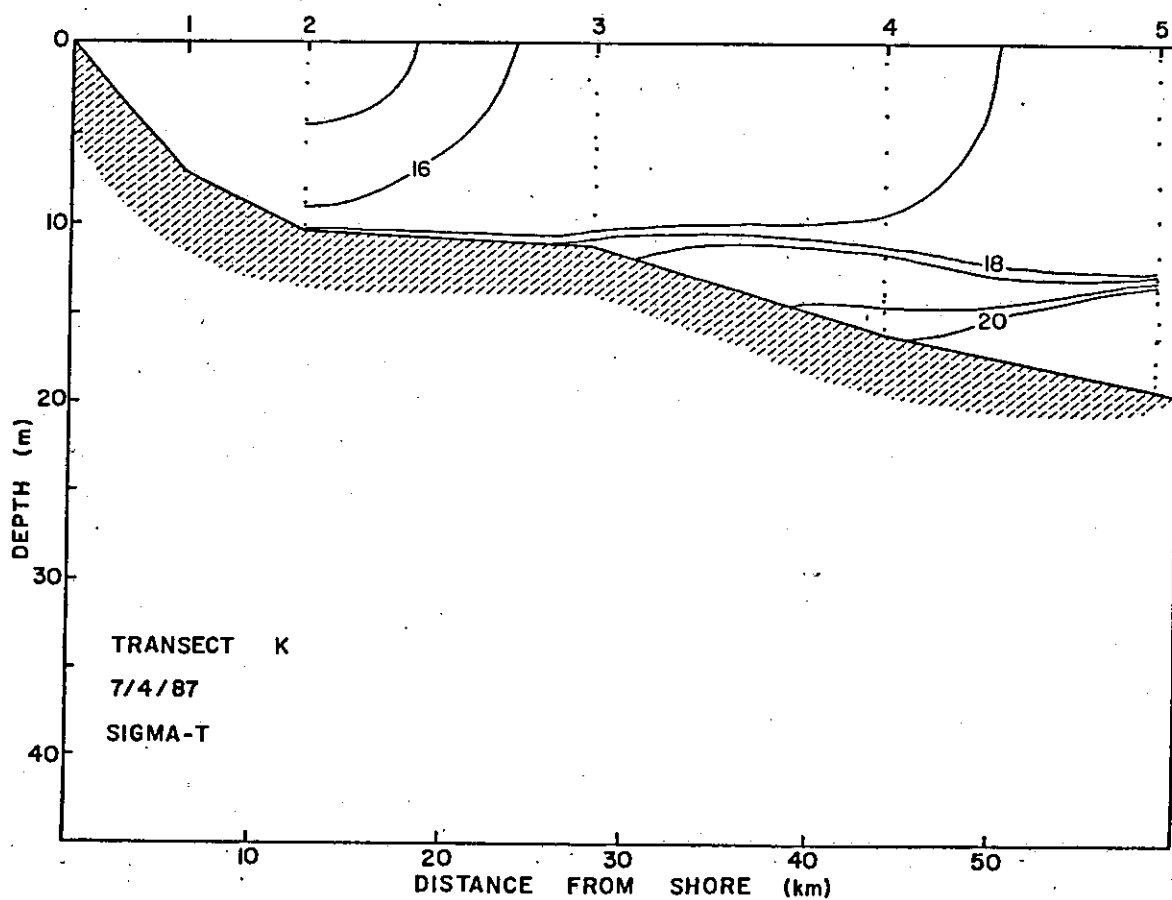
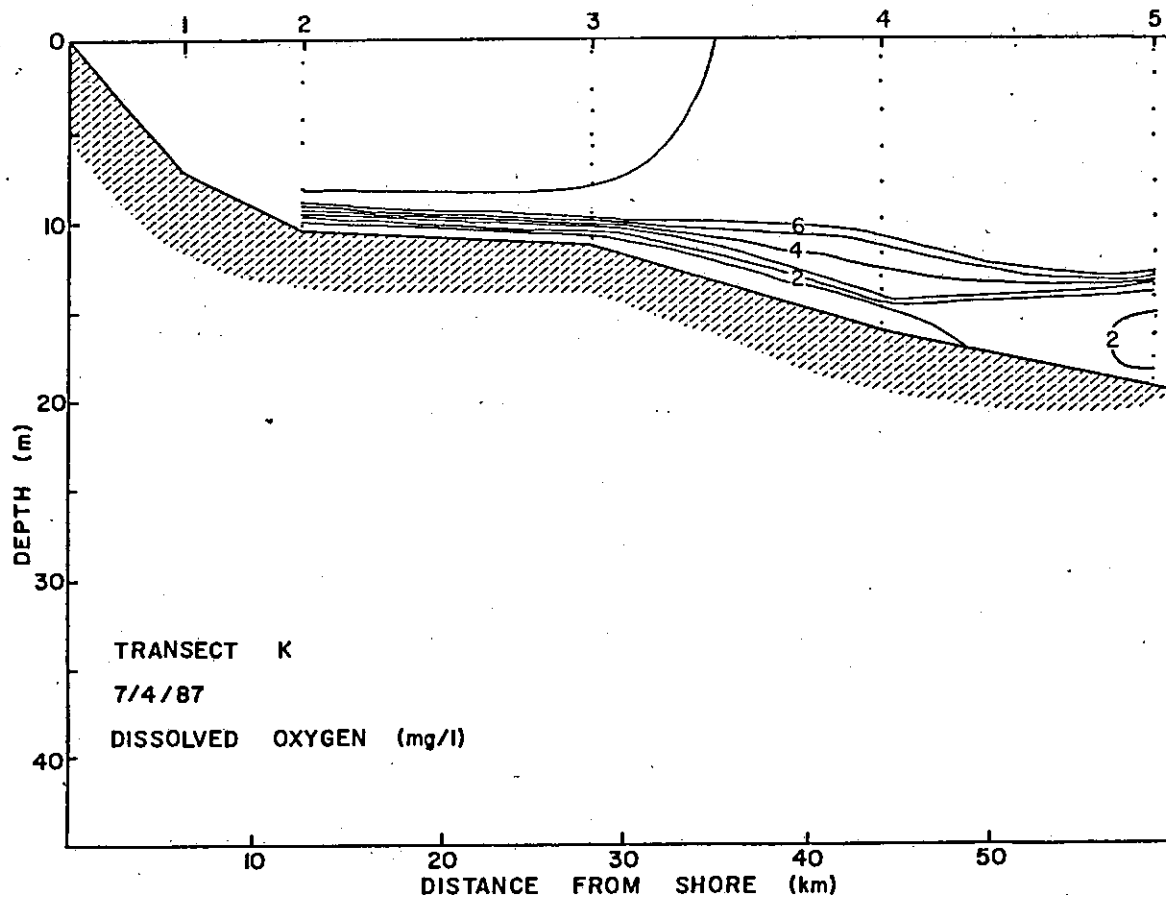
CHLOROPHYLL *a* - SURFACE ($\mu\text{g/l}$)

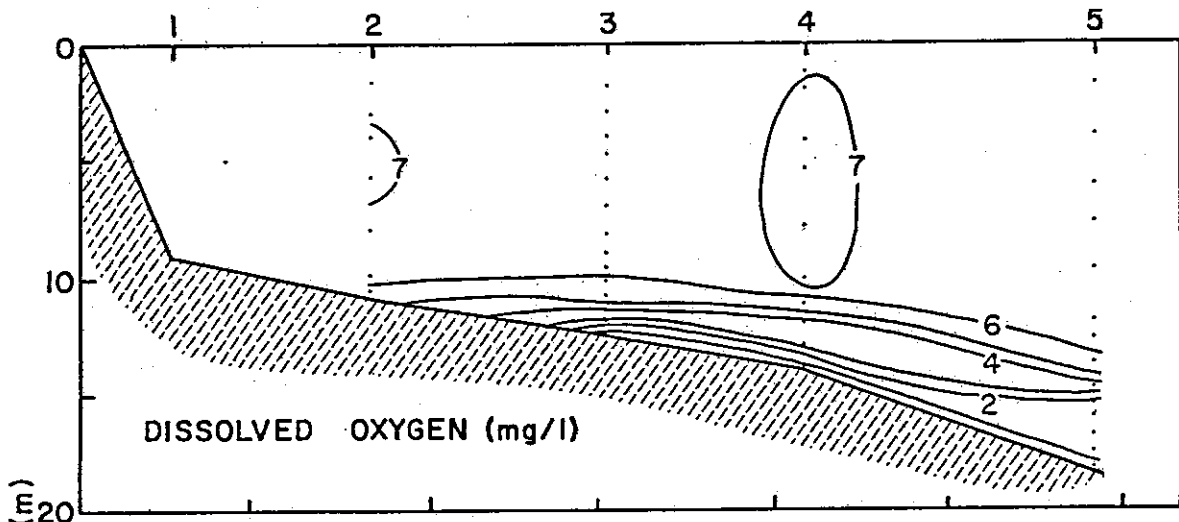






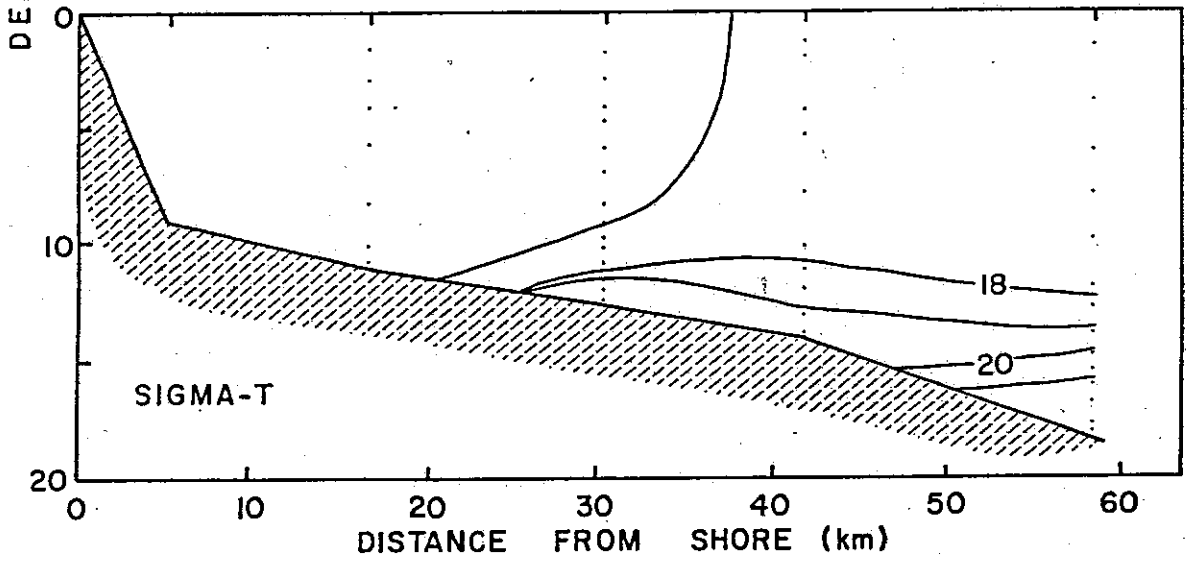


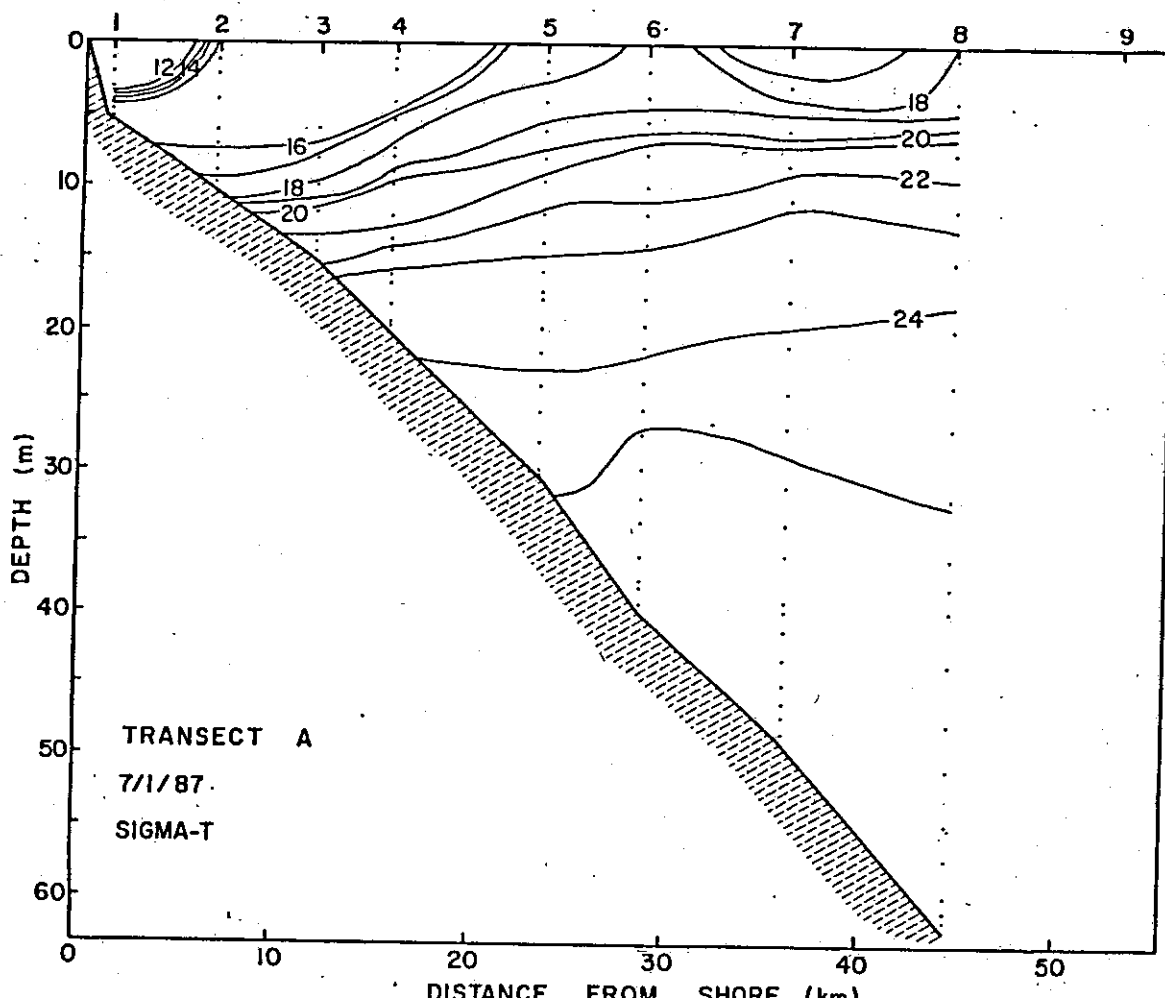
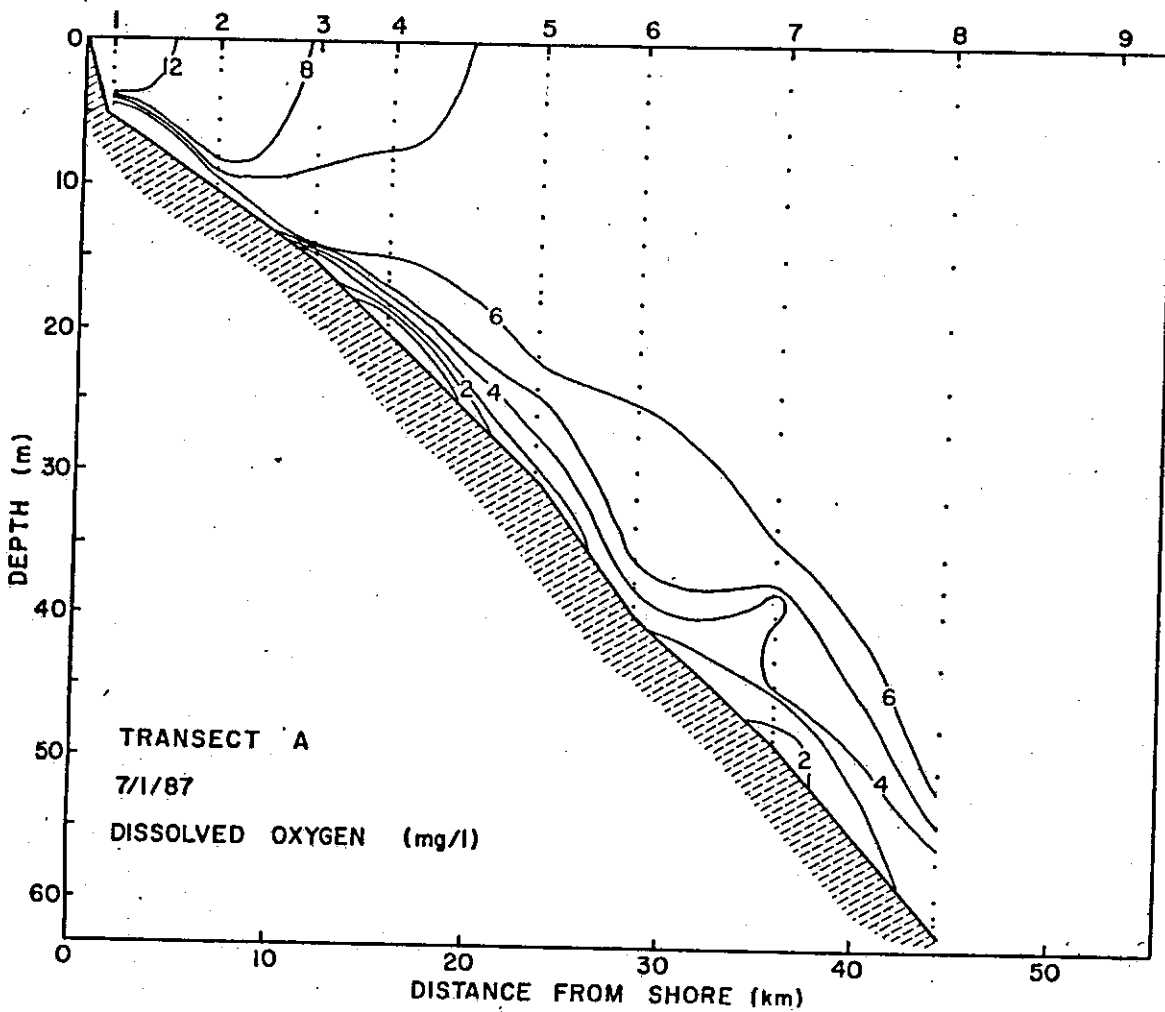


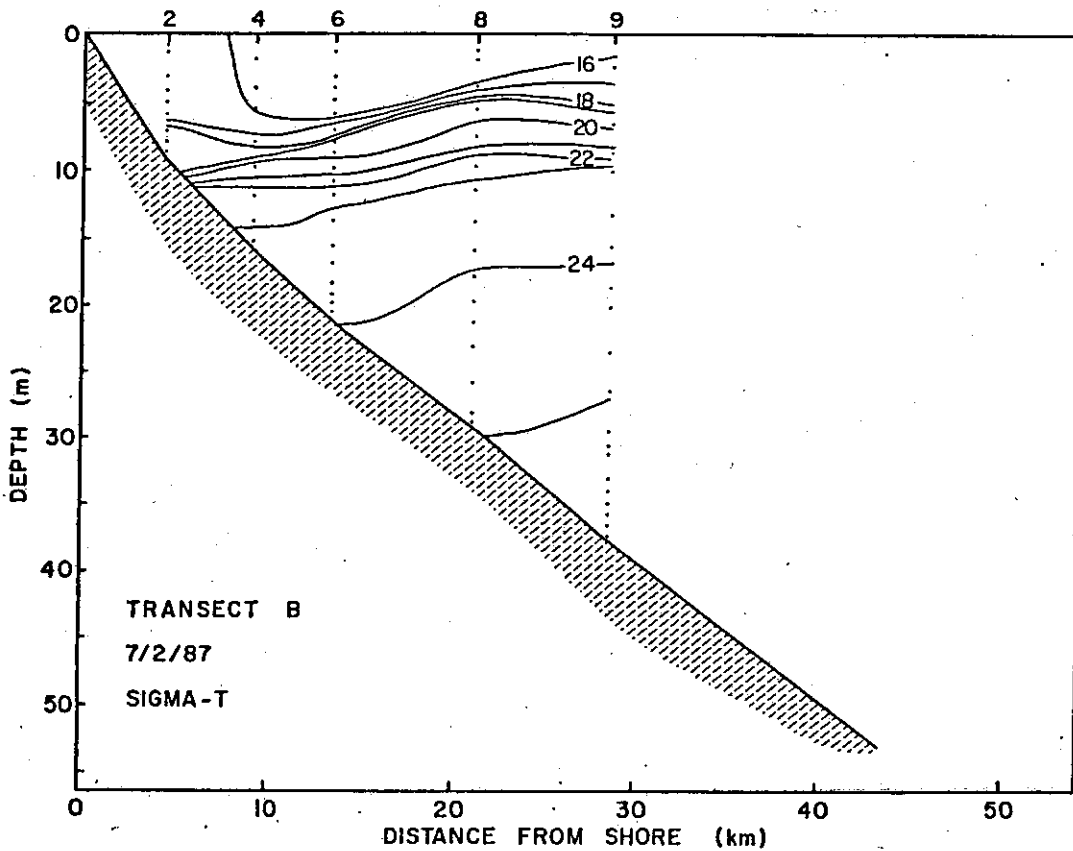
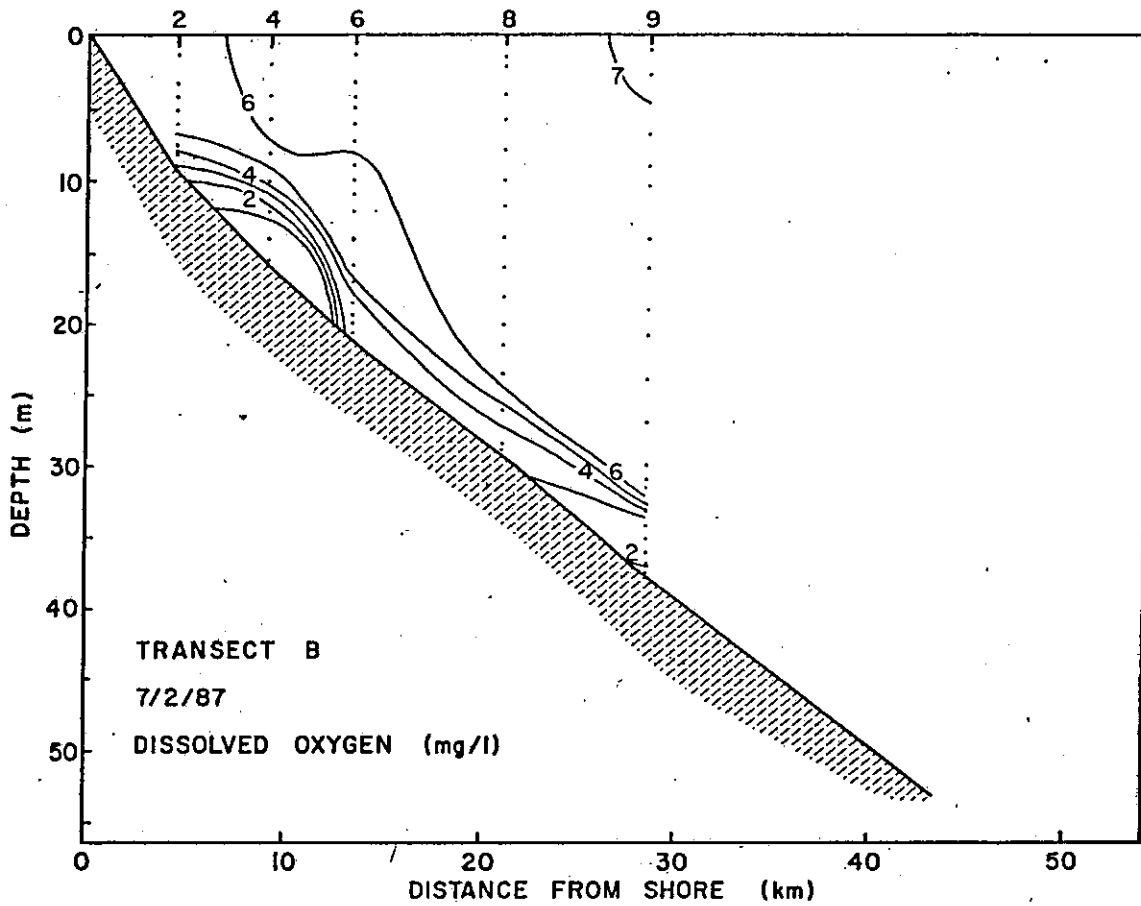


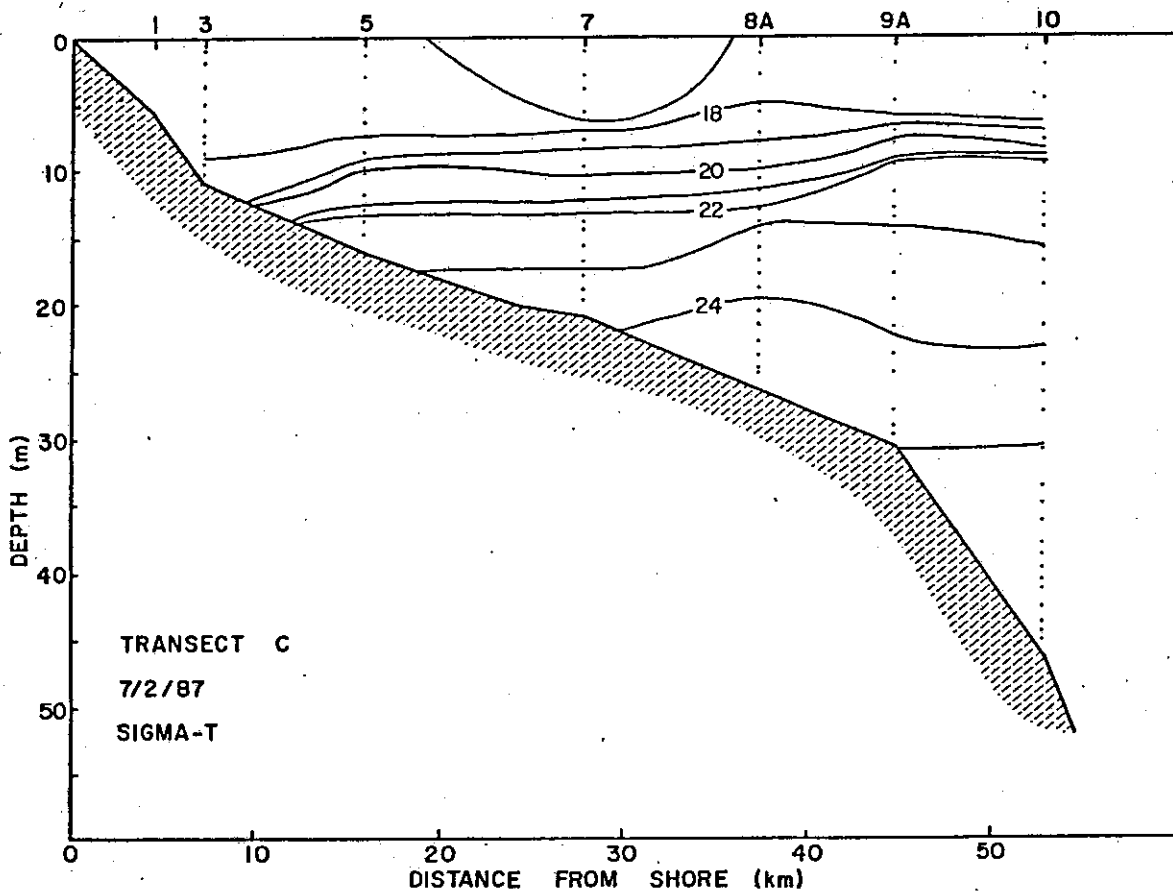
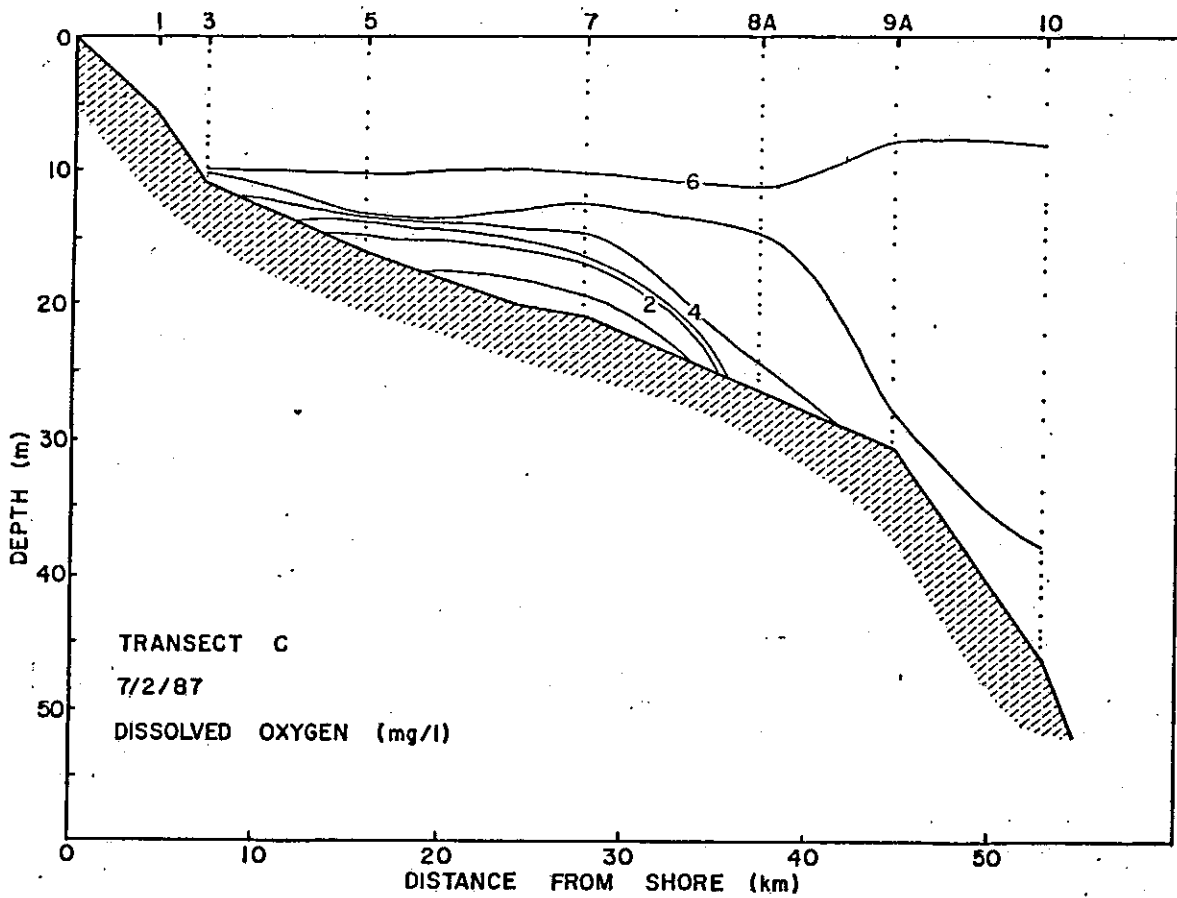
TRANSECT M

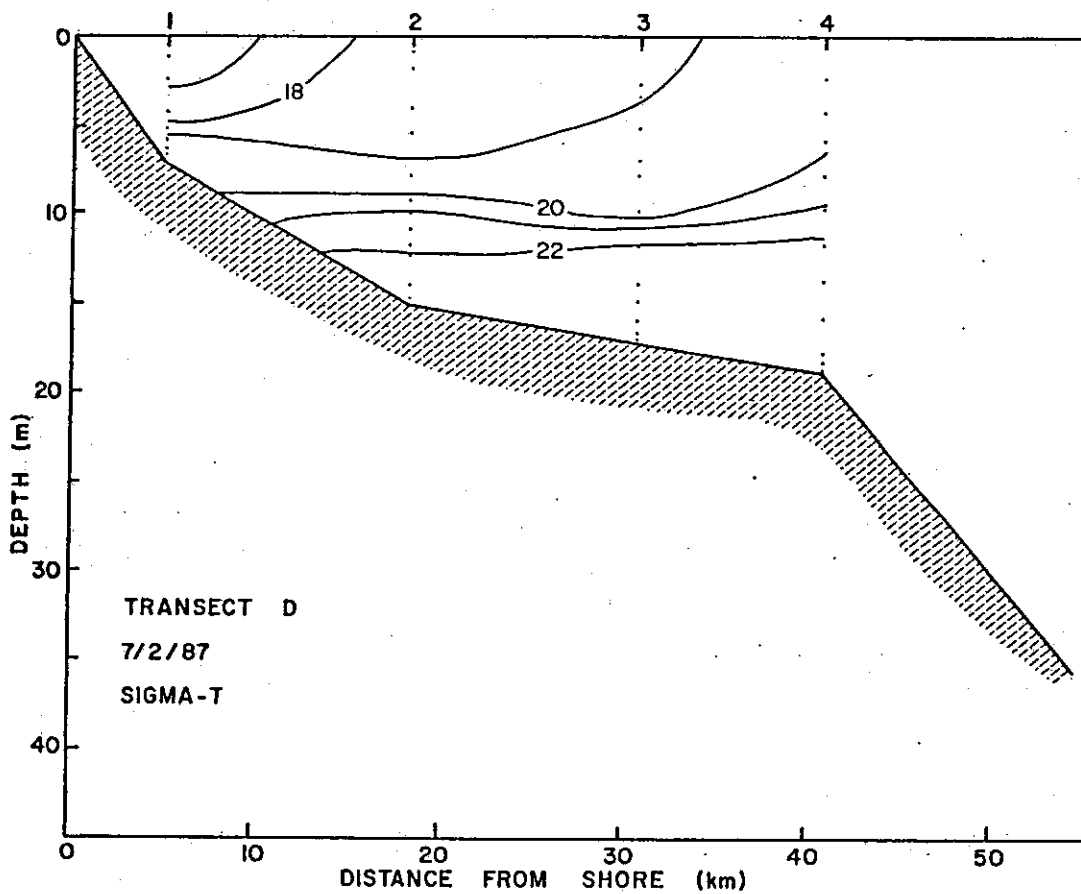
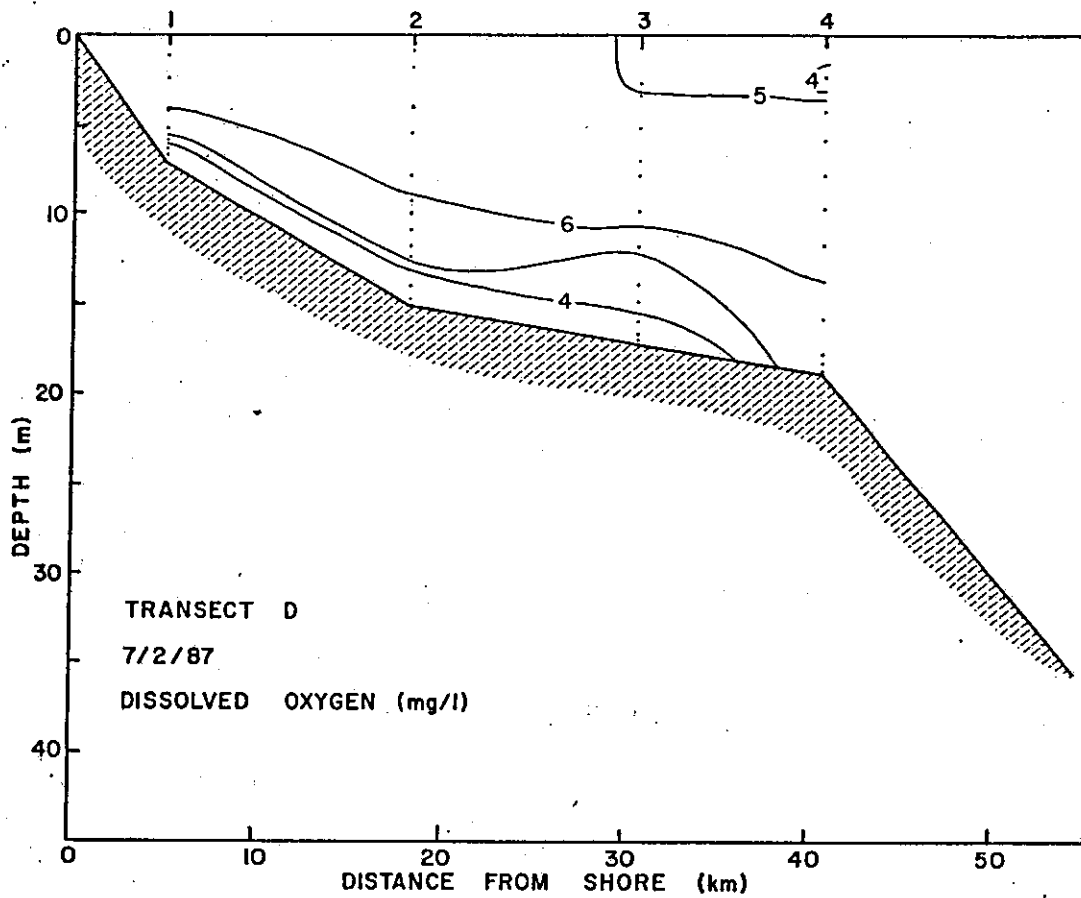
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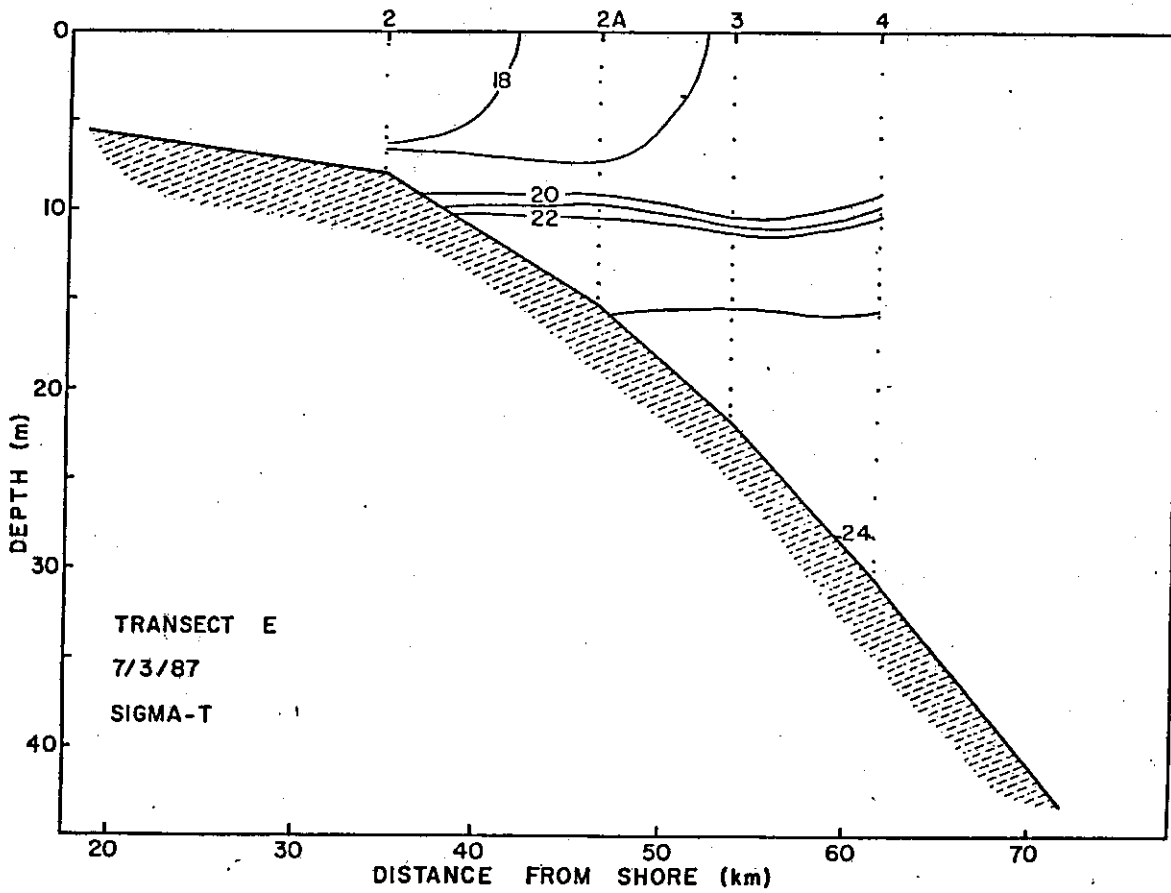
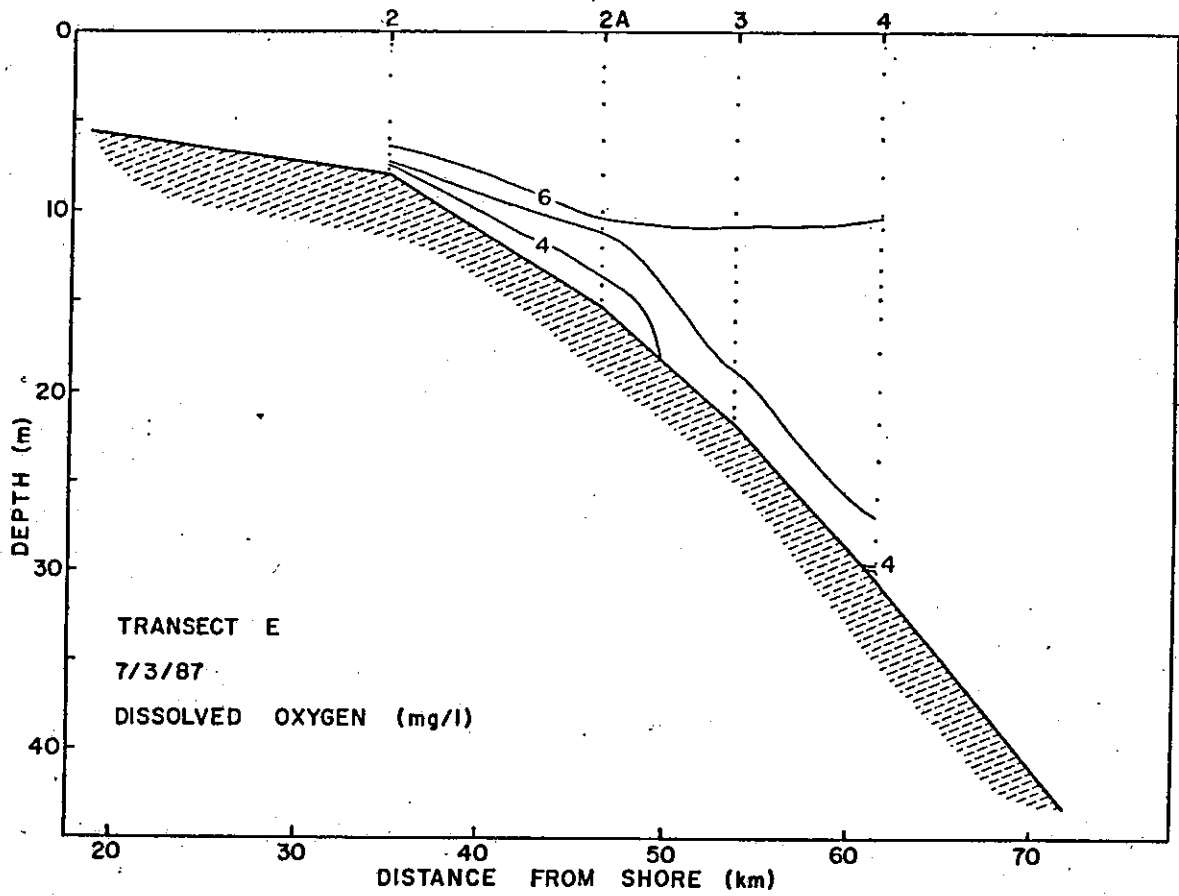


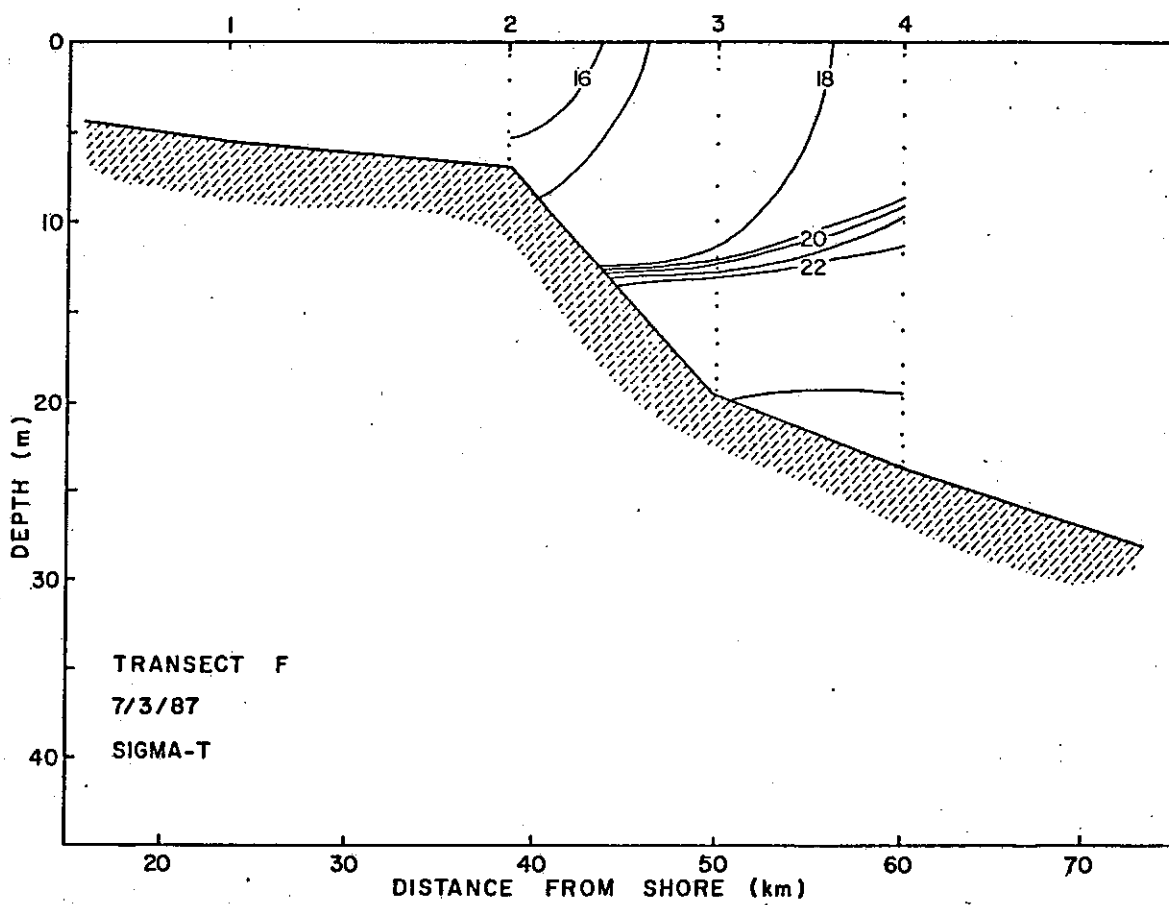
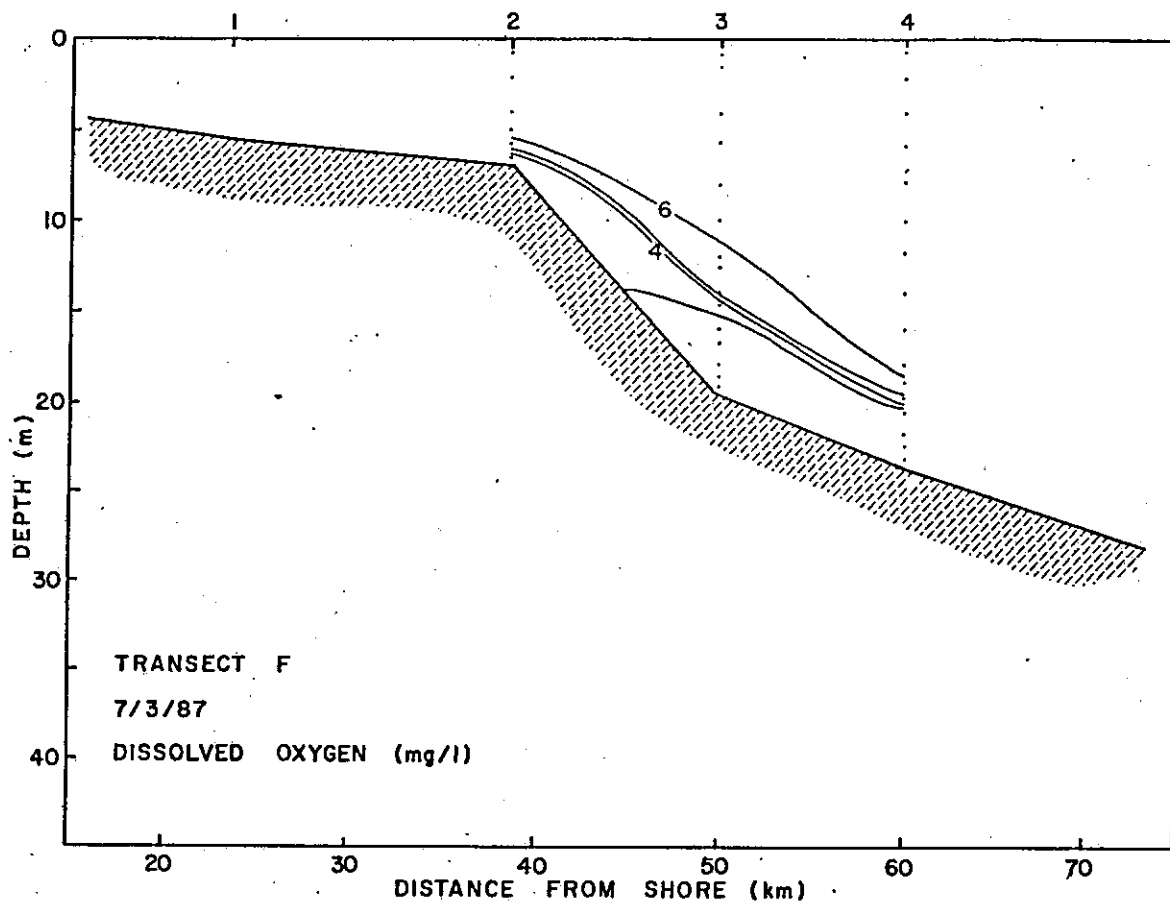


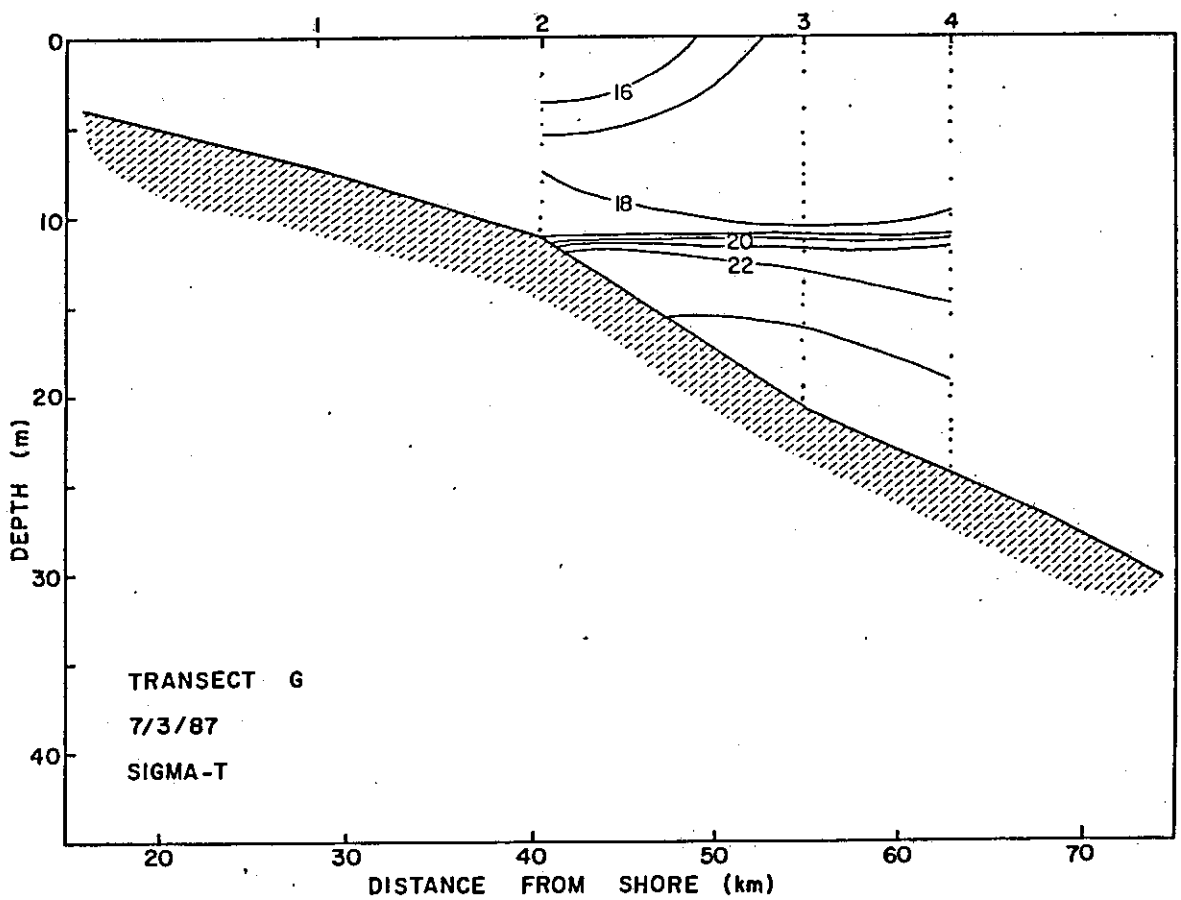
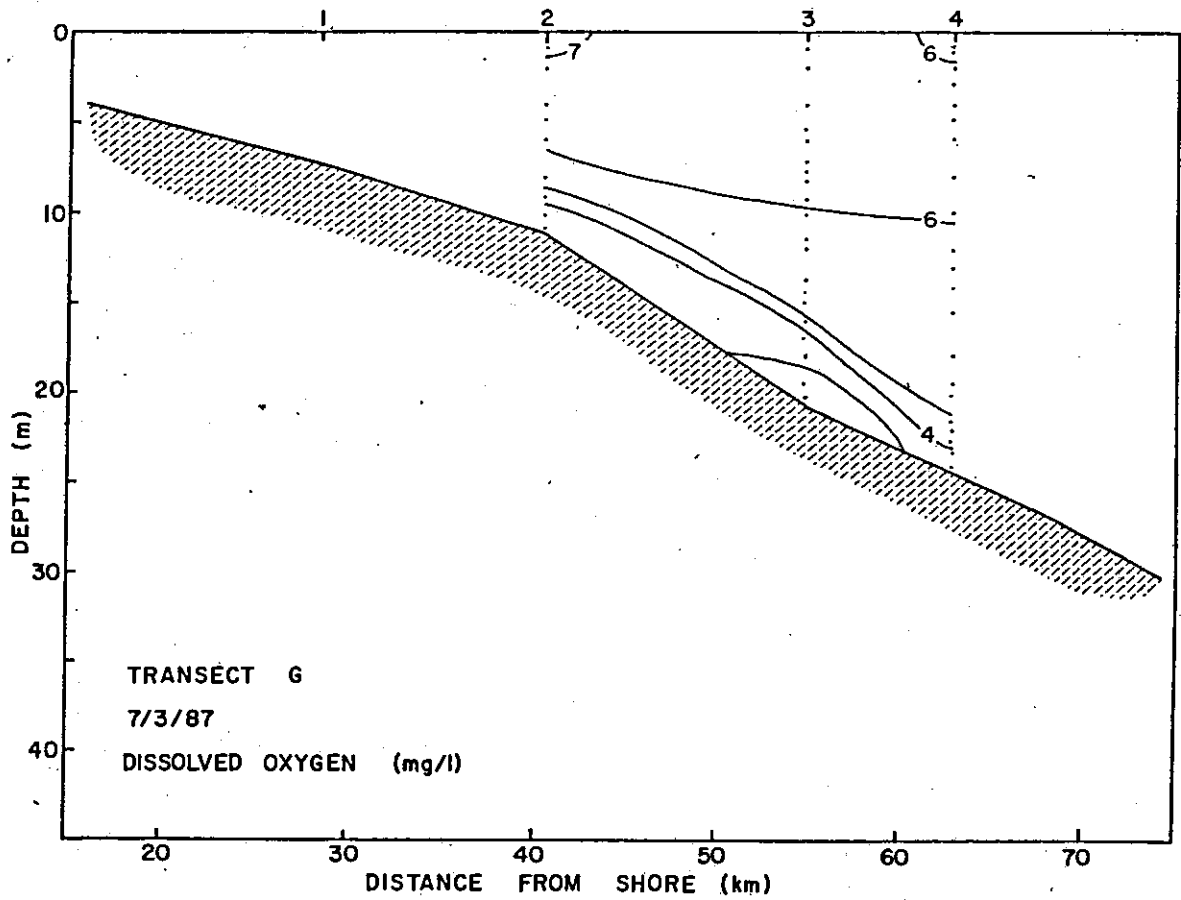


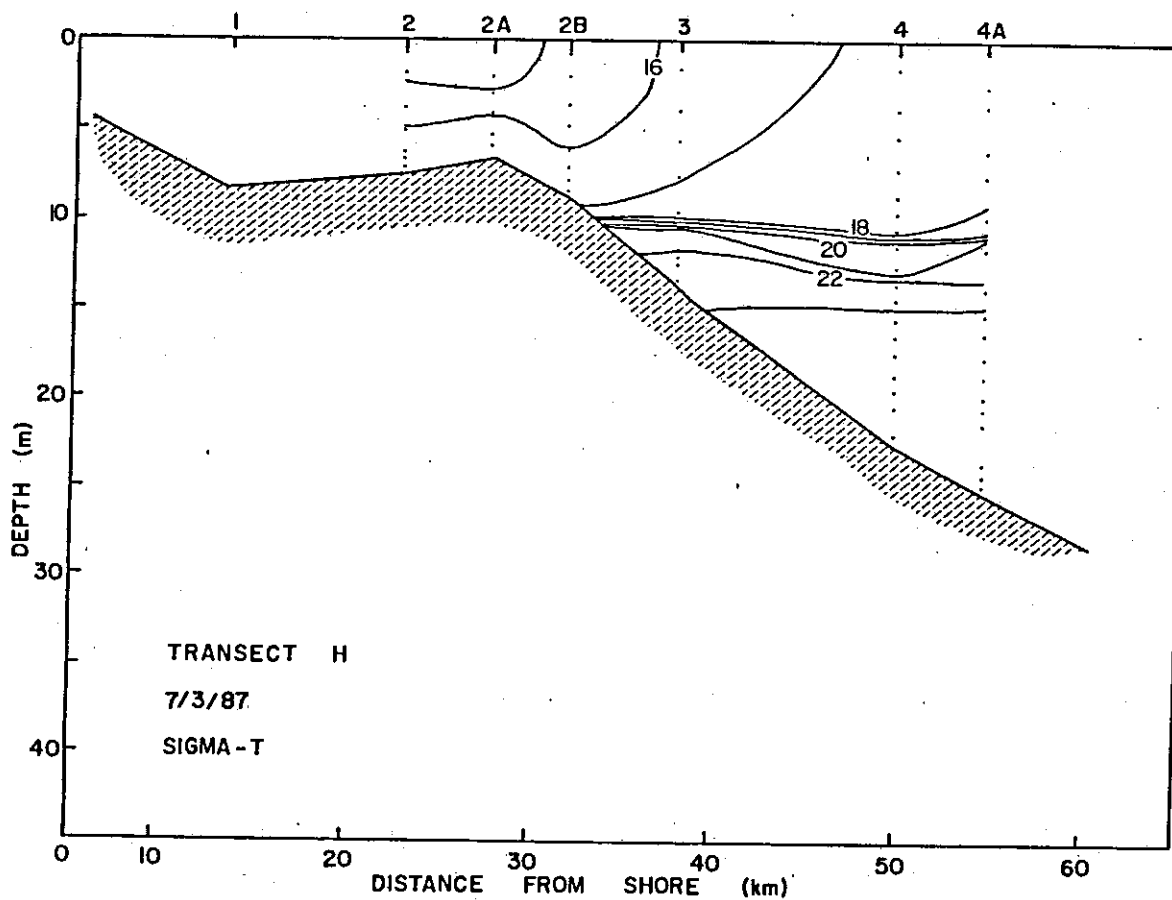
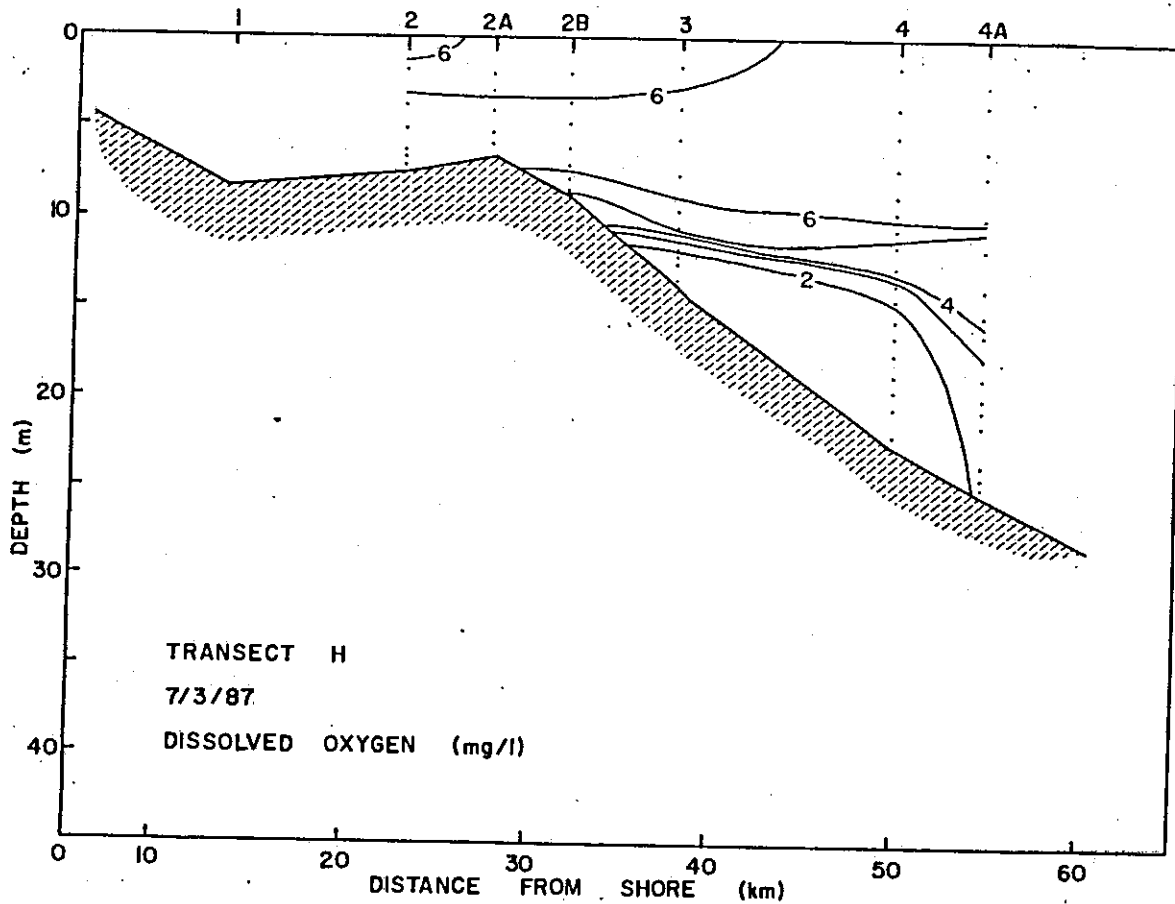












CRUISE DATA - TRANSECT A'
(off Tiger Pass to Southwest Pass)

Station: 01 Latitude: 29:08.0 N Hydrolab cast time: 12:30
Date: 07/01/87 Longitude: 89:28.5 W Secchi disk depth (m): 0.8

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.5	30.87	20.89	37.33	10.91	13.51	205.2
1.6	29.46	23.88	41.05	13.60	11.83	178.2
3.8	28.83	24.87	42.07	14.53	8.49	127.2
4.8	28.83	24.87	42.07	14.54	7.57	113.4
6.8	28.79	24.85	42.07	14.58	6.55	98.1

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.5	30.7	3.6	34.30	2.1
6.8	18.1	5.6	23.70	1.9

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.5	0.8	4.7	0.2	0.7	1.4
6.8	4.1	4.8	0.3	0.7	0.8

CRUISE DATA - TRANSECT A'
(off Tiger Pass to Southwest Pass)

Station: 02 Latitude: 29:05.5 N Hydrolab cast time: 11:56
Date: 07/01/87 Longitude: 89:29.94 W Secchi disk depth (m): 1.5

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.6	28.88	22.67	38.74	12.88	12.82	189.9
1.0	28.91	22.56	38.60	12.79	11.45	169.6
2.0	28.82	22.83	38.95	13.02	11.54	170.9
4.0	28.86	25.08	42.42	14.69	8.42	126.4
6.1	28.80	25.21	42.57	14.81	7.52	112.8
8.0	28.81	25.28	42.68	14.85	7.39	110.9
9.1	26.99	31.28	49.91	19.93	7.36	110.6
10.2	26.96	31.70	50.47	20.25	4.36	65.7

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.6	38.5	8.8	47.30	2.0
10.2	6.0	3.0	9.00	1.8

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.6	1.0	2.9	0.4	0.7	0.8
10.2	7.1	13.9	1.5	1.9	2.9

CRUISE DATA - TRANSECT A'
(off Tiger Pass to Southwest Pass)

Station: 03 Latitude: 29:01.9 N Hydrolab cast time: 10:55
Date: 07/01/87 Longitude: 89:32.0 W Secchi disk depth (m): 1.9

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.6	28.94	22.17	38.01	12.49	13.06	193.1
0.9	28.95	22.01	37.76	12.36	9.35	138.1
2.0	29.04	22.07	37.92	12.38	9.24	136.8
2.9	29.31	23.91	40.98	13.67	7.32	110.0
4.1	29.18	24.25	41.41	13.96	7.29	109.5
4.8	29.09	24.32	41.43	14.04	10.14	152.2
5.9	29.02	24.40	41.49	14.12	10.00	149.9
7.0	28.42	26.00	43.45	15.51	9.87	147.7
8.0	27.81	29.17	47.62	18.08	9.49	143.1
8.9	27.72	29.84	48.52	18.61	7.51	113.5
10.1	27.10	31.99	51.02	20.42	4.78	72.3
11.0	26.90	32.46	51.48	20.84	4.82	72.8
12.0	26.80	33.27	52.54	21.48	2.86	43.3
12.1	26.80	33.27	52.53	21.48	2.69	40.8
12.1	26.85	33.02	52.23	21.48	1.76	26.7

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.6	29.7	6.9	36.60	2.0
12.1	2.4	2.6	5.00	1.6

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.6	1.9	7.8	0.4	0.8	1.0
12.1	6.1	9.5	4.3	2.0	2.4

CRUISE DATA - TRANSECT A'
(off Tiger Pass to Southwest Pass)

Station: 04 Latitude: 28:59.0 N Hydrolab cast time: 09:15
Date: 07/01/87 Longitude: 89:34.0 W Secchi disk depth (m): 1.5

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.8	29.09	20.28	35.16	11.03	9.30	136.4
1.2	29.10	21.41	36.93	11.86	8.67	128.0
2.5	28.75	25.25	42.58	14.84	8.85	132.7
3.7	28.93	26.23	44.22	15.52	7.39	111.8
5.9	28.56	27.50	45.82	16.59	5.78	87.5
8.1	28.11	29.35	48.17	18.12	6.38	96.8
10.5	27.99	30.92	50.35	19.34	6.09	93.0
11.6	27.34	32.80	52.42	20.96	5.90	90.0
12.6	26.63	34.15	53.60	22.19	5.71	86.7
14.6	26.32	34.81	54.19	22.80	4.08	61.8
16.2	26.05	35.20	54.45	23.17	2.65	40.1
18.6	26.82	36.02	56.40	23.55	2.98	45.9
20.2	26.45	36.10	56.11	23.73	5.51	84.3
22.0	25.18	36.18	54.86	24.18	5.55	83.0
24.5	23.61	36.06	53.01	24.56	5.09	73.9
26.2	23.11	36.01	52.43	24.67	5.35	77.0
27.6	22.73	35.95	51.94	24.73	5.75	82.1
29.4	22.13	36.08	51.48	25.01	5.42	76.6
30.3	21.90	36.19	51.36	25.15	5.13	72.2
31.2	21.80	36.13	51.19	25.14	4.64	65.2
32.7	21.55	36.19	51.00	25.25	3.14	42.6

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.8	16.5	2.8	19.30	2.0
11.6	1.4	2.2	3.60	1.5
12.6	1.3	1.9	3.20	1.5
32.7	0.9	1.4	2.30	1.5

TRANSECT A', Station 04
(Continued)

NUTRIENT DATA

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Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.8	1.3	34.5	0.3	1.9	3.2
11.6	2.2	1.3	0.1	0.3	0.3
12.6	2.6	6.0	2.6	0.9	0.9
32.7	4.8	6.4	1.1	1.1	1.2

CRUISE DATA - TRANSECT A'
(off Tiger Pass to Southwest Pass)

Station: 05 Latitude: 28:57.0 N Hydrolab cast time: 07:40
Date: 07/01/87 Longitude: 89:34.5 W Secchi disk depth (m): 1.8

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.4	28.44	17.09	29.73	8.85	7.03	100.1
0.5	28.46	17.44	30.30	9.11	6.99	99.7
2.0	28.79	24.64	41.69	14.37	6.63	99.1
4.1	28.49	27.90	46.35	16.91	6.11	92.6
6.1	28.18	28.51	46.99	17.47	5.94	89.8
8.0	28.11	30.10	49.26	18.68	5.84	89.0
9.9	28.26	31.13	50.91	19.41	5.88	90.4
12.1	27.74	32.06	51.75	20.28	5.76	88.2
14.0	27.55	35.36	56.26	22.81	5.60	87.0
16.1	27.32	35.59	56.34	23.06	5.77	89.4
18.0	27.22	35.74	56.44	23.20	5.88	91.0
20.0	26.88	36.07	56.52	23.56	5.68	87.6
22.0	24.79	36.29	54.57	24.38	6.00	89.2
24.2	24.04	36.18	53.63	24.53	5.43	79.6
25.9	23.50	35.99	52.80	24.54	5.11	74.0
28.1	23.07	35.98	52.34	24.66	5.02	72.2
30.2	22.80	35.96	52.03	24.72	4.79	68.5
31.9	22.67	35.99	51.92	24.78	4.94	70.5
34.1	22.25	36.09	51.62	24.98	4.97	70.4
36.0	21.54	36.25	51.07	25.30	5.00	69.9
38.1	20.86	36.17	50.25	25.42	5.62	77.6
40.2	20.76	36.21	50.20	25.48	5.87	80.9
42.0	20.63	36.22	50.06	25.53	6.10	83.8
44.0	20.46	36.24	49.92	25.59	5.63	77.1
45.9	20.40	36.25	49.87	25.61	5.19	71.0
48.2	20.34	36.27	49.83	25.64	5.08	69.5
50.1	20.22	36.28	49.72	25.69	4.75	64.8
51.8	20.21	26.11	37.02	17.95	3.42	43.9

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Eo/Fa)
0.4	11.3	3.3	14.60	1.9
51.8	0.8	1.1	1.90	1.5

TRANSECT A', Station 05
(Continued)

NUTRIENT DATA

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Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.4	1.6	25.3	0.4	2.4	3.7
51.8	3.2	5.8	0.9	1.2	1.4

CRUISE DATA - TRANSECT A
(off Baratavia Bay)

Station: 01 Latitude: 29:17.4 N Hydrolab cast time: 14:57
Date: 07/01/87 Longitude: 89:45.0 W Secchi disk depth (m): 0.8

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.0	30.53	21.33	37.81	11.35	13.15	199.0
1.2	30.57	21.34	37.86	11.34	13.16	199.3
2.1	30.54	21.34	37.83	11.35	12.97	196.3
3.1	30.55	21.36	37.86	11.36	12.98	196.5
4.0	29.19	24.43	41.68	14.09	12.79	192.4
4.7	28.73	26.29	44.15	15.63	5.29	79.8
5.2	28.81	26.48	44.49	15.74	5.17	78.1

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.0	40.2	10.9	51.10	2.0
5.2	7.9	3.5	11.40	1.8

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.0	0.6	0.0	0.2	0.7	2.0
5.2	7.3	3.7	0.6	1.2	2.1

CRUISE DATA - TRANSECT A
(off Barataria Bay)

Station: 02 Latitude: 29:14.4 N Hydrolab cast time: 16:07
Date: 07/01/87 Longitude: 89:45.1 W Secchi disk depth (m): 2.0

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.3	29.05	26.55	44.80	15.72	8.49	128.9
2.1	29.06	26.55	44.82	15.72	8.45	128.3
4.2	29.06	26.56	44.83	15.73	8.45	128.3
6.0	29.04	26.63	44.92	15.79	8.55	129.9
7.1	28.93	26.86	45.17	15.99	8.30	126.0
8.5	28.77	27.25	45.63	16.34	8.08	122.6
9.1	28.67	27.95	46.59	16.90	7.27	110.5
10.2	28.47	28.17	46.74	17.12	5.58	84.6

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.3	18.7	1.3	20.00	2.1
10.2	2.4	1.0	3.40	1.9

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.3	0.5	2.0	0.1	0.4	0.7
10.2	4.5	4.0	0.3	0.9	1.0

CRUISE DATA - TRANSECT A
(off Barataria Bay)

Station: 03 Latitude: 29:10.6 N Hydrolab cast time: 16:58
Date: 07/01/87 Longitude: 89:44.9 W Secchi disk depth (m): 2.8

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
6.5	28.90	26.11	44.01	15.44	7.60	114.8
8.1	28.50	27.97	46.46	16.96	7.23	109.6
10.2	28.66	29.71	49.19	18.21	6.56	100.7
12.2	28.46	32.37	52.92	20.27	6.23	96.8
14.4	27.07	33.84	53.61	21.83	3.97	60.6
14.5	27.23	33.76	53.67	21.72	6.13	93.9
15.0	27.34	33.61	53.57	21.57	2.93	44.9

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
6.5	11.7	2.0	13.70	2.0
14.4	1.7	1.3	3.00	1.7

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
6.5	1.6	7.6	0.5	0.8	1.1
14.4	2.8	3.4	1.9	0.6	1.3

CRUISE DATA - TRANSECT A
(off Barataria Bay)

Station: 04 Latitude: 29:07.9 N Hydrolab cast time: 17:44
Date: 07/01/87 Longitude: 89:45.0 W Secchi disk depth (m):##.#

HYDROGRAPHIC DATA
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Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.0	28.82	26.66	44.78	15.88	7.36	111.4
2.3	28.84	26.66	44.79	15.87	7.47	113.1
4.1	28.81	26.71	44.84	15.92	7.46	112.9
5.8	28.45	28.31	46.93	17.23	7.38	112.0
7.7	28.41	30.01	49.40	18.52	7.10	108.7
8.5	28.42	30.34	49.89	18.76	6.26	96.0
9.0	28.52	31.00	50.97	19.23	6.30	97.2
10.5	28.32	32.50	52.97	20.42	6.35	98.4
12.4	28.18	32.93	53.44	20.78	6.17	95.7
14.2	27.89	34.10	54.82	21.76	6.08	94.4
14.8	27.49	35.22	56.00	22.73	6.02	93.4
16.4	26.51	35.18	54.90	23.01	5.81	88.5
16.9	26.17	35.19	54.56	23.13	5.53	83.8
18.0	25.92	35.23	54.35	23.24	3.72	56.1
19.7	25.01	35.28	53.47	23.55	0.43	6.4
20.2	25.01	35.28	53.47	23.55	0.42	5.9

CHLOROPHYLL DATA
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Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.0	13.9	2.0	15.90	2.0
20.2	1.2	1.1	2.30	1.6

NUTRIENT DATA
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Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.0	0.8	5.8	0.5	0.7	0.8
20.2	4.2	11.1	1.7	1.3	2.7

CRUISE DATA - TRANSECT A
(off Barataria Bay)

Station: 05 Latitude: 29:04.2 N Hydrolab cast time: 18:52
Date: 07/01/87 Longitude: 89:45.0 W Secchi disk depth (m):###

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.9	28.94	29.54	49.20	17.99	6.35	97.9
1.8	28.95	29.55	49.21	17.99	6.31	97.3
4.2	28.87	29.68	49.34	18.12	6.30	97.1
6.2	28.39	31.42	51.45	19.58	6.28	96.9
8.0	28.21	32.73	53.19	20.62	6.14	95.1
10.0	28.06	33.56	54.23	21.29	6.14	95.3
12.4	27.79	34.58	55.41	22.15	6.14	95.4
14.0	27.61	35.38	56.35	22.81	6.04	94.0
16.3	27.42	35.71	56.62	23.12	6.12	95.1
16.9	27.40	35.72	56.60	23.14	6.14	95.4
18.3	27.28	35.77	56.54	23.21	6.14	95.2
20.1	26.99	35.89	56.40	23.39	6.13	94.6
22.0	26.52	36.02	56.08	23.64	6.17	94.5
23.9	24.55	35.85	53.74	24.13	5.51	81.3
26.3	23.24	35.88	52.39	24.54	4.24	61.1
28.1	22.39	35.95	51.59	24.83	3.92	55.6
30.0	22.29	35.99	51.54	24.89	2.12	30.0

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.9	1.5	0.3	1.80	2.0
30.0	1.2	3.1	4.30	1.4

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.9	0.7	0.5	0.3	0.2	0.3
30.0	3.1	7.5	1.5	1.1	1.8

CRUISE DATA - TRANSECT A
(off Barataria Bay)

Station: 06 Latitude: 29:00.5 N Hydrolab cast time: 20:05
Date: 07/01/87 Longitude: 89:45.0 W Secchi disk depth (m):##.#

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.4	28.77	29.71	49.29	18.18	6.44	99.1
2.1	28.81	29.71	49.33	18.17	6.38	98.2
4.0	28.92	29.79	49.55	18.19	6.43	99.2
5.8	28.33	31.63	51.70	19.76	6.39	98.6
8.1	28.25	33.35	54.12	21.08	6.08	94.6
10.2	27.93	33.78	54.41	21.51	6.08	94.3
12.2	27.61	34.81	55.53	22.38	5.97	92.6
14.1	27.40	35.49	56.29	22.96	6.02	93.4
16.2	26.98	35.73	56.16	23.28	6.00	92.5
17.9	26.64	35.82	55.93	23.45	6.10	93.5
20.2	25.52	35.90	54.84	23.86	6.09	91.5
22.0	25.54	36.02	55.02	23.95	6.21	93.4
23.9	24.05	36.08	53.51	24.45	6.36	93.1
26.1	22.60	35.95	51.80	24.77	5.92	84.3
28.0	22.01	36.05	51.30	25.02	5.48	77.2
30.1	21.81	36.08	51.14	25.10	5.52	77.5
32.2	21.71	36.09	51.05	25.13	5.45	76.4
33.9	21.65	36.10	51.00	25.16	5.44	76.2
36.2	21.51	36.13	50.88	25.22	5.45	76.1
38.3	20.91	36.19	50.34	25.43	4.58	63.3
38.5	20.91	36.19	50.33	25.43	4.02	55.5
40.1	20.94	36.19	50.32	25.43	3.35	44.6

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.4	2.4	0.2	2.60	2.1
40.1	0.5	0.9	1.40	1.5

TRANSECT A, Station 06
(Continued)

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.4	0.6	0.2	0.3	0.2	0.2
40.1	0.8	10.4	0.9	0.8	1.4

CRUISE DATA - TRANSECT A
(off Baratavia Bay)

Station: 07 Latitude: 28:56.5 N Hydrolab cast time: 21:02
Date: 07/01/87 Longitude: 89:45.0 W Secchi disk depth (m):##.#

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.7	28.20	26.57	44.12	16.01	6.78	101.4
2.9	28.80	29.17	48.52	17.76	6.79	104.2
6.3	28.92	31.32	51.81	19.33	6.21	96.7
8.8	28.02	33.91	54.69	21.57	6.05	94.0
11.4	27.27	35.41	56.02	22.94	6.00	92.8
15.3	26.81	35.78	56.06	23.37	5.89	90.6
18.5	26.13	35.91	55.50	23.68	6.07	92.3
21.2	24.03	36.03	53.43	24.42	6.25	91.5
25.0	23.44	36.37	53.24	24.85	6.48	94.0
27.7	22.96	36.34	52.69	24.97	6.91	99.3
31.4	21.94	36.03	51.21	25.02	6.71	94.4
34.3	20.83	36.13	50.17	25.41	6.58	90.7
35.9	20.71	36.15	50.07	25.46	5.66	77.9
39.4	20.55	36.20	49.96	25.53	3.84	52.7
40.1	20.52	36.20	49.93	25.54	4.60	63.1
41.9	20.44	36.19	49.84	25.56	4.71	64.5
43.6	20.26	36.20	49.67	25.61	4.86	66.3
45.3	20.21	36.21	49.63	25.63	4.50	61.4
46.5	20.16	36.21	49.58	25.65	2.39	32.6
47.3	20.15	36.22	49.57	25.66	2.11	28.7
48.5	20.15	36.21	49.57	25.65	1.66	22.6

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.7	10.3	1.1	11.40	2.1
48.5	0.8	0.6	1.40	1.2

TRANSECT A, Station 07
(Continued)

NUTRIENT DATA
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Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.7	1.2	8.2	0.2	0.6	1.0
48.5	2.3	16.2	0.4	1.8	3.0

CRUISE DATA - TRANSECT A
(off Barataria Bay)

Station: 08 Latitude: 28:50.0 N Hydrolab cast time: 22:32
Date: 07/01/87 Longitude: 89:45.0 W Secchi disk depth (m):##.#

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.1	28.81	29.97	49.71	18.36	6.21	95.7
3.9	28.85	29.98	49.78	18.36	6.16	95.0
8.0	28.06	33.79	54.55	21.47	6.09	94.7
11.6	27.09	35.26	55.63	22.89	5.97	92.0
15.8	26.39	35.63	55.39	23.39	5.86	89.3
20.0	24.78	36.03	54.22	24.19	5.99	88.9
23.9	24.27	36.32	54.06	24.56	6.82	100.4
28.0	22.97	36.04	52.31	24.73	6.89	98.9
32.2	22.10	36.01	51.36	24.96	6.53	92.2
36.2	22.38	36.35	52.09	25.14	6.39	90.9
38.4	22.26	36.36	51.96	25.18	6.61	93.8
40.9	22.09	36.35	51.78	25.22	6.62	93.6
43.7	21.79	36.32	51.43	25.29	6.61	92.9
48.5	21.61	36.33	51.24	25.34	6.41	89.8
51.5	21.07	36.31	50.65	25.47	6.33	87.8
54.9	19.88	36.23	49.31	25.74	5.86	79.4
57.7	19.41	36.28	48.88	25.90	3.61	48.5
60.1	19.37	36.28	48.84	25.91	3.65	49.0
62.7	19.34	36.28	48.81	25.91	3.66	49.1
63.1	19.34	36.28	48.81	25.92	3.72	49.9

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.1	0.3	0.1	0.40	1.9
63.1	0.2	0.6	0.80	1.4

TRANSECT A, Station 08
(Continued)

NUTRIENT DATA

=====

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.1	2.1	0.3	0.1	0.1	0.2
63.1	0.6	10.7	0.2	1.1	1.6

CRUISE DATA - TRANSECT B
(off Belle Pass, Port Fourchon)

Station: 02 Latitude: 29:04.7 N Hydrolab cast time: 05:16
Date: 07/02/87 Longitude: 90:11.4 W Secchi disk depth (m):###

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.6	29.03	27.91	46.84	16.74	5.69	87.0
0.9	29.05	27.90	46.84	16.73	5.68	86.9
3.0	29.07	27.90	46.85	16.72	5.61	85.9
4.0	29.04	27.90	46.83	16.73	5.66	86.6
5.1	29.04	27.90	46.84	16.74	5.64	86.3
5.9	29.05	28.07	47.10	16.86	5.57	85.3
7.3	28.32	29.77	48.96	18.37	4.60	70.2
7.9	28.25	29.90	49.09	18.48	3.16	48.2
8.5	28.24	29.91	49.10	18.49	2.88	43.9

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.6	3.4	1.0	4.40	1.9
8.5	2.9	1.6	4.50	1.8

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.6	1.8	0.0	0.3	0.8	0.9
8.5	5.8	1.2	1.0	1.0	1.6

CRUISE DATA - TRANSECT B
(off Belle Pass, Port Fourchon)

Station: 04 Latitude: 29:01.7 N Hydrolab cast time: 04:25
Date: 07/02/87 Longitude: 90:07.2 W Secchi disk depth (m):###

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.4	28.93	26.52	44.66	15.74	6.65	100.7
1.9	28.97	26.52	44.69	15.72	6.63	100.5
3.9	28.94	26.55	44.71	15.75	6.71	101.7
6.1	28.96	26.70	44.96	15.86	6.68	101.4
7.9	28.41	28.55	47.25	17.42	5.92	89.9
10.1	27.62	32.41	52.13	20.57	4.39	67.2
12.1	26.64	34.45	54.02	22.42	1.81	27.5
13.9	26.37	34.97	54.47	22.90	0.85	12.9
15.6	26.27	35.06	54.48	23.00	0.69	10.5

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.4	1.6	0.4	2.00	2.0
15.6	1.6	0.8	2.40	1.8

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.4	1.2	4.9	0.4	0.3	0.2
15.6	1.8	12.9	6.5	2.7	3.9

CRUISE DATA - TRANSECT B
(off Belle Pass, Port Fourchon)

Station: 06 Latitude: 28:59.6 N Hydrolab cast time: 02:45
Date: 07/02/87 Longitude: 90:04.6 W Secchi disk depth (m):###

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.1	29.15	26.42	44.69	15.60	6.95	105.6
3.1	29.15	26.43	44.70	15.60	6.94	105.5
3.9	29.15	26.43	44.71	15.60	6.88	104.6
4.9	29.15	26.44	44.72	15.60	6.95	105.7
6.2	29.10	26.60	44.92	15.74	6.95	105.7
7.0	28.82	28.67	47.79	17.38	6.68	102.2
8.1	28.81	31.33	51.72	19.38	5.79	90.0
9.0	28.15	31.79	51.76	19.94	5.98	92.1
10.0	28.05	32.25	52.33	20.32	5.99	92.3
11.2	27.68	34.01	54.48	21.76	5.97	92.3
12.1	27.25	35.28	55.83	22.85	5.65	87.3
14.3	27.04	35.83	56.38	23.34	5.57	86.0
16.2	26.00	35.77	55.17	23.62	5.35	81.1
17.1	25.45	35.82	54.65	23.83	4.67	70.1
18.1	25.23	35.78	54.36	23.87	3.82	57.1
19.0	25.14	35.78	54.27	23.90	3.49	52.1
20.2	25.10	35.78	54.23	23.91	3.28	48.9
20.3	25.09	35.78	54.23	23.91	3.26	48.6

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.1	2.7	0.6	3.30	2.0
20.3	1.3	0.6	1.90	1.8

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.1	0.4	1.0	0.2	0.4	0.3
20.3	2.7	6.0	2.2	1.4	1.9

CRUISE DATA - TRANSECT B
(off Belle Pass, Port Fourchon)

Station: 08 Latitude: 28:55.5 N Hydrolab cast time: 01:45
Date: 07/02/87 Longitude: 90:02.0 W Secchi disk depth (m):##.#

HYDROGRAPHIC DATA
=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.9	28.97	26.23	44.25	15.51	6.75	102.2
1.9	28.98	26.23	44.27	15.51	6.75	102.2
3.8	29.00	27.54	46.25	16.47	6.68	101.9
6.0	28.35	31.62	51.70	19.74	6.13	94.6
8.0	28.15	32.22	52.39	20.56	6.06	93.5
10.2	27.48	34.52	55.00	22.21	6.06	93.6
12.1	26.72	35.53	55.62	23.21	5.96	91.4
14.1	26.58	35.91	56.00	23.54	5.97	91.5
16.2	26.20	36.15	55.91	23.85	6.23	94.9
18.3	25.68	36.19	55.41	24.04	6.43	97.1
20.2	25.21	36.26	54.99	24.24	6.53	97.8
22.0	24.08	36.24	53.76	24.56	6.64	97.4
23.7	23.35	36.12	52.82	24.69	6.62	95.7
26.2	22.90	36.12	52.34	24.82	4.96	71.1
28.1	22.70	36.06	52.05	24.83	3.79	54.1
29.1	22.66	36.03	51.98	24.82	3.38	48.2

CHLOROPHYLL DATA
=====

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.9	2.8	0.7	3.50	2.0
29.1	0.7	0.3	1.00	1.9

NUTRIENT DATA
=====

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.9	3.2	0.0	0.1	0.3	0.2
29.1	0.6	2.7	0.5	0.6	0.9

CRUISE DATA - TRANSECT B
(off Belle Pass, Port Fourchon)

Station: 09 Latitude: 28:50.1 N Hydrolab cast time: 00:24
Date: 07/02/87 Longitude: 90:00.1 W Secchi disk depth (m):##.#

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.0	28.90	26.34	44.36	15.61	7.11	107.6
1.2	28.90	26.35	44.38	15.62	8.23	124.5
2.8	29.05	28.11	47.17	16.89	7.12	109.1
6.8	28.55	31.99	52.43	19.95	6.59	102.3
9.0	27.98	33.29	53.76	21.12	6.10	94.4
11.0	27.19	35.48	56.04	23.02	6.00	92.7
14.0	27.01	35.86	56.38	23.36	6.21	95.9
16.1	26.80	35.93	56.25	23.49	6.28	96.6
19.1	24.14	35.97	53.47	24.34	6.68	97.9
21.1	23.30	35.99	52.60	24.60	6.74	97.3
24.2	23.40	36.42	53.25	24.90	6.50	94.2
27.1	23.13	36.41	52.97	24.97	6.45	93.0
30.0	22.37	36.31	52.03	25.11	6.44	91.5
31.0	22.09	36.26	51.66	25.16	6.29	88.9
31.9	21.39	36.13	50.76	25.25	6.11	85.2
33.0	20.88	36.11	50.20	25.38	3.30	45.5
34.3	20.87	36.11	50.19	25.38	2.23	30.8
35.1	20.87	36.11	50.18	25.38	2.09	28.8
36.0	20.86	36.11	50.18	25.38	2.03	28.0
37.0	20.86	36.11	50.18	25.38	2.01	27.7
37.3	20.86	36.11	50.18	25.38	1.94	26.8

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.0	1.9	0.4	2.30	2.0
37.3	0.8	0.4	1.20	1.8

TRANSECT B, Station 09
(Continued)

NUTRIENT DATA

=====

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.0	0.2	0.0	0.1	0.4	0.9
37.3	0.3	7.2	0.4	1.2	1.7

CRUISE DATA - TRANSECT C
(off Cat Island Pass, Cocodrie)

Station: 03 Latitude: 28:59.5 N Hydrolab cast time: 15:17
Date: 07/02/87 Longitude: 90:31.3 W Secchi disk depth (m):###

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.1	29.35	29.30	49.22	17.68	6.58	102.0
2.4	29.40	29.30	49.26	17.66	6.58	102.1
3.9	29.36	29.31	49.24	17.68	6.62	102.7
5.5	29.09	29.32	49.01	17.78	6.59	101.7
6.4	28.86	29.27	48.73	17.82	6.58	101.1
7.5	28.84	29.26	48.69	17.82	6.54	100.5
8.6	28.81	29.28	48.70	17.85	6.41	98.4
9.0	28.77	29.33	48.74	17.89	6.37	97.8
10.0	28.62	29.61	49.02	18.15	6.18	94.8
10.6	28.60	29.83	49.31	18.32	4.42	67.8

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.1	3.8	0.5	4.30	2.1
10.6	3.6	0.7	4.30	2.0

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.1	0.3	0.0	0.1	0.2	0.2
10.6	0.6	0.4	0.2	0.2	0.2

CRUISE DATA - TRANSECT C
(off Cat Island Pass, Cocodrie)

Station: 05 Latitude: 28:54.9 N Hydrolab cast time: 14:11
Date: 07/02/87 Longitude: 90:29.3 W Secchi disk depth (m): 7.5

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.5	29.08	28.96	48.47	17.52	6.10	94.0
1.3	29.09	28.94	48.43	17.49	6.22	95.8
3.0	29.32	28.95	48.66	17.42	6.23	96.4
5.3	28.92	28.97	48.32	17.57	6.21	95.4
7.0	28.78	28.94	48.15	17.59	6.28	96.2
9.0	28.50	30.28	49.89	18.69	6.26	96.1
10.0	28.32	31.89	52.07	19.96	6.02	93.0
10.5	28.23	32.25	52.50	20.26	5.87	90.7
12.1	27.99	32.91	53.22	20.83	5.87	90.7
13.2	27.62	34.05	54.48	21.81	5.59	86.3
14.1	27.30	34.64	54.98	22.36	2.56	39.4
15.2	27.28	34.68	55.02	22.39	1.42	21.9
15.7	27.29	34.68	55.02	22.39	1.36	21.0

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.5	1.4	0.2	1.60	2.1
15.7	19.0	2.6	21.60	2.1

← ? →
potential
problem w/
report

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.5	1.8	0.0	0.1	0.1	0.4
15.7	7.5	5.9	4.3	1.1	3.1

CRUISE DATA - TRANSECT C
(off Cat Island Pass, Cocodrie)

Station: 07 Latitude: 28:50.0 N Hydrolab cast time: 12:14
Date: 07/02/87 Longitude: 90:23.5 W Secchi disk depth (m): 8.0

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.4	29.24	27.15	45.87	16.11	6.27	95.9
1.5	29.22	27.15	45.85	16.11	6.21	94.9
3.4	29.09	27.19	45.80	16.19	6.31	96.2
4.1	28.93	27.15	45.60	16.21	6.30	95.8
6.0	28.95	27.38	45.98	16.38	6.29	95.8
7.9	28.46	30.63	50.37	18.97	6.13	94.3
10.1	28.16	31.31	51.08	19.58	6.04	92.7
11.9	27.70	32.48	52.31	20.60	5.73	87.8
12.9	27.42	33.90	54.05	21.76	4.73	72.7
14.0	27.21	34.65	54.99	22.39	6.38	98.2
14.8	27.15	34.81	55.07	22.53	3.70	56.9
15.8	27.05	35.00	55.22	22.71	3.04	46.7
17.0	26.91	35.21	55.37	22.91	1.92	29.5
18.2	26.79	35.30	55.37	23.01	1.28	19.6
18.9	26.78	35.30	55.36	23.01	1.06	16.2
19.8	26.71	35.34	55.34	23.07	0	0
20.5	26.64	35.38	55.32	23.12	0	0

check surface BV
chloro 1 p laced C10
wired C9A
whole report looks C7
screwed up C5
starting w/ C3

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Ac R: (Fo/ra)
0.4	0.5	13.5	14.00	1.1
14.8	0.8	0.5	1.30	1.8
20.5	6.6	1.0	7.60	2.0

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.4	0.4	0.6	0.1	0.1	0.4
14.8	0.8	4.7	7.5	0.6	1.5
20.5	0.4	17.3	5.7	1.2	3.1

CRUISE DATA - TRANSECT C
(off Cat Island Pass, Cocodrie)

Station: 07 Latitude: 28:50.0 N Hydrolab cast time: 12:14
Date: 07/02/87 Longitude: 90:23.5 W Secchi disk depth (m): 8.0

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.4	29.24	27.15	45.87	16.11	6.27	95.9
1.5	29.22	27.15	45.85	16.11	6.21	94.9
3.4	29.09	27.19	45.80	16.19	6.31	96.2
4.1	28.93	27.15	45.60	16.21	6.30	95.8
6.0	28.95	27.38	45.98	16.38	6.29	95.8
7.9	28.46	30.63	50.37	18.97	6.13	94.3
10.1	28.16	31.31	51.08	19.58	6.04	92.7
11.9	27.70	32.48	52.31	20.60	5.73	87.8
12.9	27.42	33.90	54.05	21.76	4.73	72.7
14.0	27.21	34.65	54.99	22.39	6.38	98.2
14.8	27.15	34.81	55.07	22.53	3.70	56.9
15.8	27.05	35.00	55.22	22.71	3.04	46.7
17.0	26.91	35.21	55.37	22.91	1.92	29.5
18.2	26.79	35.30	55.37	23.01	1.28	19.6
18.9	26.78	35.30	55.36	23.01	1.06	16.2
19.8	26.71	35.34	55.34	23.07	0.92	14.1
20.5	26.64	35.38	55.32	23.12	0.87	13.3

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.4	0.5	13.5	14.00	1.1
14.8	0.8	0.5	1.30	1.8
20.5	6.6	1.0	7.60	2.0

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.4	0.4	0.6	0.1	0.1	0.4
14.8	0.8	4.7	7.5	0.6	1.5
20.5	0.4	17.3	5.7	1.2	3.1

CRUISE DATA - TRANSECT C
(off Cat Island Pass, Cocodrie)

Station: 8A Latitude: 28:44.0 N Hydrolab cast time: 11:07
Date: 07/02/87 Longitude: 90:19.5 W Secchi disk depth (m): 7.0

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.6	28.97	28.87	48.23	17.48	6.31	96.9
1.4	28.98	28.87	48.23	17.48	6.28	96.5
3.6	28.85	28.93	48.20	17.57	6.27	96.2
5.0	28.66	29.49	48.87	18.05	6.34	97.2
6.3	28.63	30.00	49.59	18.44	6.26	96.2
7.6	28.54	30.28	49.93	18.68	6.24	95.9
8.7	28.47	30.92	50.80	19.18	6.21	95.7
9.9	28.36	31.49	51.52	19.64	6.15	94.9
11.1	28.04	32.71	52.99	20.67	6.05	93.4
12.2	27.70	33.59	53.91	21.44	5.81	89.6
13.5	27.27	34.73	55.08	22.48	5.43	83.7
14.1	26.99	35.18	55.41	22.86	5.18	79.6
15.4	26.52	35.62	55.53	23.34	4.16	63.6
15.9	26.44	35.66	55.49	23.39	4.51	68.8
17.0	26.26	35.74	55.41	23.51	4.79	72.9
18.3	25.91	35.80	55.13	23.67	4.83	73.1
18.7	25.72	35.83	54.95	23.75	4.10	61.8
20.0	24.88	35.86	54.10	24.03	3.99	59.3
21.0	24.76	35.97	54.12	24.15	4.14	61.4
22.3	24.44	35.92	53.72	24.21	5.03	74.1
23.1	24.15	35.90	53.38	24.28	4.75	69.6
24.1	23.62	36.03	53.00	24.54	4.80	69.7
25.4	23.59	36.02	52.94	24.54	3.69	53.6
25.7	23.59	36.02	52.94	24.54	3.78	54.9

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.6	0.5	0.1	0.60	1.9
25.7	1.6	2.1	3.70	1.5

TRANSECT C, Station 8A
(Continued)

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.6	1.3	0.0	0.2	0.2	0.2
25.7	2.5	6.4	2.1	0.7	1.8

CRUISE DATA - TRANSECT C
(off Cat Island Pass, Cocodrie)

Station: 9A Latitude: 28:40.4 N Hydrolab cast time: 10:12
Date: 07/02/87 Longitude: 90:16.5 W Secchi disk depth (m): 9.5

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.6	28.82	28.71	47.85	17.41	6.23	95.4
2.5	28.83	28.70	47.84	17.40	6.20	94.9
5.1	28.73	28.83	47.95	17.53	6.22	95.1
7.9	28.45	30.93	50.80	19.19	6.11	94.1
9.0	28.13	32.15	52.26	20.21	5.94	91.6
11.1	27.39	34.56	54.96	22.27	5.96	92.0
12.0	27.31	34.89	55.34	22.54	5.84	90.1
13.0	27.31	35.16	55.71	22.74	5.60	86.6
14.2	27.34	35.47	56.20	22.97	5.63	87.2
15.9	27.18	35.87	56.58	23.32	5.89	91.2
18.2	26.97	35.92	56.42	23.43	5.97	92.1
20.3	26.53	35.92	55.95	23.56	5.99	91.7
21.9	25.67	35.97	55.10	23.87	6.18	93.2
23.8	23.67	36.06	53.08	24.54	6.21	90.3
26.1	22.75	36.02	52.06	24.78	5.41	77.3
28.1	22.18	36.04	51.47	24.96	4.99	70.6
29.3	22.17	36.04	51.47	24.97	4.37	61.8
30.1	22.17	36.04	51.47	24.97	4.30	60.8

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.6	0.4	0.1	0.50	2.0
30.1	0.9	1.4	2.30	1.5

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.6	0.8	0.3	0.1	0.1	0.2
30.1	0.2	6.7	1.1	0.5	1.3

CRUISE DATA - TRANSECT C
(off Cat Island Pass, Cocodrie)

Station: 10 Latitude: 28:36.6 N Hydrolab cast time: 09:12
Date: 07/02/87 Longitude: 90:14.1 W Secchi disk depth (m):10.5

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.6	28.87	28.26	47.22	17.06	6.18	94.5
2.4	28.88	28.26	47.23	17.05	6.12	93.6
5.0	28.82	28.30	47.24	17.10	6.16	94.1
8.0	28.52	30.80	50.67	19.07	6.04	93.1
11.1	27.35	34.52	54.86	22.25	5.80	89.4
12.2	27.32	34.72	55.12	22.41	5.79	89.3
13.0	27.30	34.83	55.25	22.50	5.72	88.2
14.1	27.30	34.98	55.46	22.61	5.61	86.6
15.2	27.33	35.18	55.77	22.75	5.58	86.3
16.2	27.34	35.50	56.24	22.99	5.61	86.9
17.1	27.32	35.56	56.30	23.04	5.88	91.1
19.0	27.19	35.69	56.34	23.18	6.01	93.0
22.1	26.70	35.95	56.17	23.54	6.00	92.2
24.9	24.47	35.94	53.78	24.22	5.80	85.5
27.4	23.24	35.88	52.38	24.53	5.32	76.7
28.5	22.57	35.90	51.72	24.75	4.90	69.7
31.1	21.16	35.86	50.18	25.11	5.21	72.2
33.9	21.31	36.19	50.76	25.32	5.02	69.9
36.0	21.32	36.24	50.83	25.36	5.98	83.3
37.2	21.07	36.17	50.48	25.37	5.61	77.7
38.0	20.94	36.16	50.32	25.40	4.99	69.0
39.0	20.86	36.14	50.22	25.41	4.55	62.8
40.2	20.65	36.16	50.02	25.48	4.52	62.1
41.1	20.50	36.20	49.92	25.55	4.43	60.7
42.0	20.34	36.20	49.75	25.59	4.28	58.5
43.1	20.32	36.20	49.73	25.60	4.21	57.5
44.0	20.29	36.21	49.71	25.61	4.15	56.7
45.0	20.27	36.21	49.69	25.61	4.11	56.1
45.2	20.27	36.21	49.68	25.62	4.08	55.7

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.6	0.5	0.2	0.70	1.9
45.2	0.6	0.9	1.50	1.5

TRANSECT C, Station 10
(Continued)

NUTRIENT DATA
=====

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.6	1.1	0.0	0.1	0.1	0.2
45.2	1.5	7.9	0.8	0.6	1.4

CRUISE DATA - TRANSECT D
(off Isles Dernieres, Ship Shoal)

Station: 01 Latitude: 28:59.0 N Hydrolab cast time: 17:45
Date: 07/02/87 Longitude: 90:50.1 W Secchi disk depth (m): 1.5

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.3	29.16	27.27	45.99	16.23	6.46	98.7
2.5	28.99	28.22	47.26	16.99	6.64	101.7
4.4	28.76	28.80	47.93	17.50	5.92	90.6
5.2	28.51	30.40	50.01	18.78	5.42	83.3
6.0	28.44	30.81	50.60	19.11	4.36	67.1
7.0	28.43	30.85	50.66	19.14	3.82	58.8
7.4	28.43	30.85	50.66	19.14	3.78	58.2

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.3	7.9	1.9	9.80	2.0
7.4	7.6	1.1	8.70	2.1

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.3	1.3	0.1	0.3	0.6	0.1
7.4	4.6	0.8	2.0	0.7	1.1

CRUISE DATA - TRANSECT D
(off Isles Dernieres, Ship Shoal)

Station: 02 Latitude: 28:50.4 N Hydrolab cast time: 19:05
Date: 07/02/87 Longitude: 90:50.0 W Secchi disk depth (m): 7.0

HYDROGRAPHIC DATA
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Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.2	29.12	29.82	49.77	18.15	6.75	104.5
1.4	29.24	29.71	49.73	18.02	6.85	106.3
2.2	29.18	29.85	49.88	18.14	6.84	106.1
4.0	28.87	29.92	49.70	18.30	6.54	100.9
5.9	28.80	30.09	49.89	18.45	6.45	99.5
7.9	28.53	31.18	51.24	19.36	6.47	99.9
9.2	28.14	32.63	52.96	20.57	5.88	90.9
10.1	28.04	33.24	53.74	21.06	5.55	86.0
11.0	27.92	33.67	54.25	21.43	5.94	92.0
12.1	27.70	34.18	54.75	21.88	5.71	88.4
13.0	27.47	34.52	54.99	22.21	5.30	81.9
14.0	27.42	34.55	54.98	22.25	3.90	60.2
14.9	27.41	34.55	54.97	22.25	3.75	57.9

CHLOROPHYLL DATA
=====

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.2	2.5	0.3	2.80	2.0 ↙
14.9	17.2	2.7	19.90	2.0 ↖

NUTRIENT DATA
=====

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
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CRUISE DATA - TRANSECT D
(off Isles Dernieres, Ship Shoal)

Station: 03 Latitude: 28:43.0 N Hydrolab cast time: 20:42
Date: 07/02/87 Longitude: 90:50.0 W Secchi disk depth (m): 7.0

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.1	29.06	30.57	50.84	18.73	5.35	83.1
2.5	28.99	30.64	50.88	18.80	5.16	80.1
3.5	28.91	30.85	51.11	18.99	6.31	97.9
5.5	28.73	31.45	51.83	19.50	6.31	98.0
6.9	28.71	31.52	51.92	19.55	6.34	98.4
8.1	28.67	31.70	52.13	19.70	6.35	98.6
10.0	28.52	31.98	52.40	19.56	6.29	97.6
12.1	27.07	35.20	55.52	22.84	5.00	77.0
13.9	27.00	35.21	55.45	22.88	4.71	72.4
14.9	26.92	35.22	55.40	22.92	4.31	66.2
16.0	26.88	35.24	55.38	22.94	3.79	58.2
17.1	26.86	35.24	55.36	22.95	3.51	53.8
17.1	26.86	35.24	55.36	22.94	3.42	52.5

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.1	0.6	0.2	0.80	1.9
17.1	10.7	2.8	13.50	1.9

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.1	1.2	0.1	0.1	0.1	0.2
17.1	0.8	2.7	3.9	0.6	2.2

CRUISE DATA - TRANSECT D
(off Isles Dernieres, Ship Shoal)

Station: 04 Latitude: 28:36.4 N Hydrolab cast time: 21:50
Date: 07/02/87 Longitude: 90:50.0 W Secchi disk depth (m): 7.0

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.8	28.68	31.11	51.27	19.25	5.25	81.3
2.0	28.68	31.11	51.27	19.25	4.63	71.7
4.0	28.64	31.40	51.67	19.49	6.24	96.7
6.0	28.57	32.05	52.55	20.00	6.26	97.2
8.2	28.54	32.53	53.23	20.37	6.27	97.6
9.9	27.92	33.89	54.55	21.59	6.18	95.9
12.2	27.35	35.12	55.71	22.70	5.97	92.3
14.1	27.27	35.16	55.69	22.76	6.01	92.8
15.8	27.16	35.24	55.68	22.85	5.99	92.4
18.1	27.14	35.25	55.68	22.87	5.86	90.4
18.5	27.14	35.25	55.68	22.87	5.85	90.2
18.8	27.14	35.25	55.68	22.87	5.84	90.0

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.8	0.5	0.1	0.60	1.9
18.8	2.6	0.9	3.50	1.9

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.8	1.9	1.0	0.1	1.4	0.1
18.8	1.8	0.0	0.2	0.4	0.5

CRUISE DATA - TRANSECT E
(off Point au Fer Island, Fourleague Bay)

Station: 02 Latitude: 28:51.5 N Hydrolab cast time: 03:45
Date: 07/03/87 Longitude: 91:15.0 W Secchi disk depth (m):##.#

HYDROGRAPHIC DATA
=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.7	28.76	28.80	47.93	17.49	6.42	98.2
2.4	28.75	28.68	47.75	17.41	6.51	99.5
4.9	28.76	28.81	47.94	17.50	6.45	98.7
5.9	28.94	29.54	49.20	17.99	6.34	97.7
7.0	28.47	31.01	50.93	19.25	5.12	78.9
8.0	28.43	31.10	51.01	19.33	3.96	61.0

CHLOROPHYLL DATA
=====

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.7	5.3	1.2	6.50	2.0
8.0	10.9	2.1	13.00	2.0

NUTRIENT DATA
=====

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.7	1.9	0.7	0.2	1.4	0.2
8.0	8.8	0.7	0.7	0.9	1.1

CRUISE DATA - TRANSECT E
(off Point au Fer Island, Fourleague Bay)

Station: 2A Latitude: 28:44.6 N Hydrolab cast time: 02:50
Date: 07/03/87 Longitude: 91:15.0 W Secchi disk depth (m):##.##

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.8	28.67	30.09	49.77	18.49	6.42	98.8
2.1	28.68	30.09	49.77	18.49	6.31	97.1
3.0	28.68	30.09	49.77	18.49	6.37	98.0
3.9	28.68	30.10	49.78	18.50	6.33	97.4
5.9	28.72	30.42	50.29	18.72	6.29	97.1
7.9	28.78	31.47	51.91	19.49	6.30	97.9
9.9	27.34	34.09	54.25	21.93	6.14	94.4
11.1	26.85	34.67	54.55	22.52	5.67	86.7
12.1	26.73	34.61	54.35	22.52	4.45	67.9
13.0	26.70	34.59	54.29	22.51	4.07	62.0
14.1	26.70	34.59	54.28	22.51	3.97	60.5
14.8	26.70	34.59	54.28	22.51	3.95	60.2

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.8	1.7	0.2	1.90	2.0
14.8	17.1	2.2	19.30	2.1

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.8	1.2	0.0	0.6	0.2	0.2
14.8	2.8	1.4	0.2	0.9	0.8

CRUISE DATA - TRANSECT E
(off Point au Fer Island, Fourleague Bay)

Station: 03 Latitude: 28:39.5 N Hydrolab cast time: 01:28
Date: 07/03/87 Longitude: 91:15.0 W Secchi disk depth (m):###

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.7	28.70	31.65	52.08	19.65	6.38	99.1
2.6	28.70	31.64	52.08	19.65	6.35	98.6
4.0	28.71	31.63	52.07	19.64	6.37	99.0
5.9	28.70	31.64	52.07	19.65	6.35	98.6
8.1	28.70	31.64	52.08	19.64	6.34	98.5
10.3	28.68	31.71	52.16	19.70	6.32	98.2
12.1	27.12	34.64	54.78	22.41	5.84	89.7
13.0	26.92	34.73	54.71	22.54	5.62	86.1
14.0	26.76	34.87	54.73	22.70	5.58	85.3
15.1	26.61	35.11	54.91	22.93	5.78	88.2
15.9	26.61	35.24	55.09	23.03	5.82	88.9
17.2	26.49	35.28	55.03	23.10	5.78	88.1
18.4	26.45	35.31	55.02	23.13	5.31	80.9
20.1	26.40	35.33	55.00	23.16	4.87	74.1
21.1	26.40	35.33	55.00	23.16	4.80	73.1
21.6	26.40	35.33	55.00	23.16	4.76	72.5

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.7	0.5	0.2	0.70	1.8
21.6	3.0	0.9	3.90	1.9

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.7	1.1	0.4	0.1	0.5	0.2
21.6	2.3	0.5	0.5	0.3	1.0

CRUISE DATA - TRANSECT E
(off Point au Fer Island, Fourleague Bay)

Station: 04 Latitude: 28:35.0 N Hydrolab cast time: 00:36
Date: 07/03/87 Longitude: 91:15.1 W Secchi disk depth (m):##.#

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.8	28.71	31.08	51.26	19.22	6.29	97.4
0.9	28.72	31.07	51.25	19.21	6.33	98.0
2.4	28.74	31.08	51.29	19.21	6.31	97.8
4.3	28.70	31.08	51.26	19.22	6.31	97.7
6.2	28.72	31.08	51.27	19.22	6.31	97.7
8.1	28.64	31.31	51.54	19.42	6.31	97.7
10.1	27.72	33.70	54.08	21.51	6.16	95.1
11.0	27.03	34.79	54.90	22.55	5.58	85.6
12.0	26.90	34.84	54.83	22.63	5.35	81.9
13.0	26.86	34.91	54.90	22.70	5.21	79.8
13.9	26.87	35.01	55.05	22.77	5.51	84.4
15.1	26.72	35.10	55.01	22.88	5.54	84.7
16.0	26.60	35.26	55.11	23.04	5.31	81.1
18.0	26.34	35.40	55.04	23.23	5.47	83.2
20.0	26.12	35.44	54.85	23.33	4.97	75.3
22.1	26.01	35.45	54.75	23.38	4.92	74.4
24.0	25.86	35.51	54.68	23.64	5.17	78.0
26.0	25.43	35.54	54.26	23.62	5.18	77.6
28.2	24.47	35.57	53.28	23.94	4.74	69.8
29.7	22.83	35.72	51.75	24.54	4.40	62.9
30.0	22.27	35.96	51.47	24.87	2.44	34.5

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.8	0.2	0.0	0.20	1.9
30.0	3.4	1.4	4.80	1.8

TRANSECT E, Station 04
(Continued)

NUTRIENT DATA

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Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.8	2.7	0.2	0.1	0.2	0.2
30.0	5.0	0.9	0.9	1.0	1.6

CRUISE DATA - TRANSECT F
(off Atchafalaya Bay)

Station: 02 Latitude: 29:03.0 N Hydrolab cast time: 06:42
Date: 07/03/87 Longitude: 91:37.0 W Secchi disk depth (m): 3.5

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.5	28.61	25.87	43.41	15.35	6.20	93.1
2.3	28.59	25.87	43.40	15.36	6.12	91.8
4.1	28.60	25.88	43.42	15.36	6.15	92.3
5.0	28.62	25.97	43.56	15.42	6.16	92.5
6.1	28.67	26.81	44.88	16.04	5.94	89.7
7.1	28.64	27.57	45.99	16.61	3.35	50.8

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.5	4.3	0.7	5.00	2.0
7.1	4.6	1.0	5.60	2.0

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.5	0.5	0.3	0.1	0.4	0.1
7.1	2.1	0.6	0.3	0.9	0.4

CRUISE DATA - TRANSECT F
(off Atchafalaya Bay)

Station: 03 Latitude: 28:53.0 N Hydrolab cast time: 08:20
Date: 07/03/87 Longitude: 91:37.1 W Secchi disk depth (m): 8.5

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.1	28.60	29.29	48.51	17.92	6.25	95.6
1.8	28.60	29.29	48.51	17.92	6.23	95.3
4.1	28.59	29.29	48.51	17.92	6.19	94.7
6.0	28.59	29.29	48.51	17.92	6.24	95.5
7.9	28.59	29.30	48.52	17.92	6.19	94.7
10.0	28.59	29.33	48.57	17.95	6.20	94.9
12.0	28.32	30.60	50.20	19.00	5.89	90.3
12.9	27.36	33.65	53.64	21.59	5.34	81.9
14.2	26.83	34.35	54.08	22.29	5.31	81.0
14.9	26.55	34.84	54.47	22.74	3.71	56.5
15.9	26.47	34.99	54.60	22.88	2.51	38.2
17.1	26.44	35.05	54.64	22.94	2.21	33.6
17.8	26.43	35.06	54.65	22.94	2.16	32.8
19.0	26.42	35.06	54.65	22.95	2.13	32.4
19.2	26.42	35.06	54.65	22.95	2.09	31.8

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.1	0.8	0.2	1.00	2.0
14.2	2.0	0.6	2.60	1.9
19.2	0.9	0.2	1.10	2.0

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.1	2.6	0.1	0.2	0.3	0.1
14.2	2.5	0.4	0.5	0.5	0.6
19.2	6.1	0.1	0.3	1.6	0.2

CRUISE DATA - TRANSECT F
(off Atchafalaya Bay)

Station: 04 Latitude: 28:47.0 N Hydrolab cast time: 09:50
Date: 07/03/87 Longitude: 91:36.9 W Secchi disk depth (m): 8.5

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.9	28.68	29.51	48.90	18.05	6.37	97.7
2.3	28.65	29.51	48.89	18.07	6.33	97.1
3.9	28.59	29.53	48.86	18.10	6.33	97.0
6.1	28.55	29.71	49.09	18.25	6.33	97.0
8.0	28.61	29.98	49.54	18.43	6.27	96.3
10.1	28.30	33.77	54.78	21.38	5.99	93.5
12.0	27.99	34.62	55.67	22.11	6.08	94.8
14.0	27.60	34.64	55.29	22.26	6.18	95.7
15.9	27.30	34.77	55.15	22.45	6.17	95.2
17.9	27.21	35.12	55.55	22.74	6.22	96.0
19.0	26.82	35.18	55.24	22.92	5.94	91.0
19.9	26.29	35.18	54.68	23.08	4.97	75.4
21.1	25.30	35.40	53.93	23.55	2.96	44.2
22.1	25.19	35.40	53.81	23.59	2.35	35.0
22.9	25.15	35.40	53.78	23.60	2.21	32.9
23.3	25.15	35.41	53.78	23.61	2.15	32.0

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.9	0.7	0.1	0.80	2.0
23.3	1.9	0.8	2.70	1.8

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.9	6.8	0.0	0.6	0.4	0.1
23.3	3.0	5.7	4.3	0.9	2.5

CRUISE DATA - TRANSECT G
(off Vermilion Bay, Marsh Island)

Station: 02 Latitude: 29:08.0 N Hydrolab cast time: 16:05
Date: 07/03/87 Longitude: 92:00.0 W Secchi disk depth (m): 4.5

HYDROGRAPHIC DATA
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Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.0	29.80	26.39	45.18	15.35	7.03	108.1
2.2	29.76	26.42	45.19	15.39	6.87	105.6
4.1	28.84	26.95	45.23	16.09	6.88	104.3
5.0	28.83	27.77	46.45	16.70	6.37	97.0
6.1	28.78	28.50	47.50	17.27	6.03	92.1
7.9	28.54	29.63	48.97	18.20	5.58	85.4
9.0	28.30	30.01	49.30	18.55	4.06	62.0
10.1	28.21	30.14	49.42	18.68	3.50	53.4
11.0	28.13	30.39	49.70	18.89	2.77	42.3

CHLOROPHYLL DATA
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Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.0	1.9	0.2	2.10	2.1
11.0	6.6	1.7	8.30	1.9

NUTRIENT DATA
=====

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.0	1.3	0.0	0.1	0.3	0.1
11.0	7.6	0.8	0.4	2.5	1.3

CRUISE DATA - TRANSECT G
(off Vermilion Bay, Marsh Island)

Station: 03 Latitude: 28:59.0 N Hydrolab cast time: 14:12
Date: 07/03/87 Longitude: 91:60.0 W Secchi disk depth (m): 7.0

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.1	29.38	28.69	48.33	17.21	6.35	98.2
2.0	29.50	28.69	48.43	17.17	6.27	97.1
4.0	29.11	28.70	48.09	17.31	6.21	95.6
5.9	28.86	28.82	48.05	17.48	6.22	95.4
8.0	28.74	29.08	48.33	17.71	6.20	95.0
10.2	28.62	29.37	48.65	17.97	5.93	90.8
11.4	27.50	32.84	52.63	20.94	5.42	83.0
12.3	27.04	33.78	53.49	21.79	5.50	83.9
14.4	26.41	34.61	54.01	22.61	5.65	85.7
15.0	26.33	34.76	54.14	22.75	5.18	78.5
16.1	26.17	35.01	54.32	22.99	4.65	70.4
17.0	26.01	35.14	54.33	23.14	3.62	54.7
18.2	25.96	35.16	54.30	23.17	3.08	46.5
19.2	26.00	35.14	54.28	23.15	2.88	43.5
20.2	25.94	35.13	54.24	23.15	2.65	40.0

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.1	0.9	0.2	1.10	1.9
20.2	1.5	0.6	2.10	1.8

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.1	0.4	0.0	0.1	0.1	0.1
20.2	3.2	5.0	3.8	0.7	2.5

CRUISE DATA - TRANSECT G
(off Vermilion Bay, Marsh Island)

Station: 04 Latitude: 28:54.0 N Hydrolab cast time: 13:18
Date: 07/03/87 Longitude: 92:00.1 W Secchi disk depth (m): 7.0

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.0	29.23	28.69	48.19	17.26	5.63	86.8
1.1	29.17	28.80	48.30	17.36	5.22	80.5
1.9	29.12	28.72	48.14	17.32	6.18	95.1
3.3	29.00	28.75	48.06	17.38	6.15	94.5
5.0	28.93	28.76	48.03	17.42	6.19	95.0
6.1	28.88	28.80	48.04	17.46	6.23	95.5
8.2	28.91	28.92	48.24	17.54	6.19	95.0
10.2	28.50	29.99	49.46	18.47	6.06	92.9
12.1	27.35	33.40	53.28	21.41	5.88	90.1
14.0	27.06	33.98	53.79	21.93	5.95	91.0
15.9	26.95	34.41	54.29	22.30	6.25	95.6
18.0	26.34	34.96	54.42	22.90	6.05	91.8
19.0	26.21	35.04	54.40	23.01	5.71	86.5
20.3	26.10	35.38	54.75	23.29	5.67	85.9
22.1	25.08	35.46	53.77	23.67	4.96	73.8
22.9	24.73	35.49	53.45	23.80	4.11	60.7
23.6	24.62	35.51	53.36	23.85	3.50	51.6
24.0	24.62	35.51	53.36	23.85	3.28	48.4

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.0	0.5	0.2	0.70	1.9
24.0	2.0	1.2	3.20	1.8

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.0	0.8	0.0	0.1	0.2	0.1
24.0	3.2	5.0	3.8	0.7	2.5

CRUISE DATA - TRANSECT H
(off White Lake)

Station: 02 Latitude: 29:18.5 N Hydrolab cast time: 19:00
Date: 07/03/87 Longitude: 92:23.0 W Secchi disk depth (m): 3.5

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.0	29.46	24.53	42.05	14.08	6.09	92.1
2.1	29.20	25.55	43.41	14.92	5.80	87.8
4.0	29.09	26.32	44.49	15.54	6.79	103.0
5.2	29.01	26.99	45.43	16.06	6.56	99.8
6.3	28.88	27.27	45.74	16.31	6.41	97.4
6.9	28.87	27.27	45.74	16.32	6.39	97.1
7.6	28.85	27.29	45.75	16.34	6.17	93.8

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.0	0.0	37.5	37.50	0.2
7.6	5.0	1.3	6.30	1.9

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.0	2.2	0.0	0.3	0.3	0.6
7.6	2.9	0.0	0.2	0.4	0.3

CRUISE DATA - TRANSECT H
(off White Lake)

Station: 2A Latitude: 29:15.2 N Hydrolab cast time: 19:35
Date: 07/03/87 Longitude: 92:22.7 W Secchi disk depth (m):###

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.9	29.69	25.61	43.88	14.81	5.80	88.6
2.5	29.70	25.57	43.84	14.78	5.38	82.2
3.2	29.44	26.00	44.29	15.19	5.89	89.8
4.4	29.21	27.02	45.64	16.02	6.50	99.2
5.6	29.15	27.14	45.79	16.13	6.43	98.1
6.2	29.14	27.15	45.79	16.14	6.28	95.8

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)

CRUISE DATA - TRANSECT H
(off White Lake)

Station: 2B Latitude: 29:12.6 N Hydrolab cast time: 20:00
Date: 07/03/87 Longitude: 92:22.5 W Secchi disk depth (m):###

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.7	29.61	26.46	45.13	15.47	5.81	89.1
1.1	29.60	26.55	45.27	15.54	5.79	88.8
2.4	29.61	26.48	45.16	15.49	5.42	83.1
3.8	29.53	26.74	45.49	15.71	6.38	97.8
5.2	29.43	26.99	45.79	15.92	6.41	98.2
6.4	29.23	27.07	45.74	16.05	6.41	97.9
7.6	28.98	27.20	45.72	16.23	6.27	95.4
8.4	28.83	27.55	46.13	16.54	5.93	90.2
9.0	28.77	27.81	46.46	16.75	5.28	80.4
9.0	28.72	27.82	46.44	16.78	4.45	67.7

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
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NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
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CRUISE DATA - TRANSECT H
(off White Lake)

Station: 03 Latitude: 29:09.5 N Hydrolab cast time: 20:30
Date: 07/03/87 Longitude: 92:23.0 W Secchi disk depth (m):###

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.8	29.47	27.21	46.16	16.08	5.41	83.1
1.0	29.47	27.19	46.13	16.06	5.72	87.8
2.3	29.47	27.23	46.19	16.09	5.51	84.6
4.4	29.30	27.26	46.09	16.16	6.37	97.6
6.1	28.87	27.56	46.18	16.54	6.35	96.7
8.0	28.73	28.12	46.89	17.00	6.23	94.9
10.0	28.45	29.06	48.04	17.79	5.95	90.7
10.9	26.87	32.92	52.11	21.19	5.12	77.5
12.0	26.13	34.13	53.05	22.34	2.52	37.9
12.3	26.09	34.15	53.04	22.36	1.31	19.7
13.1	26.09	34.15	53.04	22.36	1.09	16.4
14.0	26.10	34.15	53.04	22.36	1.10	16.5
14.6	26.10	34.12	53.00	22.34	1.10	16.5

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.0	12.5	9.2	21.70	1.7
14.6	17.3	2.0	19.30	2.1

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.0	3.8	0.0	0.5	0.4	0.1
14.6	2.2	6.8	7.4	1.9	4.4

CRUISE DATA - TRANSECT H
(off White Lake)

Station: 04 Latitude: 29:02.0 N Hydrolab cast time: 21:46
Date: 07/03/87 Longitude: 92:23.0 W Secchi disk depth (m):###

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.0	28.94	28.39	47.47	17.13	6.09	93.3
2.0	28.94	28.39	47.48	17.13	6.08	93.1
4.1	28.94	28.39	47.49	17.14	6.09	93.3
6.1	28.96	28.41	47.53	17.14	6.09	93.3
7.8	28.89	28.46	47.54	17.20	6.15	94.1
9.0	28.61	28.43	47.25	17.27	6.16	93.8
10.0	28.55	28.71	47.61	17.50	6.17	94.0
11.0	27.65	31.85	51.35	20.15	5.81	88.7
12.1	27.38	32.44	51.94	20.68	4.93	75.1
13.1	25.85	34.65	53.48	22.82	4.17	62.6
13.9	25.64	34.79	53.45	22.99	2.93	43.9
14.9	25.32	34.96	53.35	23.22	2.11	31.4
16.2	25.30	34.96	53.32	23.22	1.94	28.9
17.0	25.28	34.96	53.31	23.23	1.87	27.8
18.0	25.27	34.96	53.30	23.23	1.79	26.6
19.2	25.26	34.95	53.28	23.23	1.72	25.6
20.0	25.26	34.96	53.29	23.23	1.70	25.3
21.0	25.26	34.96	53.28	23.23	1.71	25.4
22.5	25.25	34.96	53.28	23.23	1.64	24.4

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.0	0.4	0.2	0.60	1.9
22.5	2.6	0.9	3.50	1.9

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.0	1.0	0.0	0.2	0.5	0.1
22.5	3.2	7.0	5.3	1.0	3.3

CRUISE DATA - TRANSECT H
(off White Lake)

Station: 4A Latitude: 28:58.4 N Hydrolab cast time: 22:50
Date: 07/03/87 Longitude: 92:22.5 W Secchi disk depth (m):###

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.0	29.13	28.29	47.50	17.00	6.24	95.8
2.9	29.13	28.29	47.50	16.99	6.24	95.8
4.2	29.13	28.29	47.50	17.00	6.28	96.4
6.5	28.95	28.30	47.36	17.06	6.27	96.0
8.1	28.83	28.64	47.77	17.36	6.30	96.4
10.2	28.38	29.96	49.31	18.49	6.22	95.2
12.0	27.11	32.94	52.38	21.13	4.20	63.9
13.9	26.32	34.00	53.07	22.19	4.51	68.0
16.1	25.79	35.03	53.94	23.12	5.50	82.7
16.9	25.58	35.02	53.71	23.19	3.77	56.4
18.1	25.18	35.11	53.41	23.88	3.00	44.6
19.0	24.97	35.15	53.25	23.47	2.63	39.0
20.2	24.89	35.17	53.18	23.50	2.37	35.1
21.1	24.89	35.16	53.18	23.50	2.35	34.8
21.9	24.88	35.16	53.16	23.51	2.33	34.5
23.9	24.87	35.16	53.16	23.51	2.29	33.9
25.0	24.87	35.16	53.16	23.51	2.28	33.7
25.1	24.87	35.16	53.16	23.50	2.29	33.9

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.0	0.4	0.2	0.60	1.9
25.1	3.9	1.6	5.50	1.9

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.0	1.0	0.0	0.1	0.1	0.1
25.1	3.1	4.6	3.5	0.9	2.9

CRUISE DATA - TRANSECT I
(off Grand Lake)

Station: 02 Latitude: 28:34.0 N Hydrolab cast time: 04:54
Date: 07/04/87 Longitude: ~~90:07.1~~ W Secchi disk depth (m):###

92° 44.90

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.8	29.06	26.70	45.04	15.83	6.64	100.9
2.0	29.06	26.70	45.03	15.83	6.60	100.3
4.0	29.06	26.70	45.04	15.83	6.57	99.9
5.9	29.06	26.71	45.06	15.84	6.63	100.8
8.1	29.00	26.77	45.10	15.90	6.63	100.7
10.1	28.35	28.98	47.83	17.77	6.17	93.8
10.9	27.98	30.49	49.72	19.02	5.63	85.8
11.7	27.40	32.05	51.40	20.37	3.85	58.6
12.9	27.37	32.09	51.42	20.41	2.98	45.3
14.2	27.36	32.09	51.42	20.42	2.85	43.3
14.3	27.35	32.09	51.42	20.42	2.90	44.1

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.8	1.1	0.3	1.40	1.9
14.3	8.3	1.3	9.60	2.0

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.8	2.8	0.4	0.1	0.4	0.1
14.3	9.5	1.1	1.6	0.9	2.0

CRUISE DATA - TRANSECT I
(off Grand Lake)

Station: 03 Latitude: 29:17.8 N Hydrolab cast time: 05:50
Date: 07/04/87 Longitude: 92:45.0 W Secchi disk depth (m):##.#

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.2	29.11	27.35	46.06	16.30	5.91	90.2
1.8	29.11	27.41	46.15	16.34	6.07	92.7
4.0	29.13	27.39	46.14	16.32	6.16	94.1
6.0	29.12	27.39	46.13	16.32	6.14	93.8
8.0	29.06	27.43	46.15	16.38	6.15	93.9
10.1	28.75	27.82	46.47	16.77	6.13	93.3
11.0	28.39	29.13	48.09	17.86	6.09	92.7
11.9	27.43	32.77	52.46	20.91	5.15	78.7
13.0	27.06	33.13	52.60	21.30	3.37	51.3
14.2	26.90	33.28	52.65	21.46	2.85	43.3
15.1	26.84	33.32	52.65	21.51	2.30	34.9
16.1	26.80	33.35	52.65	21.55	2.03	30.8
17.0	26.62	33.49	52.66	21.70	1.27	19.2

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.2	0.3	0.2	0.50	1.8
17.0	2.2	1.0	3.20	1.8

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.2	1.7	0.0	0.2	0.2	0.1
17.0	12.3	1.8	2.2	0.7	1.8

CRUISE DATA - TRANSECT I
(off Grand Lake)

Station: 04 Latitude: 29:10.5 N Hydrolab cast time: 02:40
Date: 07/04/87 Longitude: 92:45.0 W Secchi disk depth (m):##.#

HYDROGRAPHIC DATA
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Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.1	29.08	27.98	46.99	16.78	6.13	93.9
2.0	29.07	27.98	46.98	16.78	6.14	94.0
4.0	29.07	27.97	46.96	16.78	6.20	94.9
5.9	29.06	27.97	46.95	16.78	6.21	95.1
7.9	29.03	27.98	46.95	16.80	6.20	94.9
10.1	28.66	28.84	47.90	17.56	6.19	94.6
11.9	27.90	31.57	51.21	19.86	6.17	94.4
13.1	26.67	33.06	52.11	21.37	5.31	80.2
14.0	26.50	33.42	52.45	21.69	5.03	75.9
15.0	26.24	34.00	52.99	22.21	5.27	79.4
15.8	26.10	34.17	53.08	22.38	4.67	70.2
18.5	26.07	34.21	53.10	22.42	4.29	64.5
19.1	26.07	34.21	53.10	22.42	4.26	64.0
19.9	26.07	34.21	53.11	22.42	4.23	63.6

CHLOROPHYLL DATA
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Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.1	0.1	0.1	0.20	1.6
19.9	2.0	1.2	3.20	1.8

NUTRIENT DATA
=====

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.1	1.5	0.7	0.4	0.2	1.2
19.9	0.5	0.0	0.1	0.1	0.1

CRUISE DATA - TRANSECT I
(off Grand Lake)

Station: 05 Latitude: 29:03.0 N Hydrolab cast time: 01:17
Date: 07/04/87 Longitude: 92:45.0 W Secchi disk depth (m):##.#

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.0	29.10	28.90	48.39	17.46	6.21	95.6
2.1	29.10	28.96	48.48	17.51	6.16	94.9
3.9	29.13	28.84	48.32	17.41	6.17	95.1
5.9	28.82	29.39	48.86	17.92	6.20	95.3
8.2	28.69	29.91	49.52	18.35	6.24	96.0
10.0	28.61	30.20	49.86	18.59	6.25	96.1
11.9	28.23	31.96	52.08	20.04	6.25	96.4
14.0	27.42	33.64	53.69	21.56	6.30	96.7
15.9	27.22	33.83	53.75	21.77	6.24	95.6
18.1	26.82	34.30	54.00	22.25	6.12	93.3
19.9	25.49	34.69	53.15	22.96	4.89	72.9
21.9	25.28	34.74	53.01	23.07	3.69	54.9
24.0	25.25	34.75	53.00	23.08	3.53	52.4

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.0	0.2	0.1	0.30	1.7
24.0	2.4	1.2	3.60	1.8

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.0	2.1	0.0	0.2	0.2	0.1
24.0	2.2	1.3	0.5	0.3	2.2

CRUISE DATA - TRANSECT J
(off Creole)

Station: 02 Latitude: 29:30.6 N Hydrolab cast time: 00:10
Date: 07/05/87 Longitude: 93:05.0 W Secchi disk depth (m):##.#

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.9	29.24	25.95	44.04	15.21	8.28	125.7
2.9	29.23	25.94	44.03	15.21	7.21	109.5
4.0	29.22	25.95	44.03	15.21	7.21	109.4
5.0	29.21	26.08	44.22	15.32	7.17	108.9
5.8	29.03	26.83	45.21	15.94	7.03	106.9
7.1	29.09	27.23	45.87	16.22	6.64	101.3
8.2	29.04	27.30	45.93	16.29	6.40	97.6
9.0	28.90	27.38	45.94	16.39	6.37	96.9
10.1	28.91	27.40	45.97	16.40	6.22	94.7
11.0	28.78	27.42	45.88	16.46	6.13	93.1
12.1	27.59	30.14	48.83	18.88	2.03	30.7
12.4	27.53	30.31	49.02	18.88	0.50	7.5
12.8	27.52	30.31	49.02	19.03	0.44	6.6

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.9	1.5	0.3	1.80	2.0
12.8	19.1	2.8	21.90	2.0

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.9	0.4	0.0	0.2	0.2	0.1
12.8	2.2	3.2	5.1	0.9	1.3

CRUISE DATA - TRANSECT J
(off Creole)

Station: 03 Latitude: 29:23.5 N Hydrolab cast time: 23:03
Date: 07/04/87 Longitude: 93:04.9 W Secchi disk depth (m):###

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.3	29.25	27.61	46.57	16.45	6.80	104.3
1.9	29.24	27.61	46.56	16.45	6.82	104.5
4.1	29.22	27.61	46.55	16.45	6.80	104.2
6.0	29.22	27.60	46.55	16.45	6.80	104.2
7.8	29.23	27.60	46.54	16.45	6.78	103.9
10.1	28.88	27.67	46.35	16.61	6.79	103.5
11.9	27.73	30.08	48.87	18.79	6.14	92.9
13.3	27.33	31.99	51.25	20.35	2.91	44.2
13.6	27.33	32.03	51.30	20.38	1.36	20.7
14.0	27.32	32.03	51.30	20.38	1.23	18.7
14.4	27.32	32.04	51.31	20.40	1.20	18.2
15.1	27.32	32.04	51.30	20.40	1.13	17.2

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.3	1.1	0.3	1.40	1.9
15.1	14.6	3.1	17.70	2.0

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.3	6.8	0.0	0.2	0.1	0.1
15.1	4.2	2.9	5.6	0.8	2.7

CRUISE DATA - TRANSECT J
(off Creole)

Station: 04 Latitude: 29:17.5 N Hydrolab cast time: 07:30
Date: 07/04/87 Longitude: 93:05.0 W Secchi disk depth (m):###

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.9	28.83	27.62	46.23	16.60	6.49	98.8
2.0	28.82	27.64	46.25	16.61	6.45	98.1
4.0	28.82	27.64	46.25	16.61	6.43	97.8
6.0	28.81	27.64	46.24	16.61	6.47	98.4
8.2	28.81	27.64	46.25	16.62	6.49	98.7
10.0	28.80	27.66	46.27	16.63	6.47	98.4
11.1	28.74	27.78	46.40	16.74	6.39	97.2
12.0	27.61	31.87	51.35	20.17	3.85	58.7
13.0	27.36	32.27	51.68	20.55	1.80	27.4
14.0	27.21	32.46	51.80	20.74	1.31	19.9
15.0	27.08	32.91	52.31	21.12	1.23	18.7
16.2	27.05	33.02	52.44	21.22	1.63	24.8
16.9	27.01	33.10	52.52	21.29	1.69	25.7

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.9	2.1	0.2	2.30	2.1
16.9	2.6	0.7	3.30	1.9

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.9	3.8	0.2	0.1	0.3	0.4
16.9	4.2	3.1	4.2	0.9	2.4

CRUISE DATA - TRANSECT K
(off Cameron)

Station: 02 Latitude: 29:38.5 N Hydrolab cast time: 18:00
Date: 07/04/87 Longitude: 93:24.9 W Secchi disk depth (m): 2.0

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.4	29.77	25.66	44.04	14.82	7.70	117.8
1.7	29.78	25.65	44.03	14.81	7.64	116.9
4.3	29.72	25.64	43.96	14.82	7.64	116.8
6.2	29.23	26.18	44.39	15.38	7.48	113.7
8.2	29.09	26.59	44.89	15.74	7.31	111.1
9.1	28.90	26.79	45.05	15.95	6.77	102.7
10.0	28.42	27.94	46.36	16.96	5.99	90.7
10.6	28.40	27.98	46.40	17.00	1.27	19.2
10.6	28.40	27.98	46.40	17.00	0.73	11.0

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.4	4.7	0.6	5.30	2.0
10.6	9.6	2.6	12.20	1.9

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.4	1.8	0.0	0.1	0.2	0.5
10.6	9.2	4.6	6.8	2.0	3.7

CRUISE DATA - TRANSECT K
(off Cameron)

Station: 03 Latitude: 29:29.3 N Hydrolab cast time: 19:31
Date: 07/04/87 Longitude: 93:25.0 W Secchi disk depth (m):##.#

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.6	29.44	27.67	46.83	16.43	7.29	112.2
3.1	29.44	27.70	46.89	16.46	7.27	111.9
3.9	29.44	27.71	46.89	16.46	7.26	111.7
5.1	29.43	27.70	46.88	16.46	7.23	111.3
6.2	29.42	27.70	46.87	16.46	7.25	111.5
6.9	29.43	27.70	46.87	16.46	7.30	112.3
8.3	29.12	27.72	46.63	16.57	7.20	110.2
9.3	28.92	27.76	46.52	16.67	6.83	104.2
10.1	28.80	27.89	46.61	16.81	5.87	89.4
11.0	27.94	29.23	47.82	18.08	0.74	11.2

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.6	5.2	0.6	5.80	2.1
11.0	18.9	2.1	21.00	2.1

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.6	12.3	0.0	0.4	0.2	0.2
11.0	2.1	0.4	0.5	0.9	1.5

CRUISE DATA - TRANSECT K
(off Cameron)

Station: 04 Latitude: 29:19.4 N Hydrolab cast time: 20:50
Date: 07/04/87 Longitude: 93:24.9 W Secchi disk depth (m):###

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.3	29.25	27.83	46.91	16.61	6.41	98.4
2.3	29.26	27.83	46.92	16.61	6.43	98.7
3.8	29.26	27.83	46.92	16.61	6.41	98.4
6.0	29.26	27.84	46.93	16.61	6.41	98.4
7.9	29.24	27.86	46.95	16.64	6.40	98.2
10.2	28.92	28.29	47.33	17.07	6.46	98.8
12.4	27.78	30.72	49.85	19.25	4.67	71.0
13.6	27.37	31.20	50.16	19.75	3.49	52.8
13.9	27.34	31.27	50.22	19.80	3.67	55.5
14.0	27.31	31.28	50.21	19.82	1.99	30.1
15.0	26.91	32.23	51.19	20.67	1.87	28.2
16.3	26.87	32.60	51.66	20.95	0.61	9.2

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.3	1.0	0.3	1.30	1.9
16.3	3.3	0.5	3.80	9.7

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.3	12.5	0.0	0.3	0.4	0.2
16.3	5.4	7.9	9.8	1.0	4.1

CRUISE DATA - TRANSECT K
(off Cameron)

Station: 05 Latitude: 29:10.0 N Hydrolab cast time: 11:21
Date: 07/04/87 Longitude: 93:25.0 W Secchi disk depth (m): 7.0

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.9	29.07	28.73	48.11	17.35	6.08	93.5
2.2	29.05	28.72	48.08	17.35	5.97	91.8
4.0	29.05	28.72	48.08	17.34	6.29	96.7
5.9	29.03	28.72	48.06	17.35	6.38	98.0
8.3	28.99	28.72	48.02	17.37	6.32	97.1
9.9	28.95	28.72	47.99	17.38	6.32	97.0
12.0	28.86	28.78	47.99	17.45	6.28	96.3
13.3	27.36	31.36	50.38	19.87	5.90	89.3
13.8	26.64	32.59	51.42	21.02	2.45	36.9
14.9	26.56	33.16	52.14	21.48	1.69	25.5
15.3	26.56	33.35	52.40	21.62	1.85	27.9
16.1	26.54	33.40	52.46	21.66	2.24	33.8
16.9	26.46	33.46	52.46	21.74	2.31	34.8
18.0	26.35	33.51	52.41	21.80	2.23	33.6
18.5	26.32	33.52	52.41	21.82	2.27	34.1
18.7	26.32	33.52	52.41	21.82	1.97	29.6

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.9	0.9	0.2	1.10	2.0
12.0	1.2	0.4	1.60	1.9
18.7	2.2	0.8	3.00	1.9

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.9	5.4	0.6	0.1	0.9	0.2
12.0	1.8	0.0	0.1	0.2	0.2
18.7	4.2	6.2	5.5	0.5	2.6

CRUISE DATA - TRANSECT M
(off Sabine)

Station: 02 Latitude: 29:35.9 N Hydrolab cast time: 16:41
Date: 07/04/87 Longitude: 93:37.7 W Secchi disk depth (m): 1.5

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.9	29.73	28.07	47.70	16.64	6.42	99.5
3.1	29.78	28.07	47.74	16.62	6.52	101.2
4.3	29.66	28.12	47.71	16.69	7.14	110.6
5.9	29.44	28.13	47.54	16.78	7.11	109.7
8.4	28.96	28.03	46.96	16.86	6.72	102.7
10.0	28.80	27.95	46.70	16.85	6.05	92.2
11.2	28.71	27.91	46.57	18.85	5.43	82.6

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.9	4.8	0.6	5.40	2.1
11.2	6.9	1.3	8.20	2.0

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.9	1.5	0.0	0.1	0.3	0.2
11.2	2.3	0.4	0.3	0.5	0.5

CRUISE DATA - TRANSECT M
(off Sabine)

Station: 03 Latitude: 29:28.0 N Hydrolab cast time: 15:26
Date: 07/04/87 Longitude: 93:36.1 W Secchi disk depth (m): 6.5

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.8	29.46	27.68	46.86	16.43	6.61	101.8
1.9	29.46	28.00	47.35	16.67	6.72	103.6
3.0	29.48	28.00	47.37	16.66	6.74	104.0
4.0	29.39	28.00	47.29	16.70	6.76	104.1
4.8	29.32	28.00	47.22	16.72	6.81	104.8
6.1	29.02	28.01	46.98	16.82	6.82	104.4
7.0	28.93	28.02	46.91	16.86	6.85	104.7
8.0	28.86	28.03	46.87	16.89	6.74	102.9
8.9	28.81	28.05	46.85	16.92	6.65	101.4
9.9	28.77	28.17	47.00	17.02	6.51	99.3
10.6	28.67	28.32	47.13	17.17	5.97	91.0
11.0	28.19	29.11	47.89	17.92	5.49	83.3
11.5	27.44	30.57	49.31	19.25	3.03	45.7
12.1	27.23	30.84	49.50	19.52	1.36	20.5
12.8	27.22	30.83	49.49	19.52	0.28	4.2

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.8	2.9	0.3	3.20	2.1
12.8	11.6	1.7	13.30	2.0

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.8	1.2	0.2	0.1	0.3	0.1
12.8	11.6	3.5	5.5	1.1	4.5

CRUISE DATA - TRANSECT M
(off Sabine)

Station: 04 Latitude: 29:20.0 N Hydrolab cast time: 14:20
Date: 07/04/87 Longitude: 93:34.7 W Secchi disk depth (m): 5.5

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
1.3	29.42	29.18	49.10	17.57	6.82	105.8
1.8	29.43	29.16	49.07	17.54	7.13	110.6
4.2	29.41	29.14	49.03	17.54	7.14	110.7
5.9	29.31	29.16	48.98	17.59	7.17	111.0
8.1	29.30	29.20	49.01	17.62	7.20	111.5
10.3	28.96	29.32	48.89	17.83	7.11	109.5
11.3	28.30	29.66	48.80	18.29	5.45	83.1
12.2	28.12	29.82	48.86	18.47	2.78	42.3
13.1	27.52	30.58	49.41	19.23	3.10	46.9
14.7	27.34	30.90	49.70	19.53	0.44	6.6

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.3	3.6	0.4	4.00	2.0
14.7	14.2	3.8	18.00	1.9

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
1.3	1.3	0.3	0.1	0.3	0.2
14.7	8.1	5.3	8.8	1.1	4.2

CRUISE DATA - TRANSECT M
(off Sabine)

Station: 05 Latitude: 29:09.4 N Hydrolab cast time: 12:42
Date: 07/04/87 Longitude: 93:32.5 W Secchi disk depth (m): 1.0

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.8	29.22	29.51	49.41	17.88	6.42	99.4
1.9	29.20	29.52	49.40	17.89	6.38	98.8
3.9	29.20	29.51	49.40	17.89	6.31	97.7
6.2	29.19	29.52	49.39	17.90	6.32	97.8
8.1	29.14	29.52	49.35	17.91	6.32	97.8
10.0	29.10	29.53	49.33	17.93	6.26	96.8
12.4	29.00	29.54	49.26	17.97	6.21	95.8
12.9	28.72	29.64	49.14	18.14	6.15	94.5
13.9	27.80	30.70	49.84	19.23	5.40	82.1
14.9	27.00	31.74	50.57	20.26	3.42	51.6
15.5	26.80	32.00	50.75	20.53	1.54	23.2
16.2	26.35	32.64	51.21	21.15	1.42	21.3
17.3	25.89	33.21	51.55	21.72	1.20	17.9
18.0	25.71	33.39	51.61	21.91	1.15	17.1
18.7	25.67	33.42	51.61	21.94	0.89	13.2

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.8	1.1	0.3	1.40	2.0
18.7	2.1	3.6	5.70	1.1

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.8	5.4	0.1	0.1	0.2	0.6
18.7	3.4	8.2	5.4	0.8	3.8