

Louisiana Universities Marine Consortium  
Data Report No. 9

Hydrographic, Biological, and Nutrient  
Characteristics of the Water Column  
on the Louisiana Shelf  
during 1988

by

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## Introduction

Since 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 O<sub>2</sub>) 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 1985, 1986, and 1987 (Rabalais et al., 1985b, 1989b, 1989c). These cruises have provided us with exhaustive information concerning the temporal and spatial variability associated with the phenomenon of hypoxia on the Louisiana shelf. It was not our intent to continue assessment-type cruises during 1988. Opportunities existed, however, in conjunction with other research cruises and the LUMCON summer program to re-occupy stations along Transect C off Cat Island Pass near Cocodrie. In addition, the drought conditions in the upper Mississippi River basin during the spring and summer of 1988 resulted in a significant reduction in the flow rate of the Mississippi River. We were therefore compelled to conduct a shelf-wide cruise during mid-summer of 1988 to document the hydrographic conditions of the Louisiana shelf under low flow conditions of the Mississippi River and to assess the effects of this low flow on the phenomenon of hypoxia.

The cruises along Transect C were conducted on board the R/V *Pelican* as part of a research effort named LaSER for data in April (Murrell and Dagg, 1988) and as part of the LUMCON summer program for the remainder. The shelf-wide cruise was conducted on board the R/V *Acadiana* from August 12 through August 16, 1988.

## Methods

While on board the *Pelican*, 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 twelve 5-liter Niskin bottles for recovering water samples at discrete depths. Water samples were collected for routine analyses of chlorophyll *a*, phaeopigments, and nutrients only on the April, 1988 cruise. 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). For the April cruise, nutrient analyses were performed on board immediately following sample collection on an Alpkem auto-analyzer.

While on board the *Acadiana*, temperature, pH, dissolved oxygen, conductivity, salinity, and depth were measured with a Hydrolab Surveyor II Water Quality Data System at 1-, 2-, or 3-m intervals through the water column. Readings from a digital display unit were recorded on board ship. Conductivity in 25°C equivalents was converted to *in situ* salinity. Water samples were collected to check the conductivity sensor against water of a known salinity. A correction factor was applied as necessary for *in situ* salinity calculations. Operation, maintenance, and calibration of the Hydrolab Surveyor II followed instructions provided by the Hydrolab manual (Hydrolab Corp., 1984). Yearly maintenance of the Surveyor II was performed by Hydrolab Corporation.

On the *Acadiana* shelf-wide cruise, water for chlorophyll and nutrient analyses was collected from surface and bottom waters in 5-l Niskin bottles. Samples for nutrients

concentrations 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).

Chlorophyll analyses for the April cruise and the shelf-wide cruise followed a modified fluorometric technique as described in Strickland and Parsons (1972). Water samples were filtered immediately following collection onto glass fiber filters. The filters were immersed in 5 ml of DMSO/Acetone (40/60) solution, allowed to extract for at least one hour in the dark, then measured on a Turner Model 10 fluorometer calibrated for chlorophyll *a*.

## Results

Selected parameters (dissolved oxygen and sigma-t) are illustrated for the cruises along Transect C. These and additional parameters are contoured for the entire shelf for the mid-August cruise. 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, the Louisiana Board of Regents Education Quality Support Fund, and by the Louisiana Universities Marine Consortium. We acknowledge the help of L. Smith, J. Gauthier, students of the LUMCON Introduction to Marine Science and Marine Ecology courses, and the captains and crews of the R/V *Acadiana* and R/V *Pelican*. P. Swarzenski helped with the graphics.

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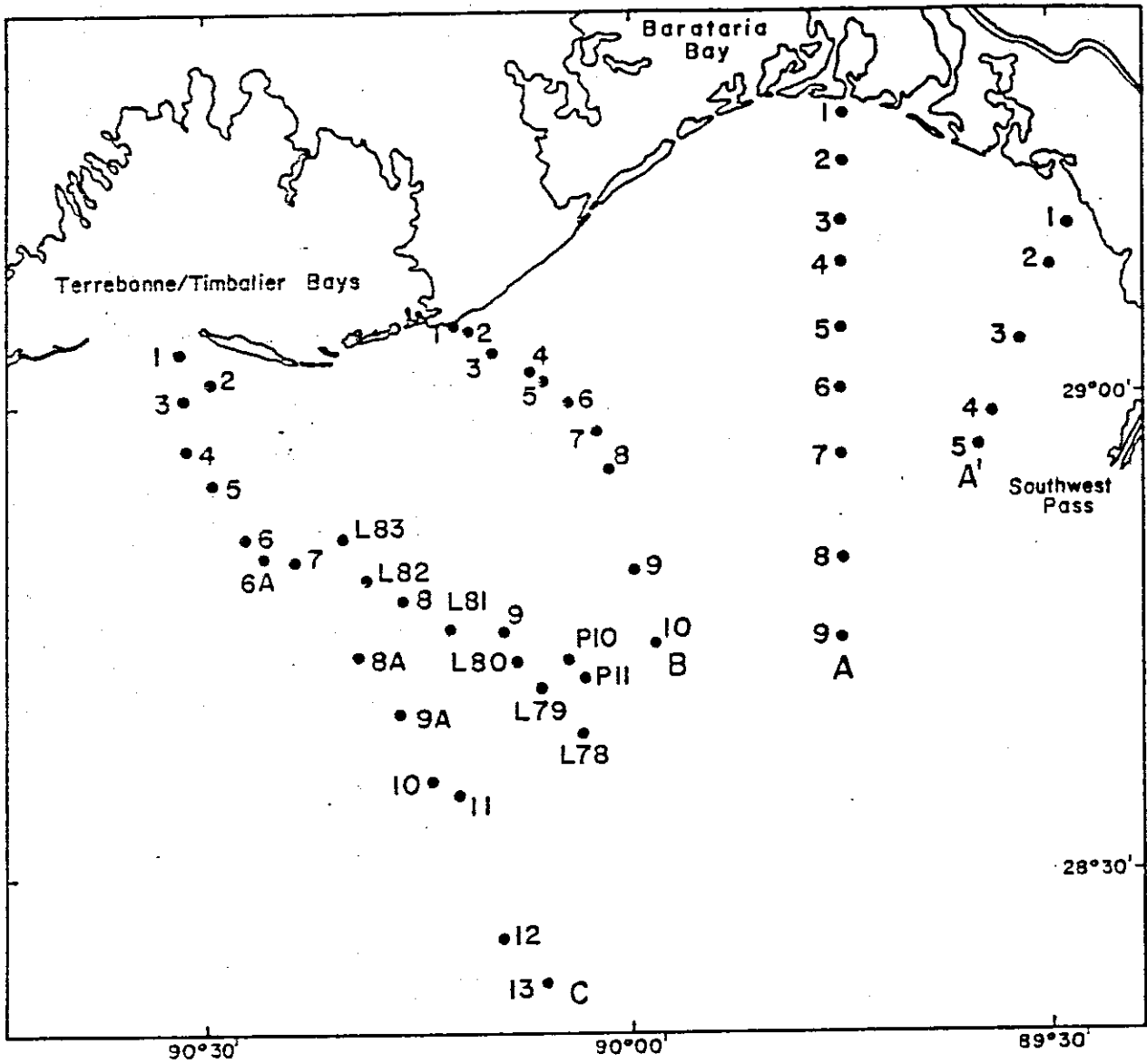
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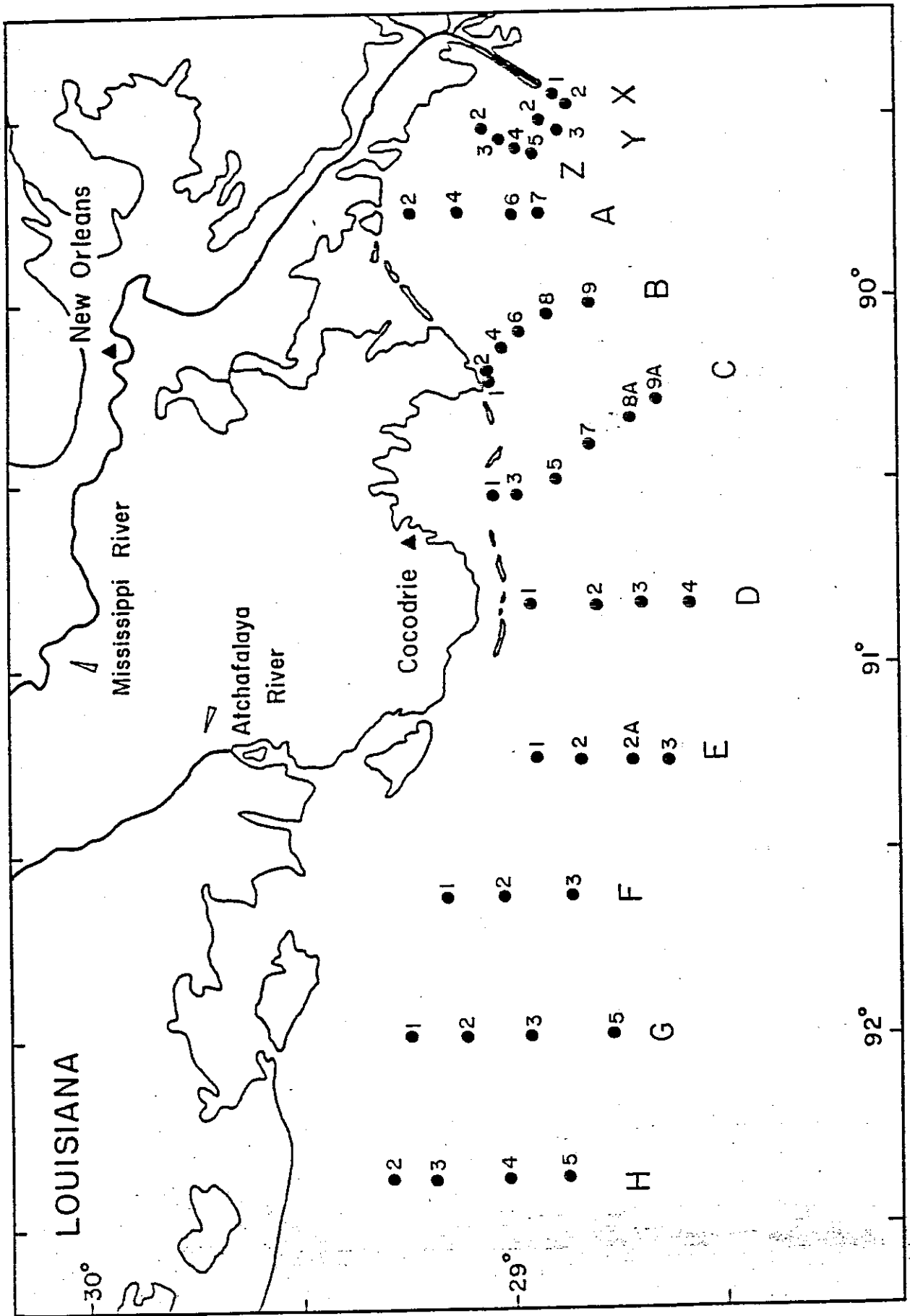
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### List of Transects

- X Off Southwest Pass
- Y To West of Southwest Pass
- Z Off Tiger Pass towards Southwest Pass (named A' in 1986 and 1987)
- 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

Transect X  
Off Southwest Pass

<u>Station</u>	<u>Depth (ft)</u>	<u>Depth (m)</u>	<u>Latitude</u>	<u>Longitude</u>
1	-	-	28°54.70'N	89°25.60'W
		(just inside mouth of pass)		
2	173	52	28°50.46'N	89°29.03'W
3	300	90	28°45.48'N	89°32.00'W



Transect Y  
To West of Southwest Pass

<u>Station</u>	<u>Depth (ft)</u>	<u>Depth (m)</u>	<u>Latitude</u>	<u>Longitude</u>
1	77	23	28°58.00'N	89°28.50'W
2	106	32	28°54.00'N	89°30.00'W
3	253	76	28°49.17'N	89°33.95'W

Transect Z

Off Tiger Pass towards Southwest Pass  
(named A' in 1986 and 1987)

<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 Baratavia 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

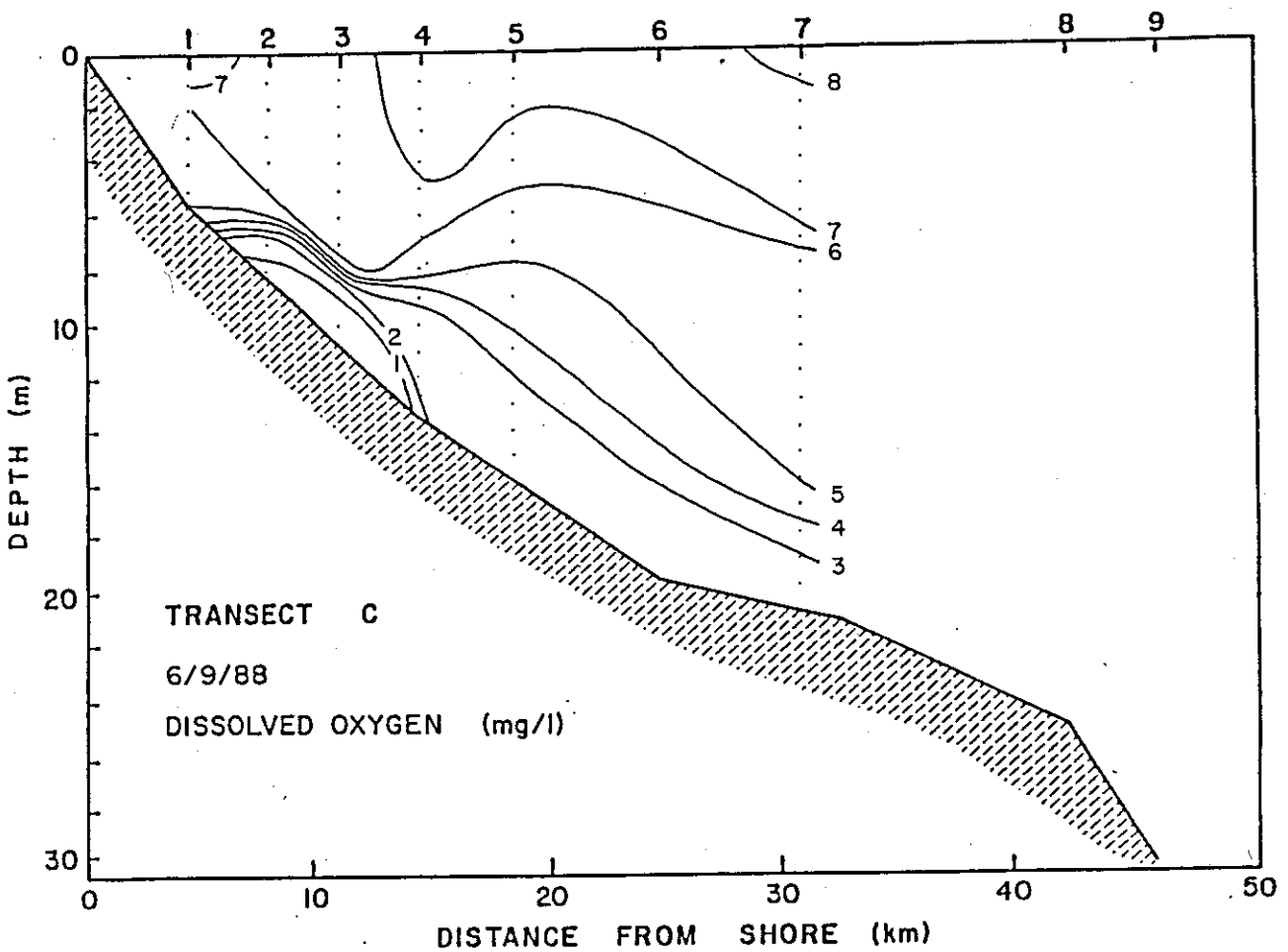
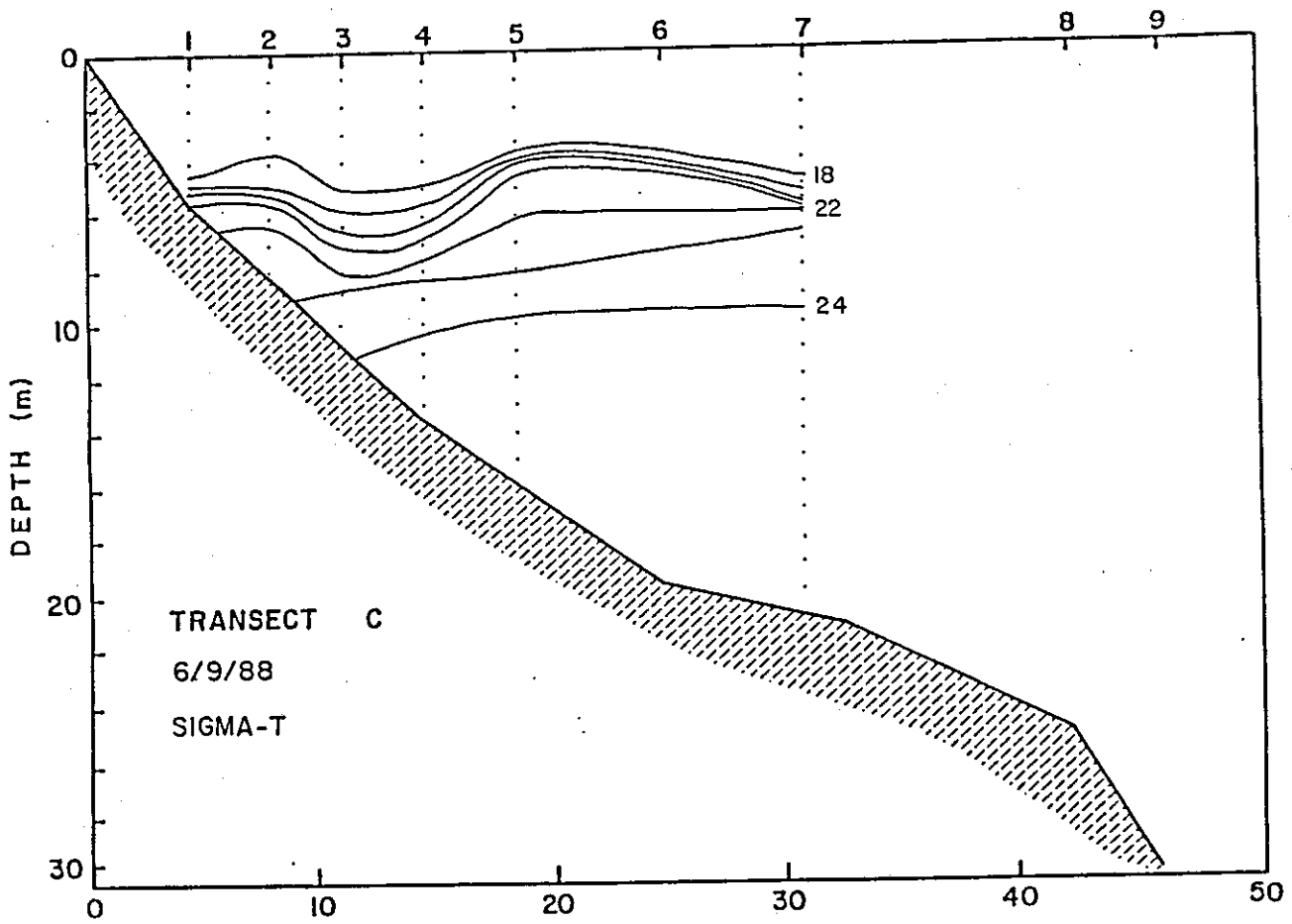


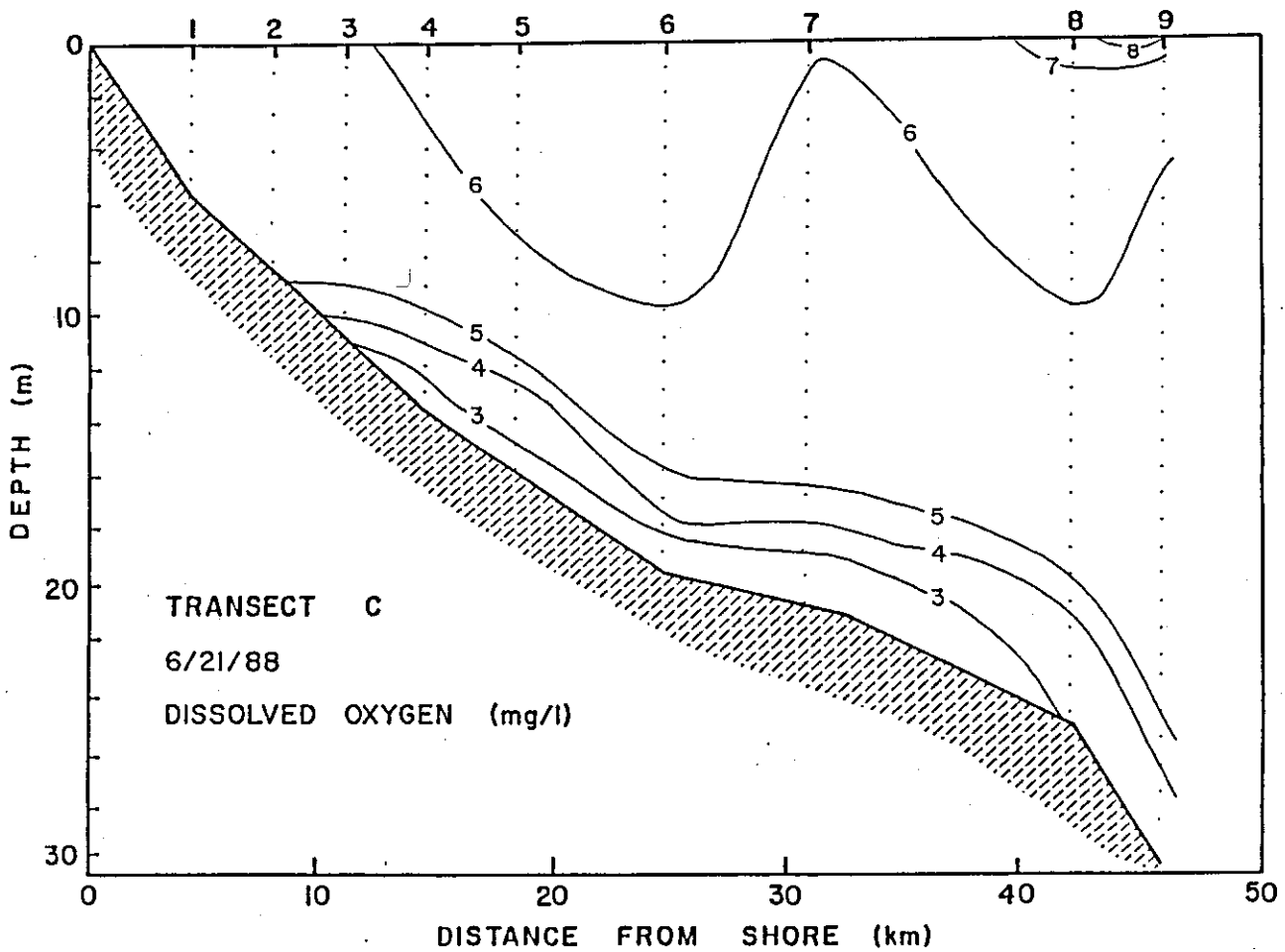
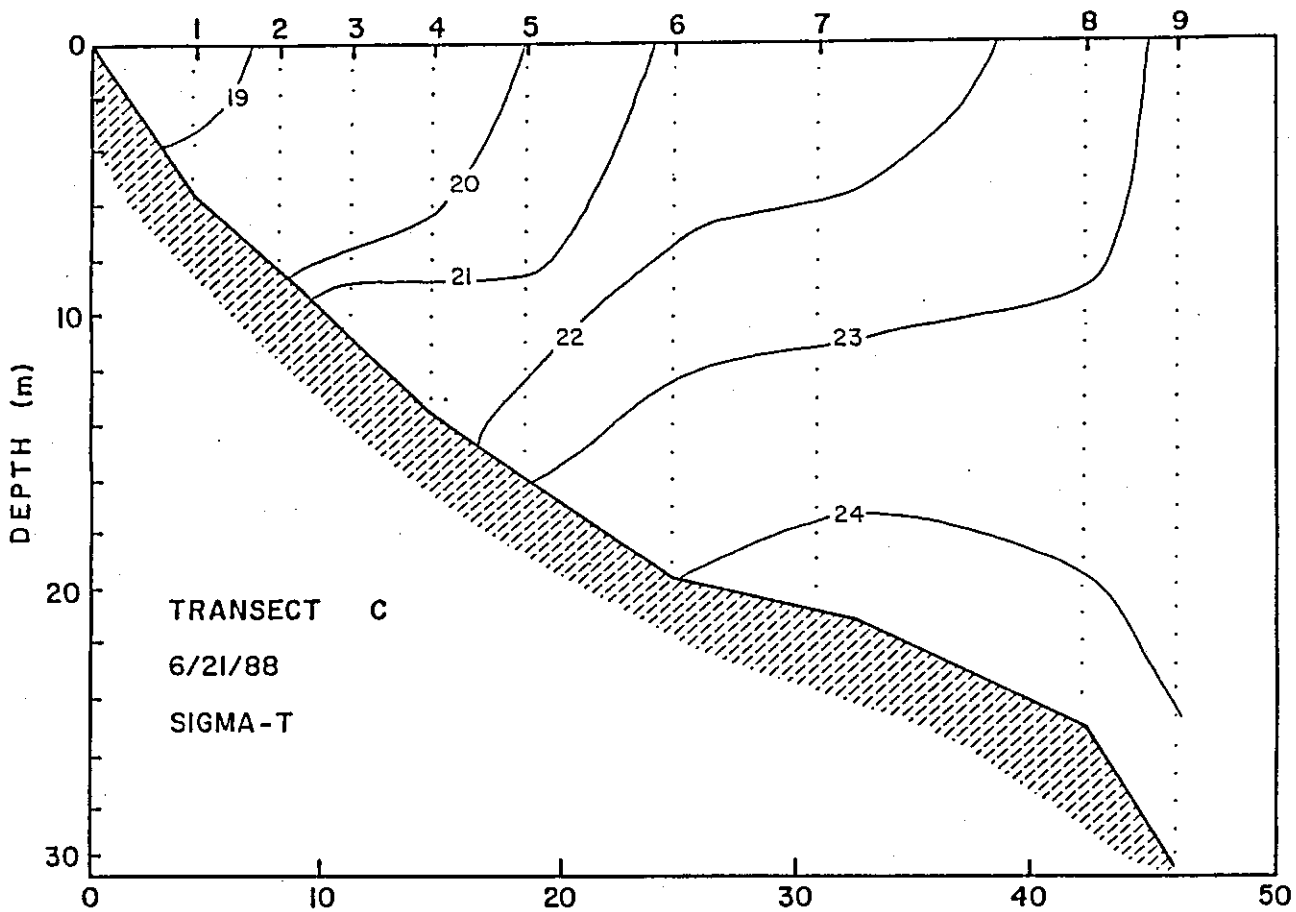
Transect G  
Off Vermilion Bay, Marsh Island

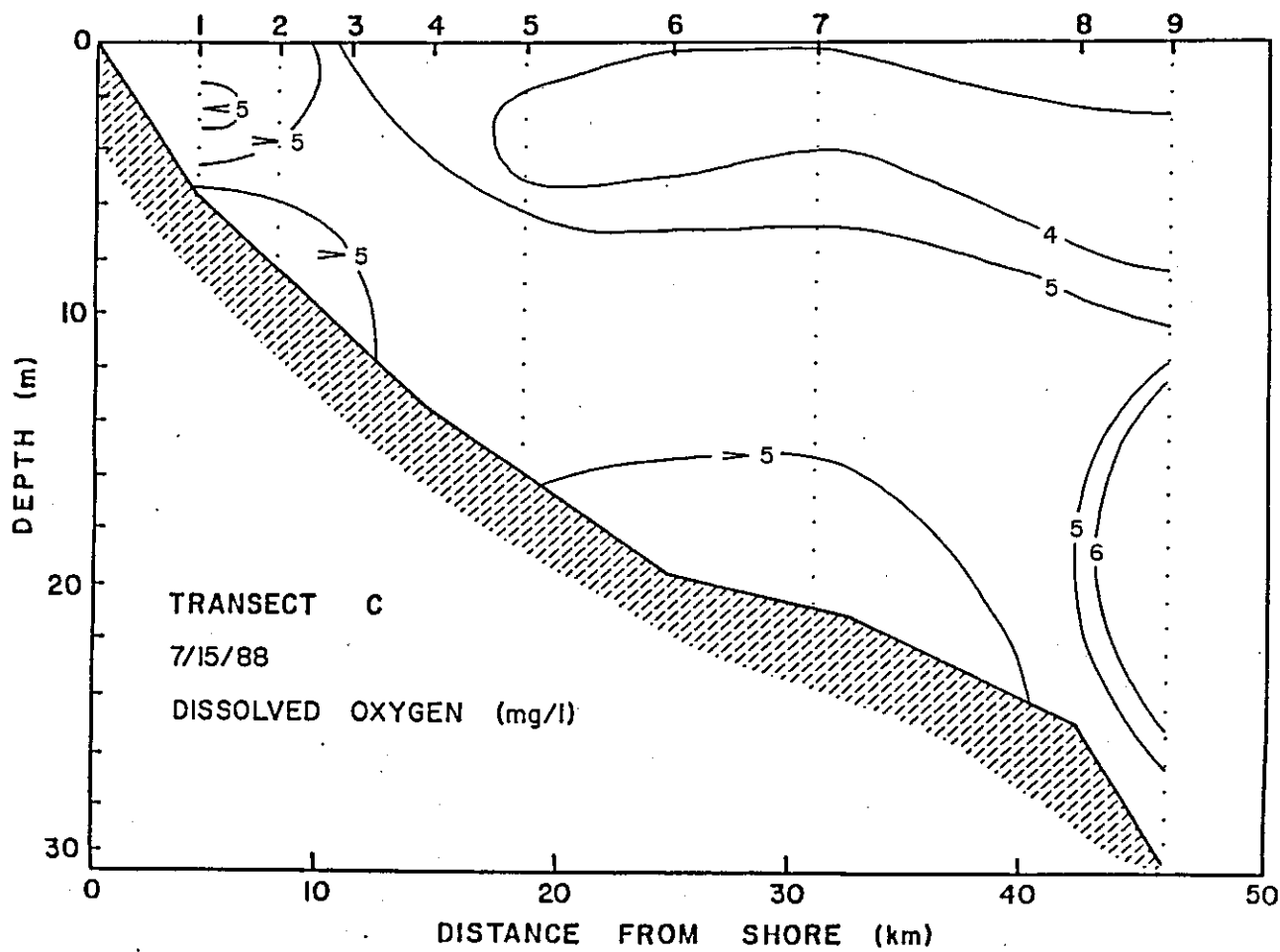
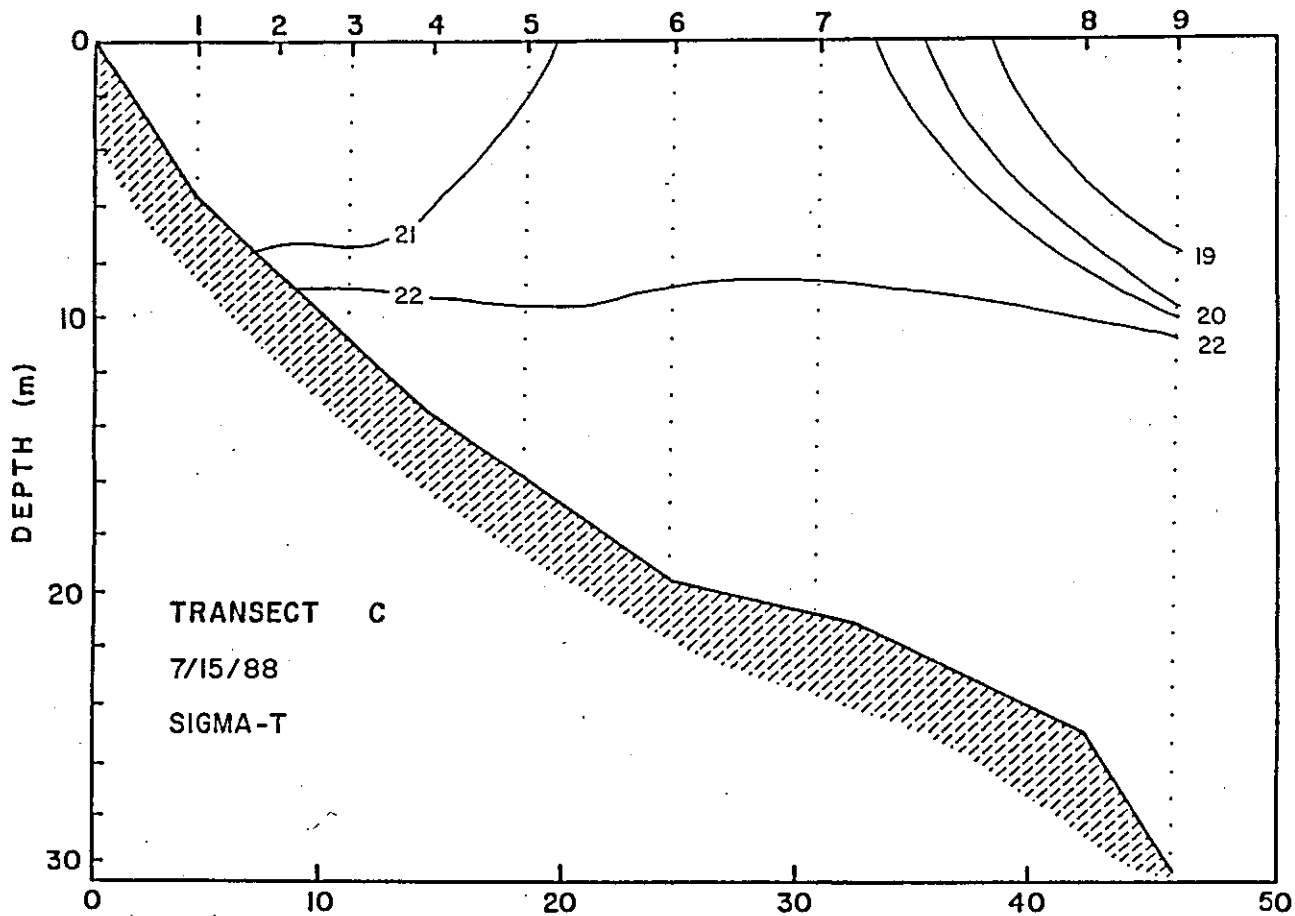
<u>Station</u>	<u>Depth (ft)</u>	<u>Depth (m)</u>	<u>Latitude</u>	<u>Longitude</u>
1	24	7.2	29°15.50'N	92°00.00'W
2	30	9.0	29°08.00'N	92°00.00'W
3	60	18.0	28°59.00'N	92°00.00'W
4	81	24.3	28°54.00'N	92°00.00'W
5	99	29.7	28°47.50'N	92°00.00'W

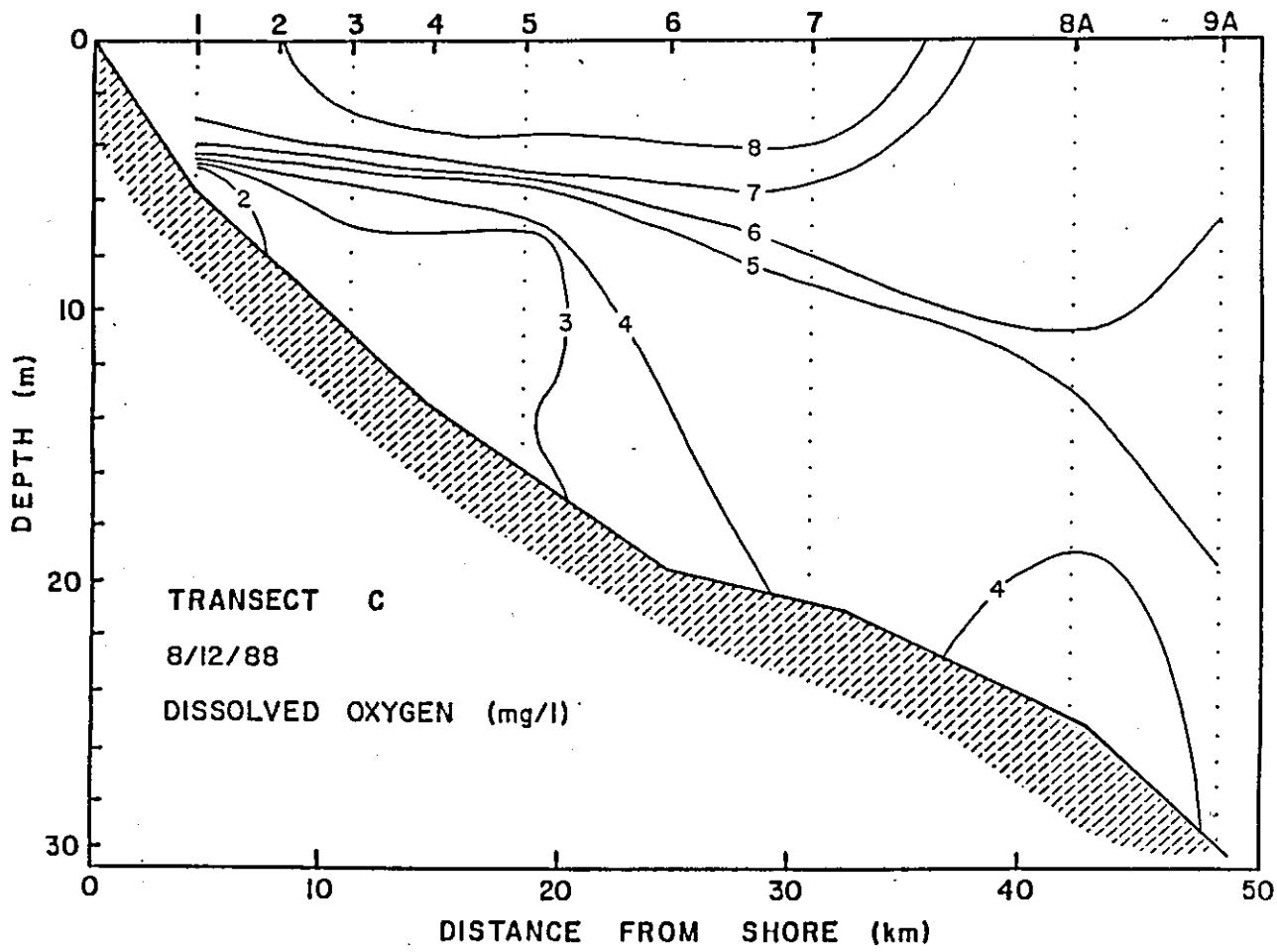
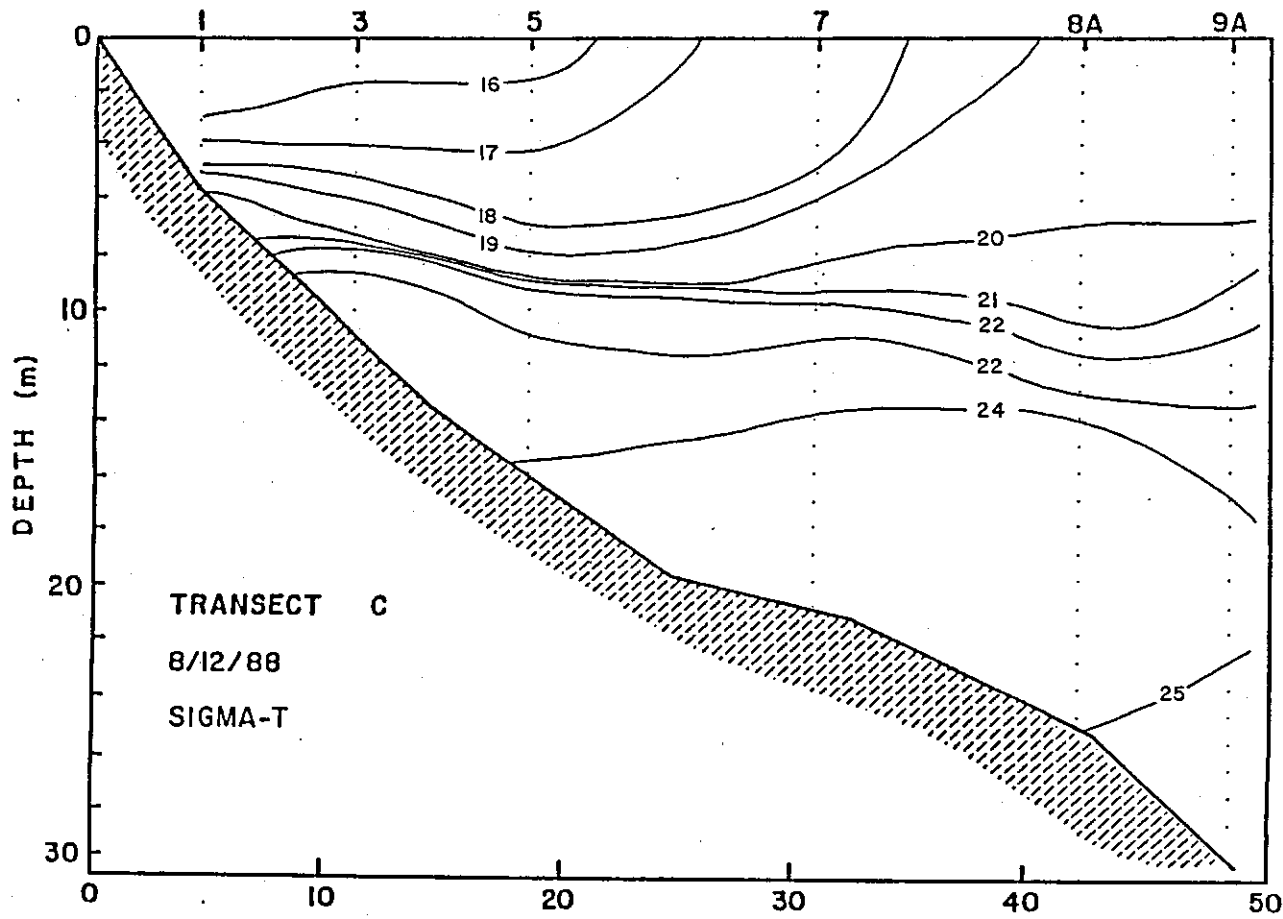
Transect H  
Off White Lake

<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



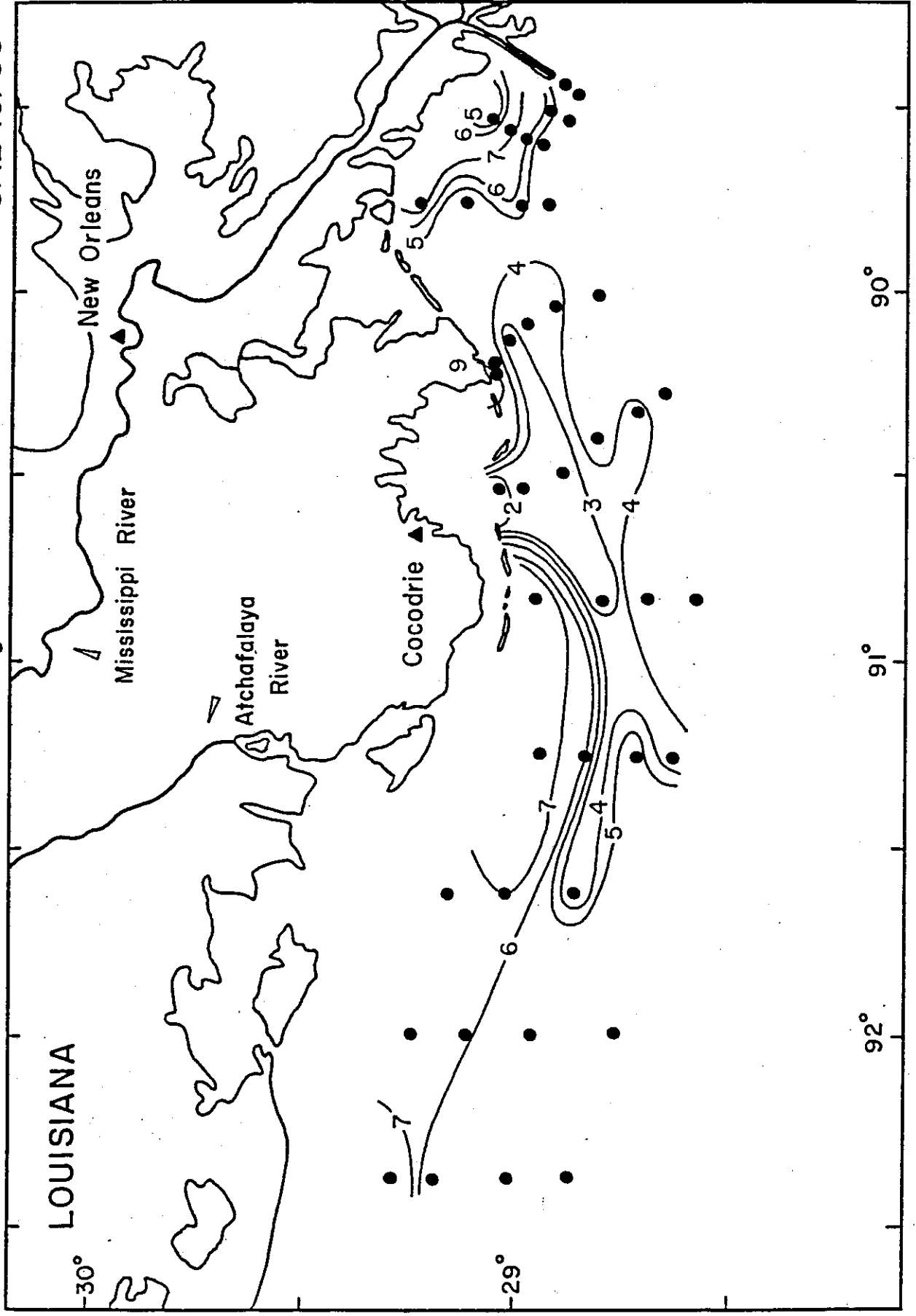






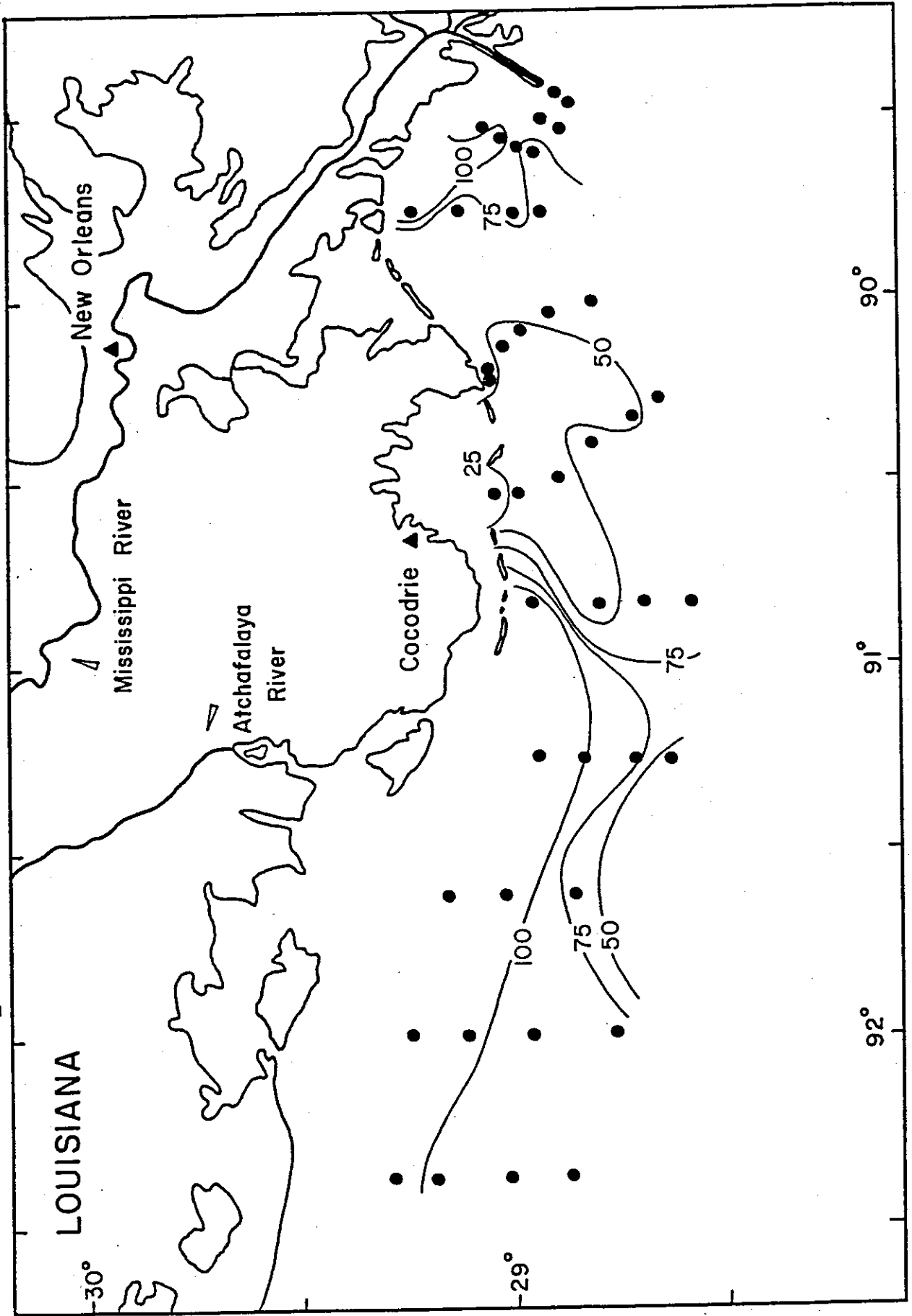
DISSOLVED OXYGEN - BOTTOM (mg/l)

8/12-16/88



BOTTOM % O<sub>2</sub> SATURATION

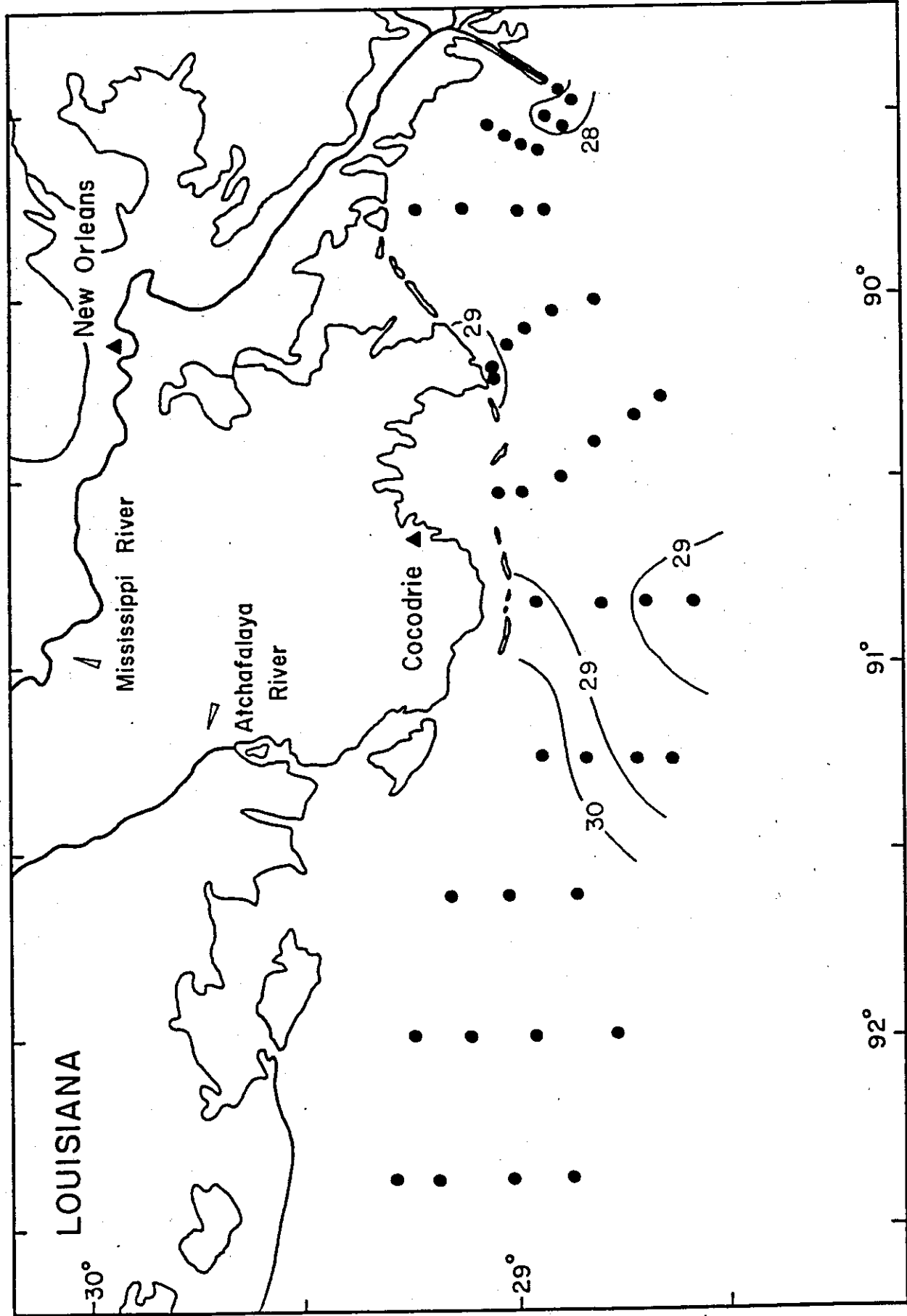
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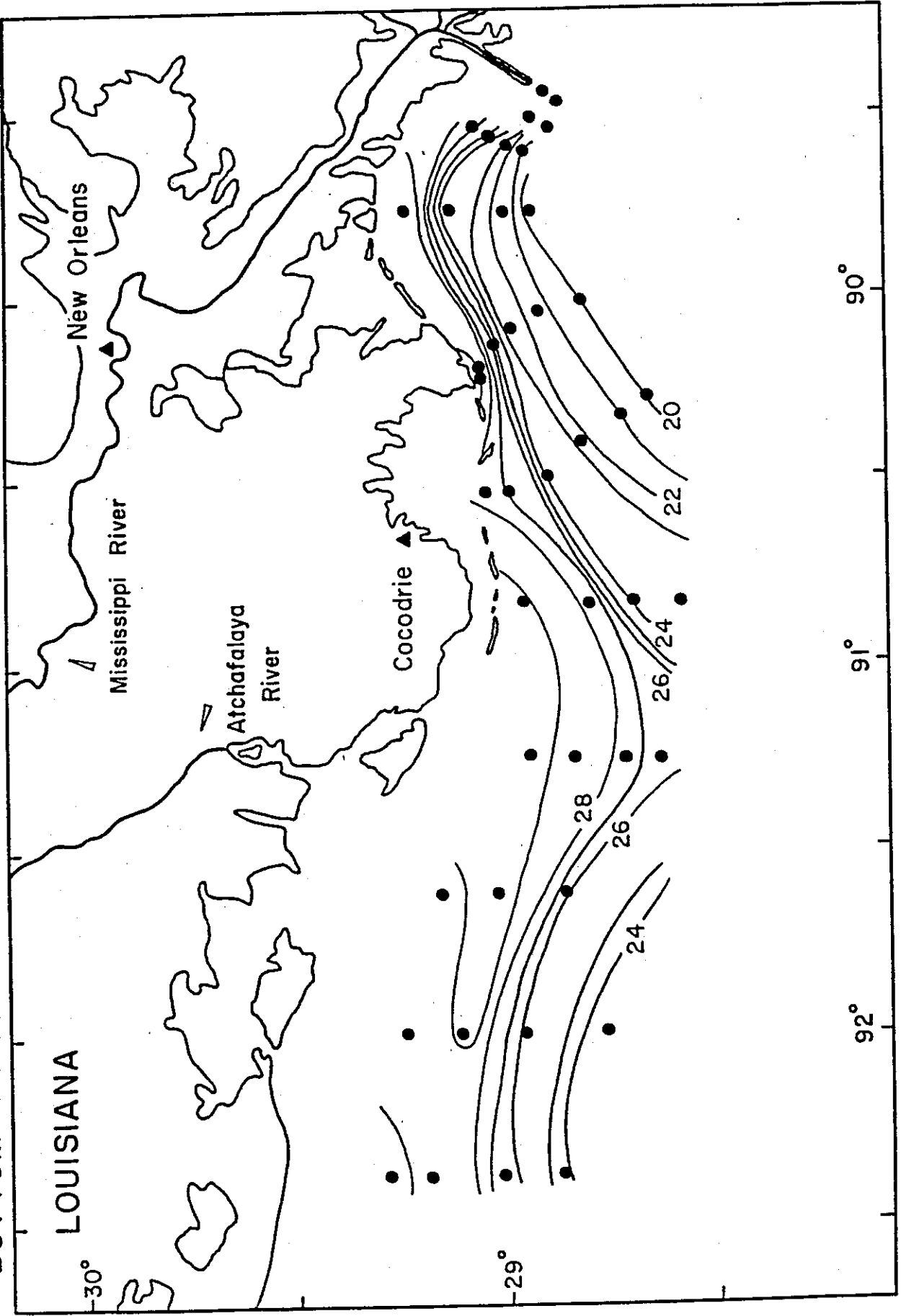
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SURFACE TEMPERATURE (°C)



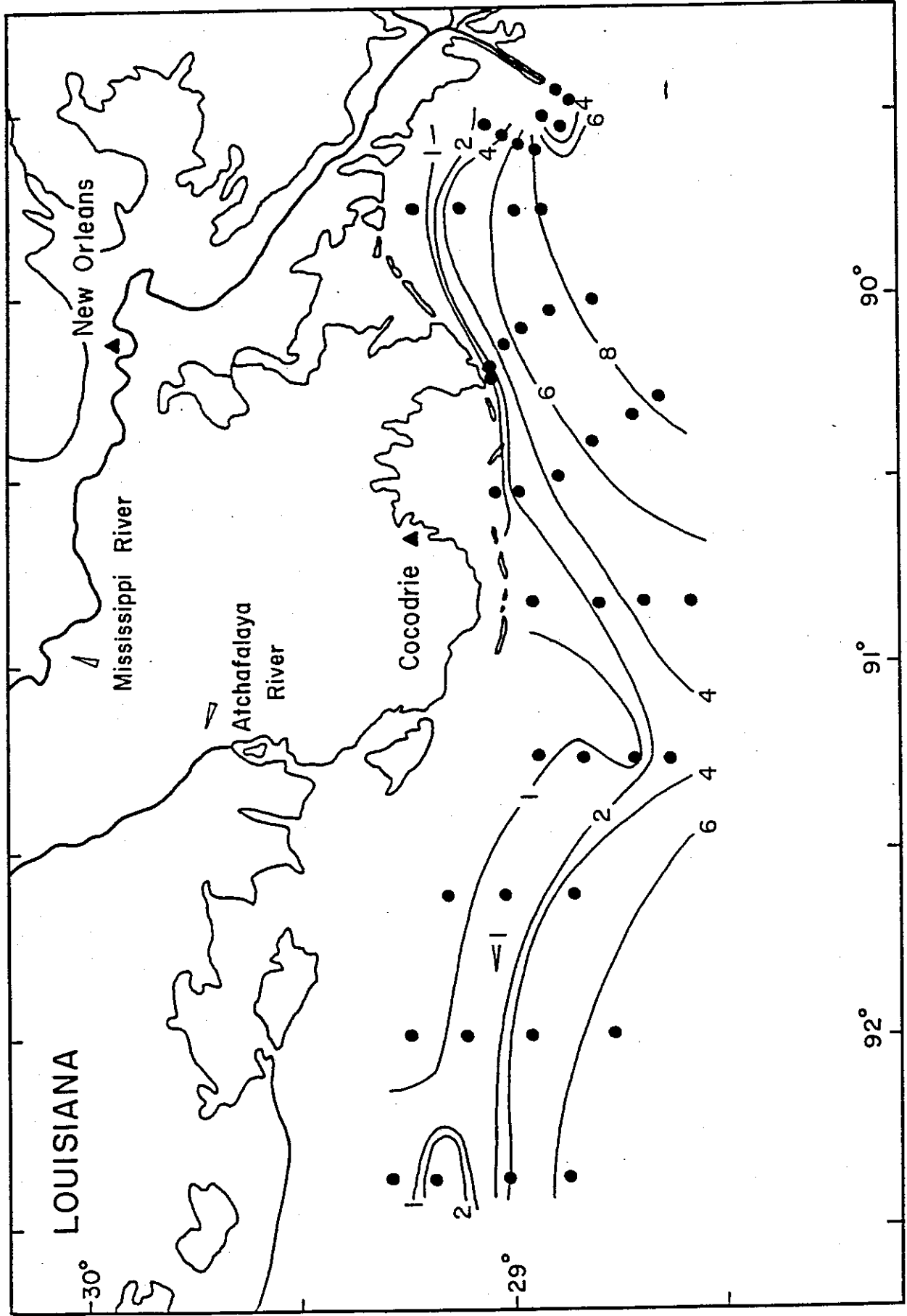
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BOTTOM TEMPERATURE (°C)



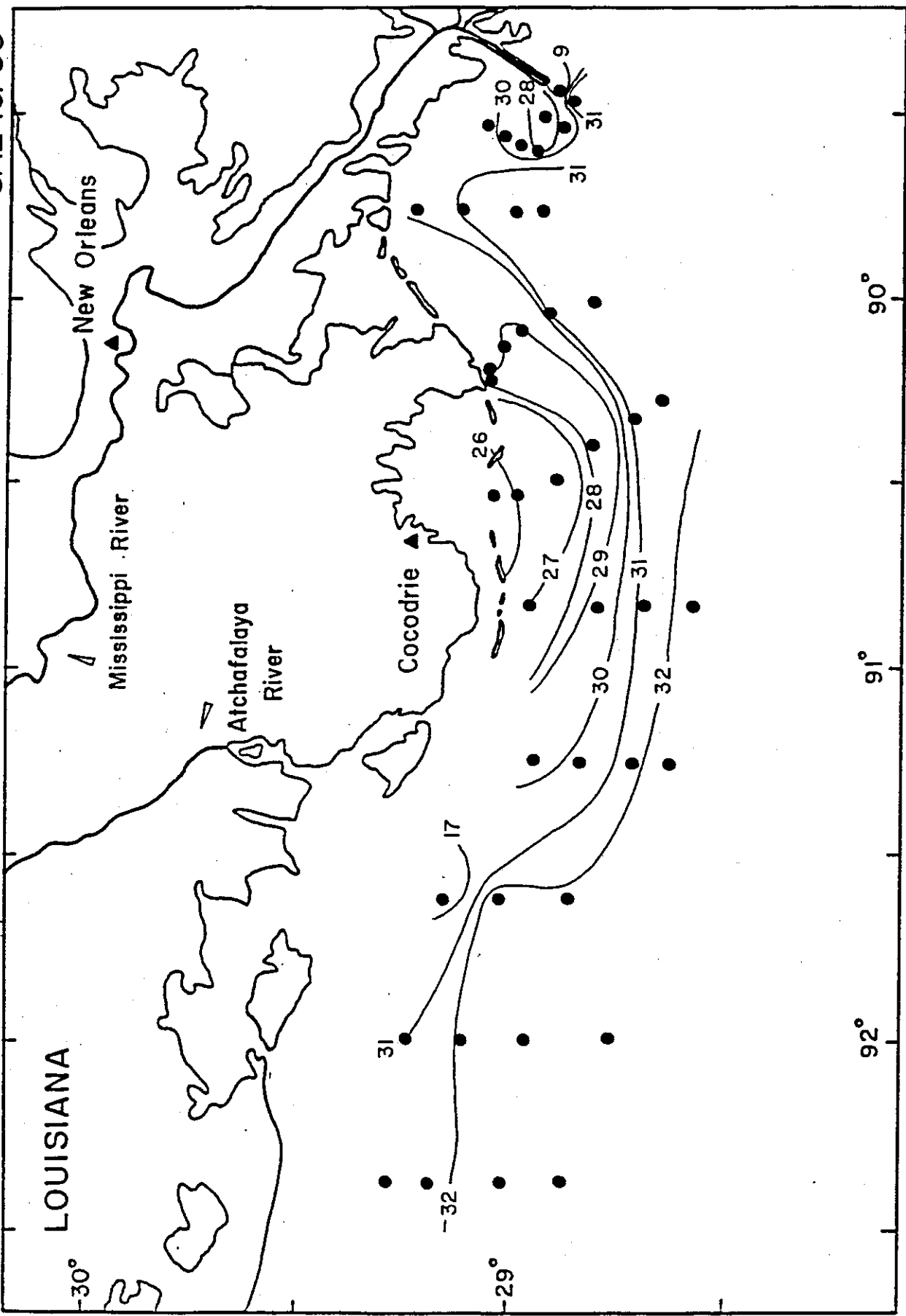
8/12-16/88

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



SURFACE SALINITY (‰)

8/12-16/88



LOUISIANA

New Orleans

Mississippi River

Atchafalaya River

Cocodrie

30°

29°

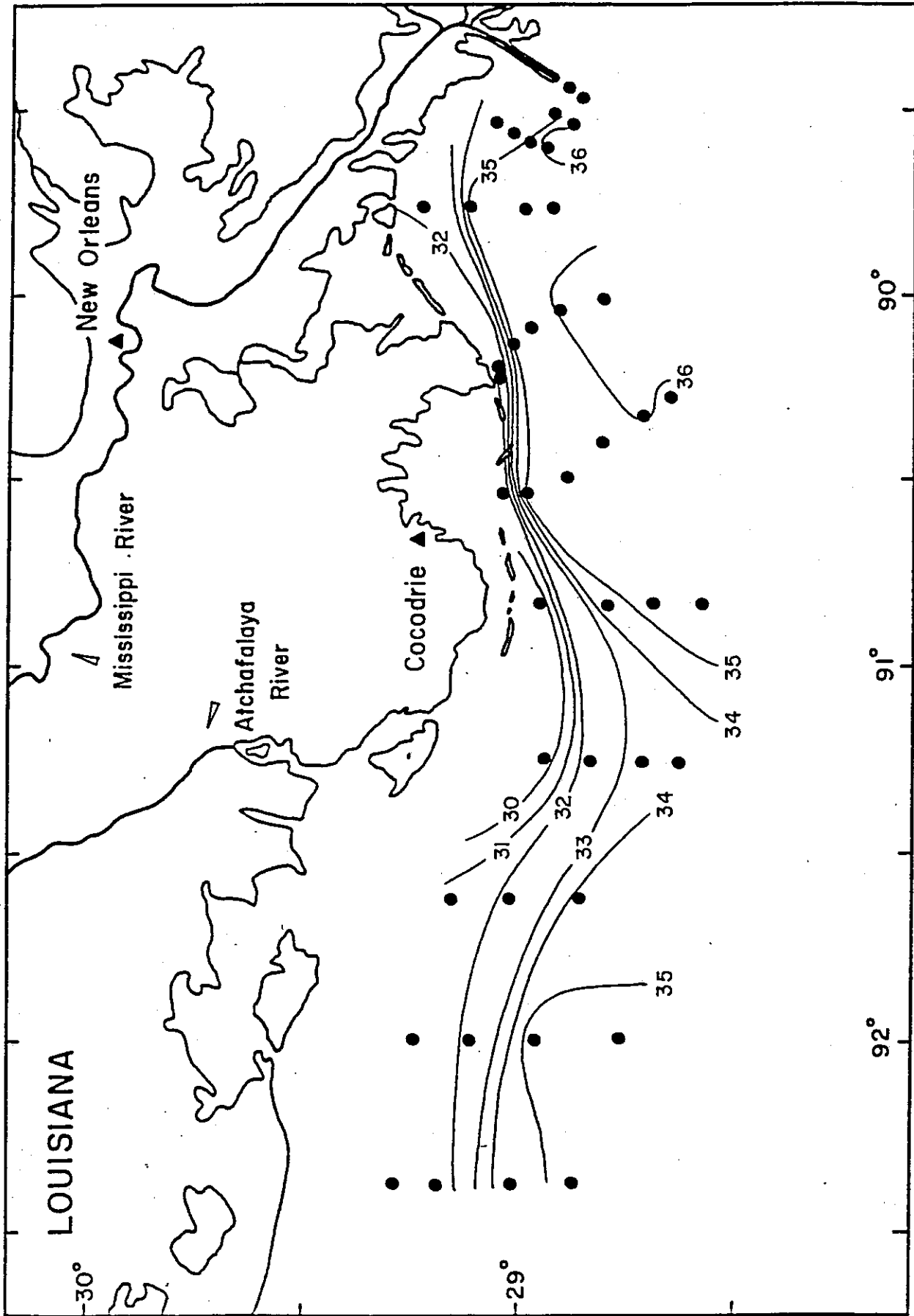
92°

91°

90°

BOTTOM SALINITY (‰)

8/12-16/88



LOUISIANA

30°

29°

New Orleans

Mississippi River

Atchafalaya River

Cocodrie

32

35

36

35

31

30

32

33

34

34

35

36

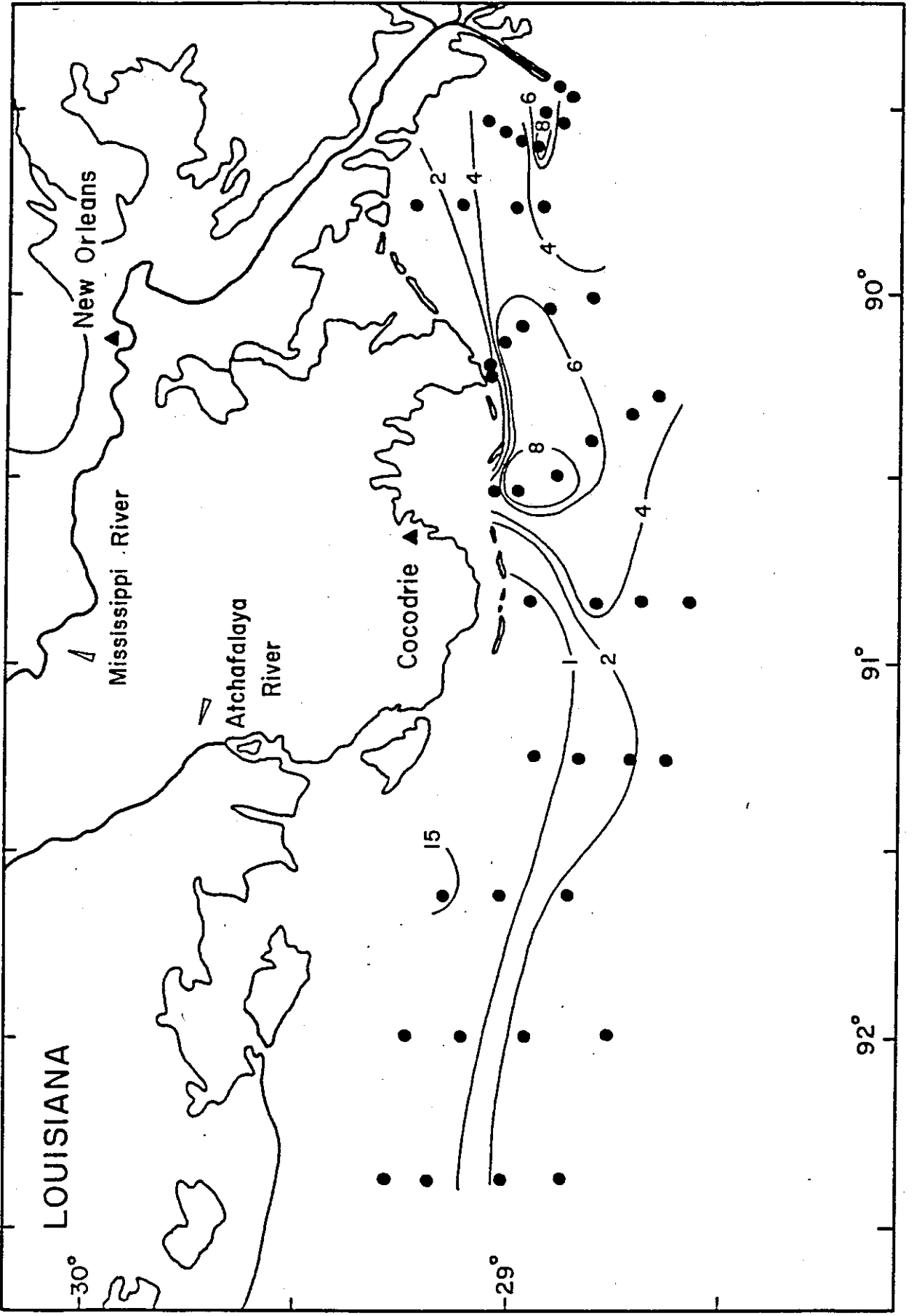
92°

91°

90°

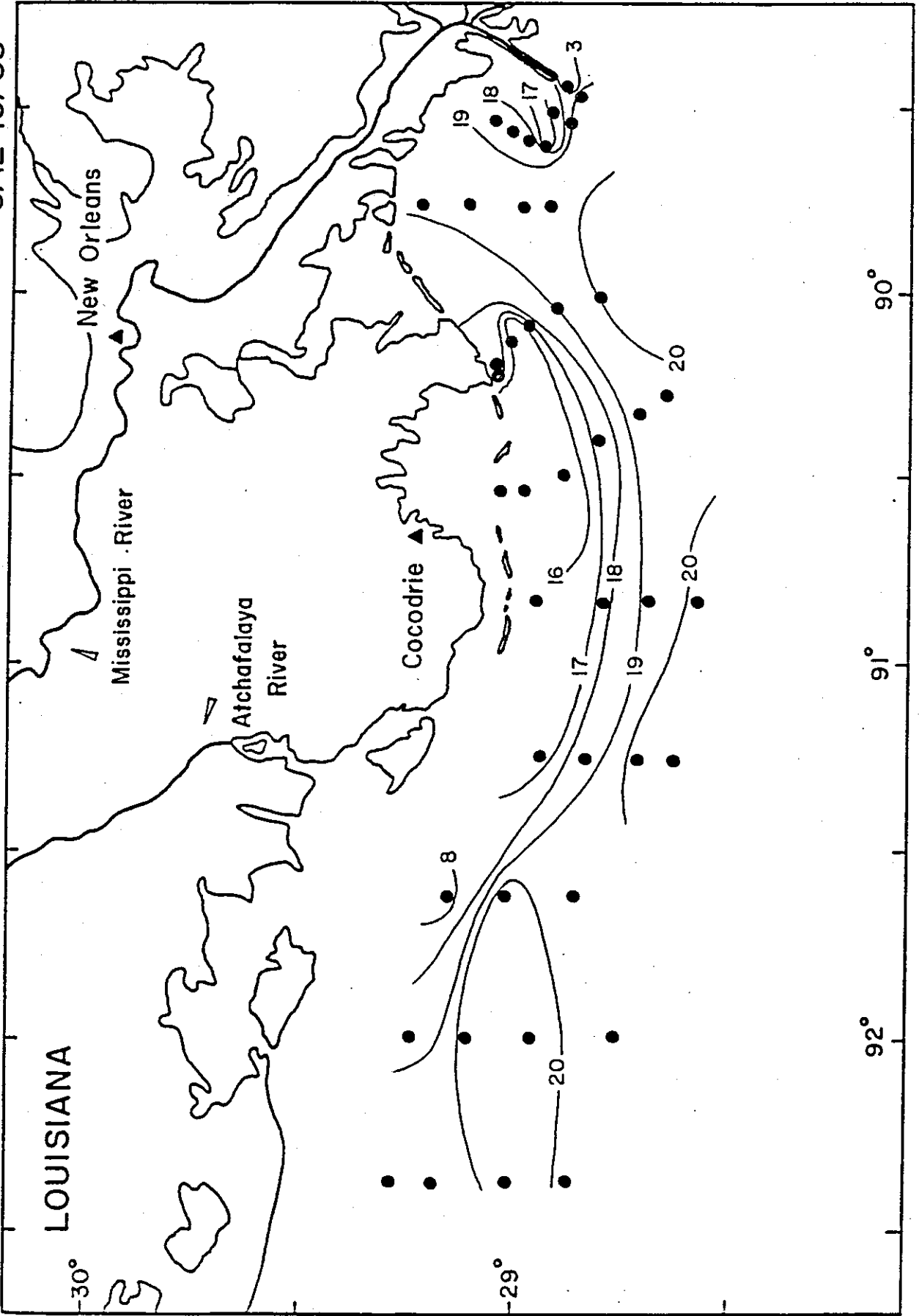
Δ SALINITY (‰) (BOTTOM - SURFACE)

8/12-16/88



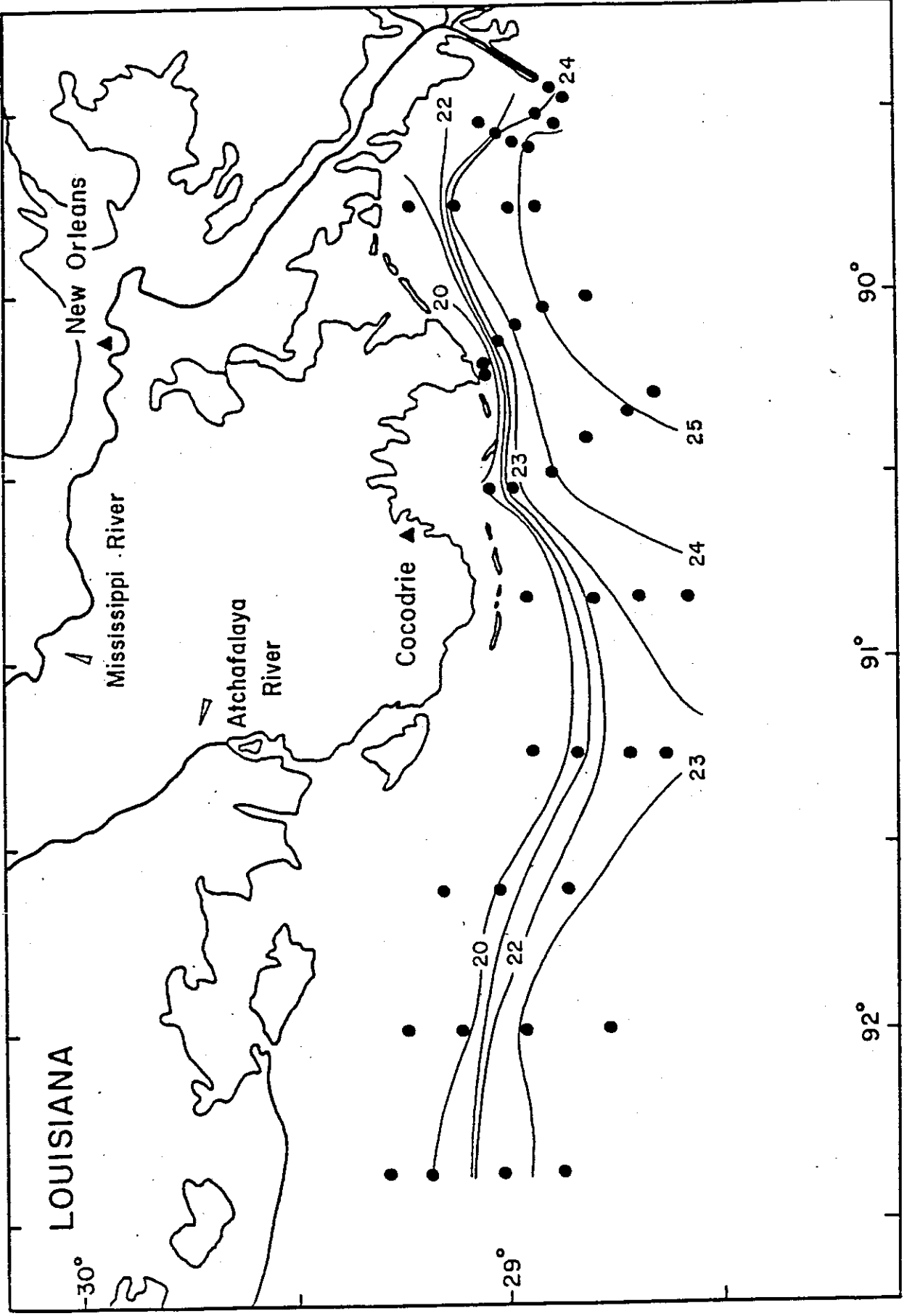
SURFACE SIGMA-T

8/12-16/88



BOTTOM SIGMA-T

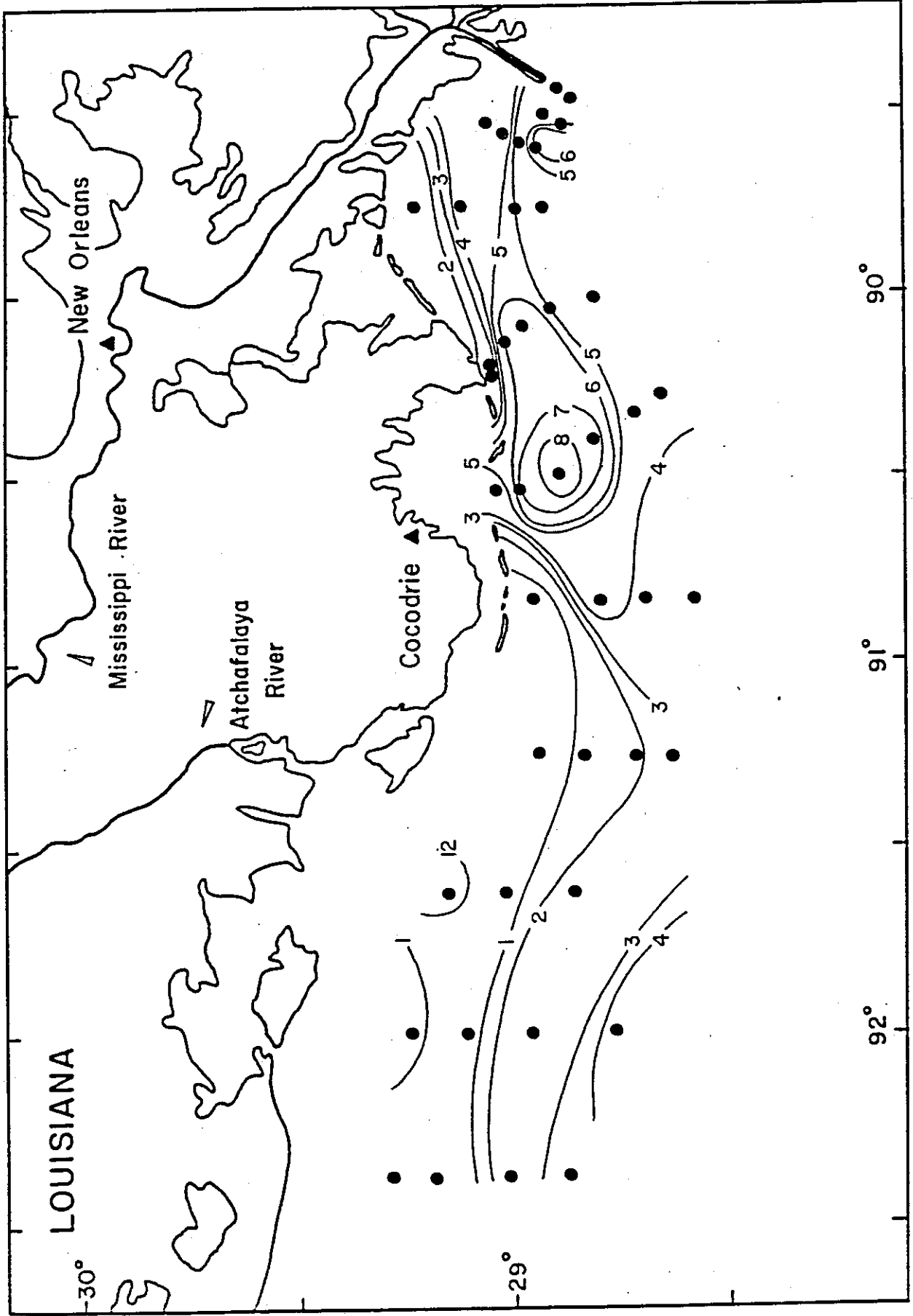
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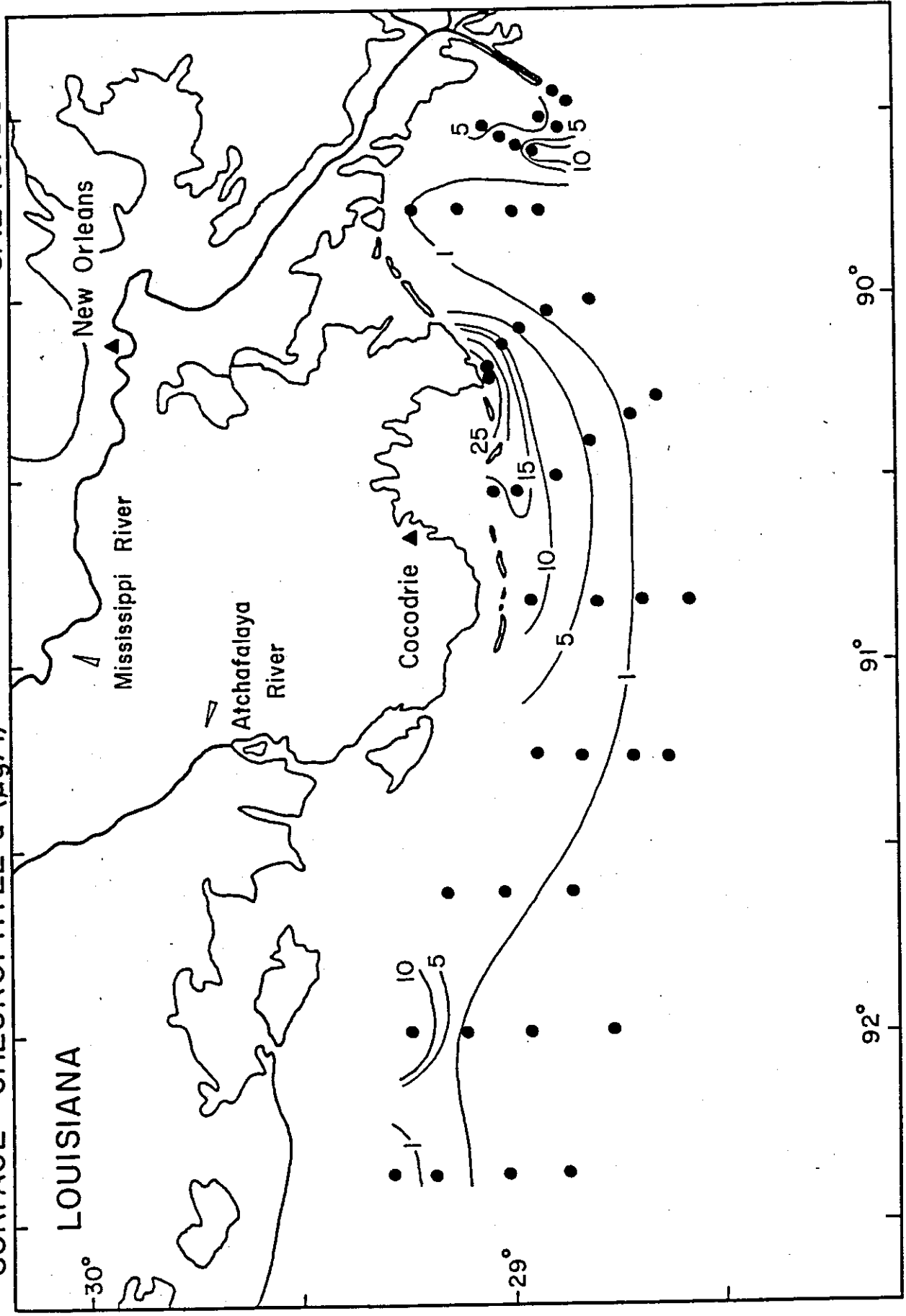
△ SIGMA-T (BOTTOM - SURFACE)

8/12-16/88



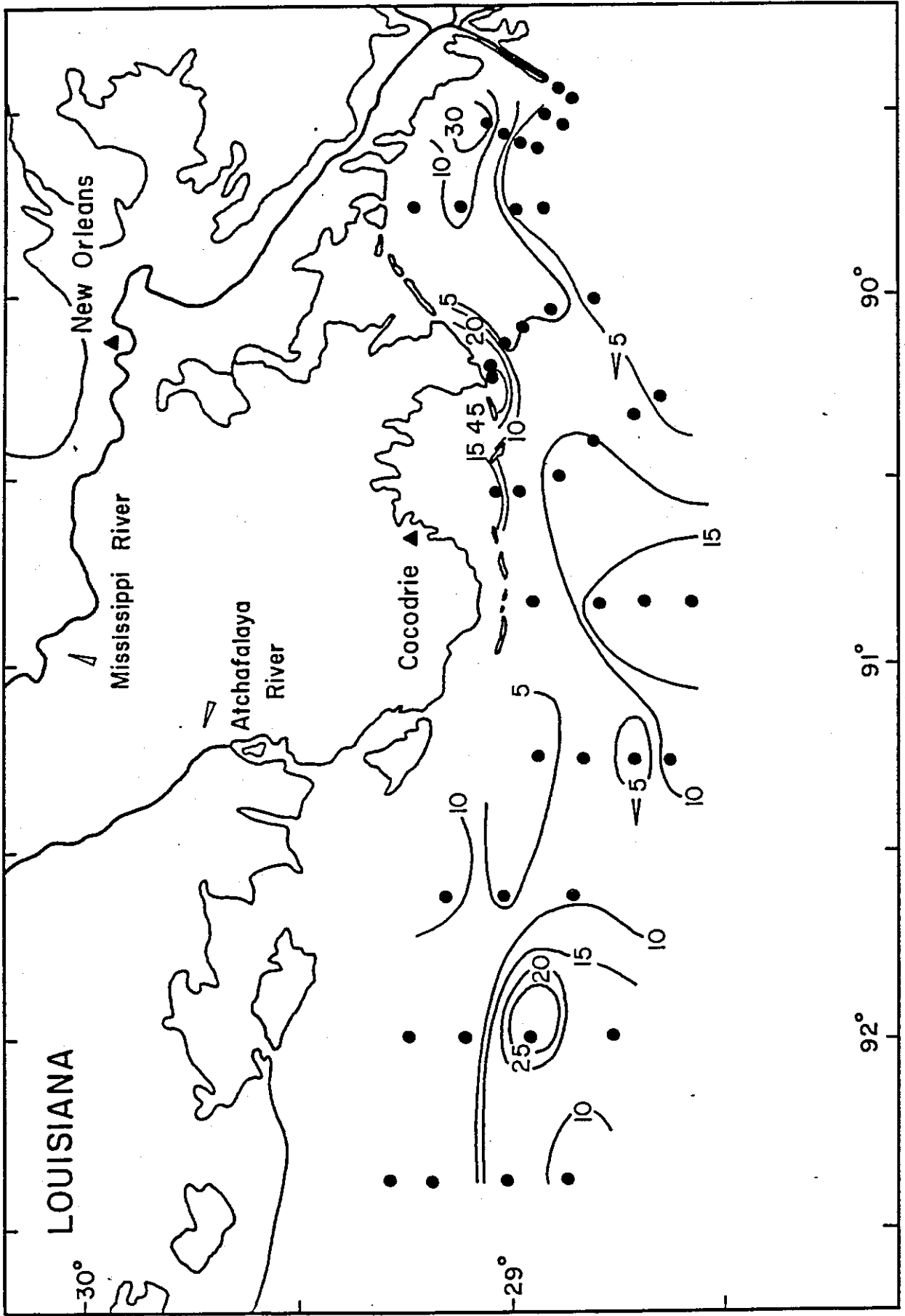
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SURFACE CHLOROPHYLL *a* ( $\mu\text{g/l}$ )



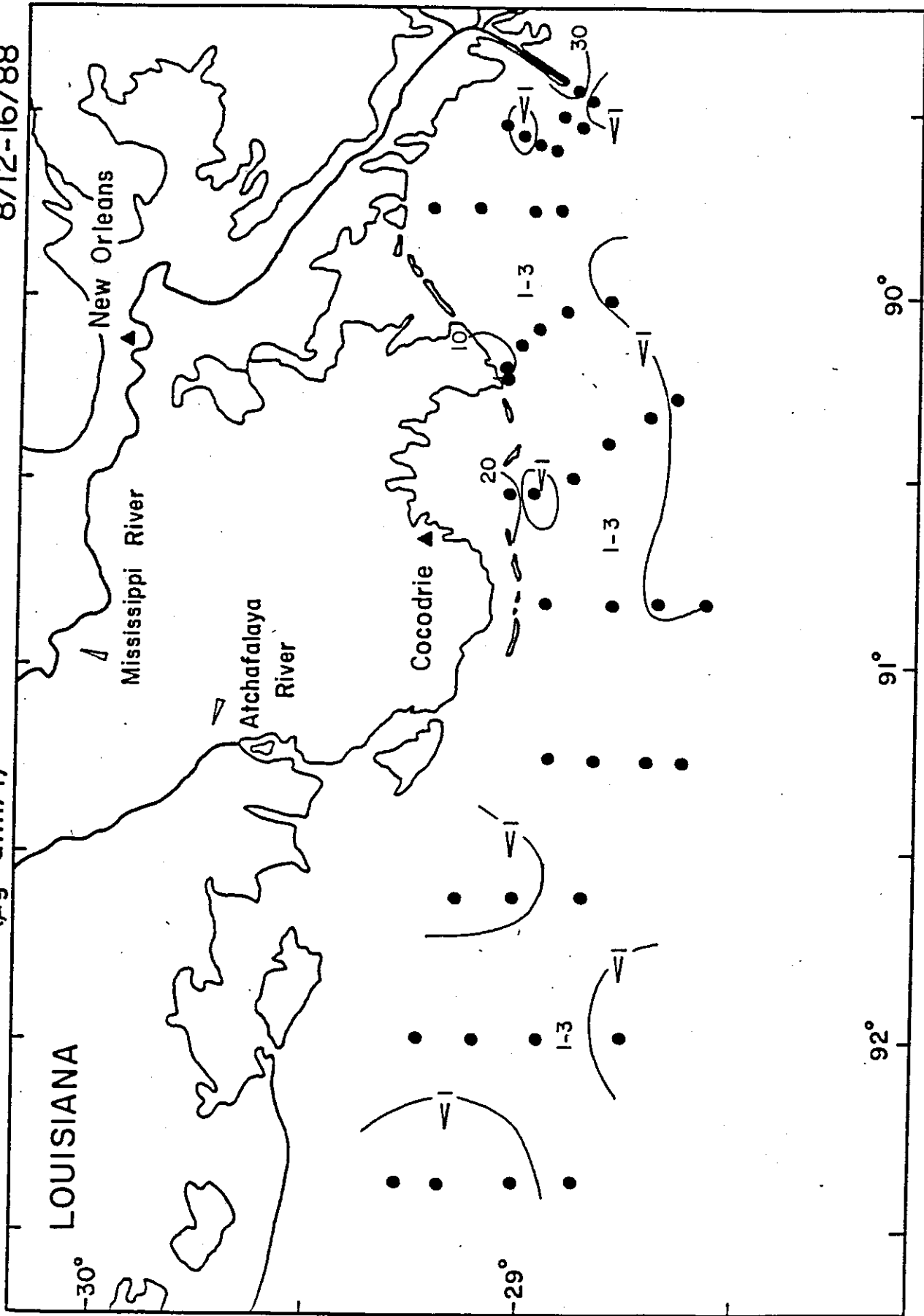
BOTTOM CHLOROPHYLL a ( $\mu\text{g/l}$ )

8/12-16/88



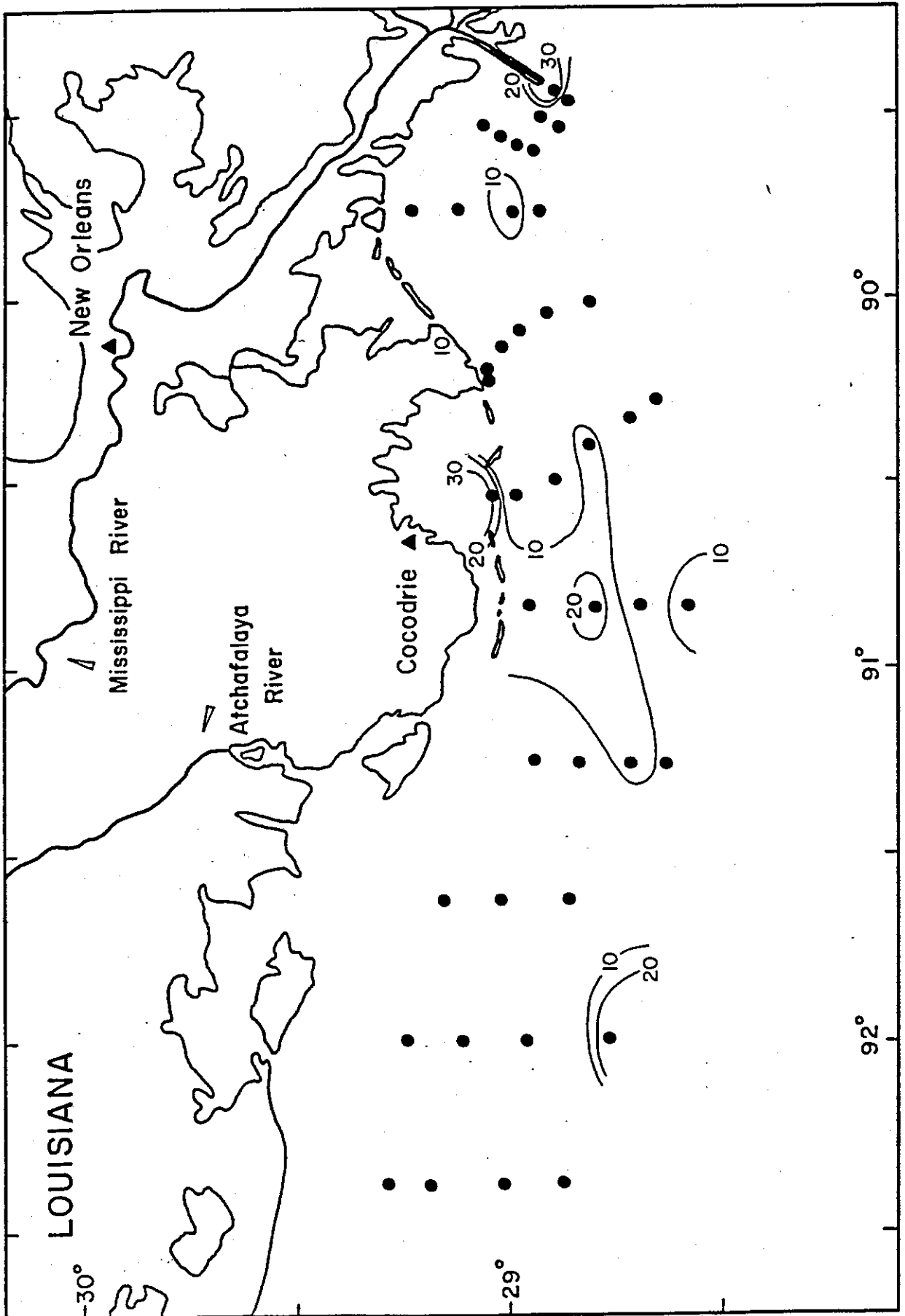
SURFACE NITRATE ( $\mu\text{g atm/l}$ )

8/12-16/88



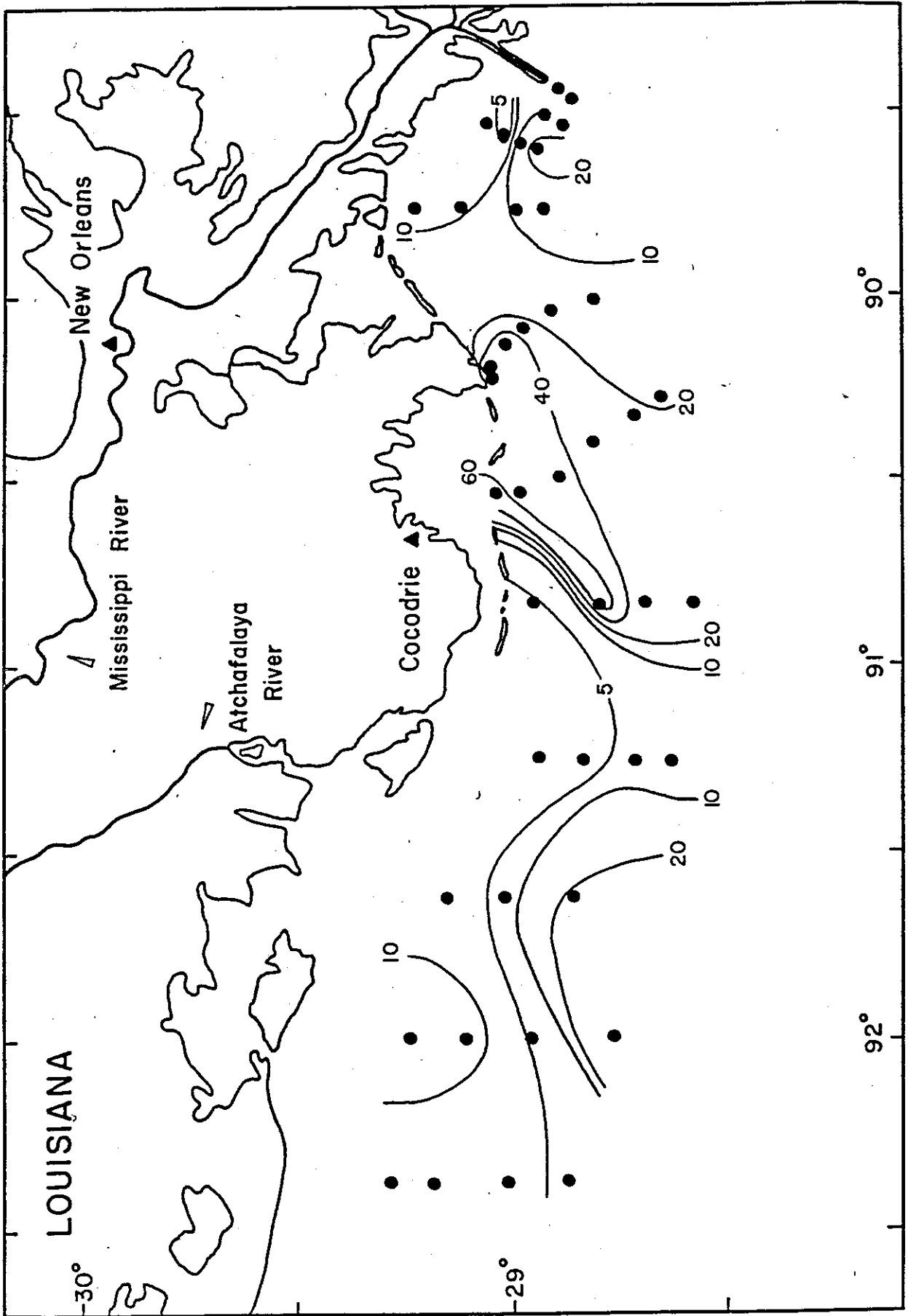
SURFACE DIN

8/12-16/88



BOTTOM DIN

8/12-16/88



CRUISE DATA - TRANSECT L  
(from LaSER cruise)

Station: 83                      Latitude: 28:50.99 N    Hydrolab cast time: 14:09  
Date: 04/24/88                  Longitude: 90:17.47 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA

=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
2.0	24.01	28.10	42.80	18.42	8.71
4.0	22.54	29.73	43.70	20.08	9.26
6.0	21.65	31.22	44.80	21.45	8.93
8.0	20.27	31.71	44.20	22.19	8.59
10.0	19.11	33.20	44.90	23.62	4.83
12.0	19.27	34.31	46.40	24.43	5.38
14.0	19.00	34.73	46.60	24.82	4.64
16.0	19.03	35.09	47.10	25.08	3.35
18.0	18.95	35.04	46.90	25.07	2.90
20.0	18.93	35:05	46.90	25.08	2.53
21.0	18.95	35.06	47.00	25.08	2.56

=====

CRUISE DATA - TRANSECT L  
(from LaSER cruise)

Station: 82                      Latitude: 28:48.56 N    Hydrolab cast time: 13:29  
Date: 04/24/88                  Longitude: 90:17.45 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA  
=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
2.0	24.91	28.38	43.90	18.38	7.63
4.0	22.80	29.69	43.90	19.97	7.97
6.0	21.68	30.72	44.20	21.06	7.59
8.0	21.09	31.70	44.90	21.96	6.42
10.0	19.88	33.30	45.70	23.50	7.99
12.0	20.01	34.26	47.10	24.20	6.38
14.0	19.69	34.79	47.40	24.68	5.90
16.0	19.14	35.23	47.30	25.16	4.52
18.0	19.06	35.19	47.20	25.16	3.43
20.0	18.97	35.19	47.10	25.17	2.49

CHLOROPHYLL DATA  
=====

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)
0.0	03.69	01.25	4.94
5.0	06.63	02.27	8.90
10.0	09.01	01.22	10.23
15.0	05.23	01.55	6.78
19.0	01.54	00.98	2.52

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)
0.0	6.9	0.2	0.1	#.#	18.7
5.0	3.3	0.4	0.1	#.#	10.3
10.0	2.7	0.7	0.1	#.#	16.2
15.0	2.4	13.6	0.9	#.#	18.2
19.0	5.8	20.9	1.0	#.#	23.9



CRUISE DATA - TRANSECT L  
(from LaSER cruise)

Station: 81                      Latitude: 28:46.14 N    Hydrolab cast time: 13:00  
Date: 04/24/88                  Longitude: 90:15.28 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)
2.0	24.23	30.06	45.70	19.84	7.68
4.0	23.37	30.20	45.10	20.19	7.96
6.0	20.38	32.38	45.10	22.67	8.00
8.0	19.87	33.36	45.80	23.55	7.14
10.0	20.17	34.19	47.10	24.10	7.70
12.0	19.72	35.33	48.10	25.09	7.34
14.0	19.22	35.52	47.80	25.36	7.63
16.0	19.15	35.48	47.70	25.35	4.51
18.0	19.14	35.50	47.70	25.37	3.61
20.0	19.13	35.50	47.70	35.27	3.38
22.0	19.12	35.50	47.70	25.38	3.28
24.0	19.12	35.50	47.70	25.38	3.21
25.0	19.12	35.50	47.70	25.38	3.17
27.0	19.12	35.50	47.70	25.38	3.14

=====

CRUISE DATA - TRANSECT L  
(from LaSER cruise)

Station: 80                      Latitude: 28:43.69 N    Hydrolab cast time: 12:22  
Date: 04/24/88                  Longitude: 90:13.33 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
2.0	22.98	30.29	44.80	20.37	7.18
4.0	22.38	30.63	44.70	20.80	7.61
6.0	21.11	31.63	44.80	21.91	7.04
8.0	19.36	33.17	45.10	23.53	7.64
10.0	19.79	33.71	46.20	23.64	7.92
12.0	19.75	34.30	46.90	24.30	7.72
14.0	19.24	35.28	47.50	25.17	7.10
16.0	19.23	35.61	47.90	25.43	7.38
18.0	19.14	35.74	48.00	25.56	4.94
20.0	19.03	35.74	47.90	25.58	4.24
22.0	18.89	35.74	47.70	25.62	3.82
24.0	18.77	35.70	47.50	25.62	3.56
25.0	18.75	35.70	47.50	25.62	3.46
30.0	18.48	35.98	47.60	25.90	3.25
33.0	18.43	36.02	47.60	25.95	2.96

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)
0.0	06.59	01.51	8.10
5.0	09.27	00.92	10.19
10.0	04.83	00.71	5.54
15.0	05.71	00.60	6.31
20.0	01.51	00.46	1.97
30.0	00.24	00.38	0.62

TRANSECT L, Station 80  
(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)
0.0	5.9	4.9	0.1	#.#	11.0
5.0	3.6	2.4	0.1	#.#	8.9
10.0	4.1	1.4	0.2	#.#	4.9
15.0	5.2	5.4	0.4	#.#	12.2
20.0	7.8	22.4	0.3	#.#	17.4
30.0	4.3	29.6	0.7	#.#	18.2

CRUISE DATA - TRANSECT L  
(from LASER cruise)

Station: 79                      Latitude: 28:41.17 N    Hydrolab cast time: 11:53  
Date: 04/24/88                  Longitude: 90:11.35 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
2.0	22.39	32.08	46.60	21.90	8.25
4.0	22.36	32.00	46.50	21.84	7.76
6.0	22.37	31.97	46.50	21.82	9.01
8.0	22.10	32.02	46.30	21.93	9.01
10.0	20.17	32.85	45.50	23.08	8.22
12.0	19.06	33.84	45.60	24.12	5.43
14.0	19.42	35.50	48.00	25.29	5.23
16.0	19.50	35.77	48.40	25.48	5.42
18.0	19.51	35.94	48.60	25.61	5.73
20.0	19.47	36.12	48.80	25.76	5.98
22.0	19.13	36.20	48.50	25.91	5.68
24.0	19.08	36.22	48.50	25.94	5.17
25.0	19.06	36.24	48.50	25.95	5.17
30.0	18.65	36.26	48.10	26.08	5.02
35.0	18.05	36.24	47.50	26.21	4.52
36.0	17.88	36.30	47.40	26.30	4.72

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CRUISE DATA - TRANSECT L

Station: 78                      Latitude: 28:38.74 N    Hydrolab cast time: 11:15  
 Date: 04/24/88                  Longitude: 90:09.48 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
2.0	22.52	32.01	46.60	21.81	8.33
4.0	22.39	32.12	46.70	21.93	7.87
6.0	22.28	32.06	46.50	21.91	7.41
8.0	21.67	32.09	46.00	22.10	8.40
10.0	20.64	32.56	45.60	22.74	8.36
12.0	20.19	34.23	47.20	24.13	7.64
14.0	19.83	35.43	48.30	25.14	7.98
16.0	19.37	35.71	48.20	25.47	7.54
18.0	19.44	35.94	48.50	25.63	6.88
20.0	19.49	36.22	48.90	25.83	6.68
22.0	19.39	36.34	49.00	25.94	6.61
24.0	19.26	36.37	48.90	26.00	6.33
25.0	19.18	36.36	48.80	26.01	6.21
30.0	18.98	36.35	48.60	26.06	6.14
35.0	18.02	36.28	47.50	26.25	5.65
40.0	17.93	36.33	47.40	26.31	5.06
45.0	17.64	36.35	47.20	26.40	4.90
50.0	17.59	36.35	47.10	26.41	4.82
55.0	17.54	36.34	47.10	26.42	4.81
60.0	17.47	36.34	47.00	26.43	4.80
63.0	17.39	36.33	46.90	26.45	4.74

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)
2.0	03.78	00.23	4.01
5.0	05.54	00.90	6.44
10.0	05.40	00.78	6.18
20.0	02.46	00.48	2.94
40.0	00.11	00.11	0.22
60.0	00.07	00.08	0.15

TRANSECT L, Station 78  
(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)
2.0	4.0	0.2	0.1	##	3.0
5.0	4.9	0.2	0.1	##	3.2
10.0	6.3	0.1	0.2	##	4.5
20.0	7.6	0.2	0.3	##	1.6
40.0	9.4	21.5	0.2	##	4.1
60.0	6.1	27.0	0.2	##	4.1

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

Station: 01            Latitude: 29:03.40 N    Hydrolab cast time: 09:40  
Date: 06/09/88        Longitude: 90:31.90 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
1.1	26.49	28.26	45.13	17.81	6.43
2.1	26.51	28.25	45.14	17.80	5.94
3.0	26.51	28.26	45.15	17.80	5.96
3.9	26.45	28.29	45.15	17.85	5.99
5.0	26.09	29.12	46.01	18.58	5.89
5.8	26.04	29.22	46.10	18.67	4.51

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

Station: 02                      Latitude: 29:01.18 N    Hydrolab cast time: 15:45  
Date: 06/09/88                  Longitude: 90:29.34 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA  
=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
2.8	27.37	28.51	46.28	17.73	7.06
4.0	26.84	28.66	46.02	18.00	7.00
6.3	23.96	33.73	50.31	22.70	6.10
7.0	23.86	33.84	50.34	22.80	2.24
7.6	23.86	33.83	50.33	22.80	1.14
8.0	23.85	33.81	50.29	22.79	1.26



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

Station: 03                      Latitude: 28:59.42 N    Hydrolab cast time: 10:34  
Date: 06/09/88                  Longitude: 90:31.27 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA

=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
0.5	26.83	28.11	45.21	17.59	6.64
2.2	26.88	28.09	45.23	17.56	6.84
4.1	26.72	28.27	45.34	17.75	6.84
6.2	26.97	30.20	47.42	19.43	6.74
8.0	24.91	32.93	50.17	21.80	6.07
8.8	23.43	34.29	50.51	23.28	1.46
10.1	23.37	34.33	50.50	23.32	0.73
10.7	23.36	34.33	50.49	23.32	0.51

=====

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

Station: 04                      Latitude: 28:56.98 N    Hydrolab cast time: 15:05  
Date: 06/09/88                  Longitude: 90:31.47 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA

=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
2.1	27.36	28.21	45.82	17.50	7.54
4.1	26.98	28.36	45.71	17.73	7.48
6.1	25.07	31.46	48.33	20.65	7.63
7.9	23.50	35.62	52.33	24.26	5.33
9.0	22.97	35.68	51.85	24.46	3.64
9.9	22.86	35.65	51.69	24.47	2.95
11.1	22.84	35.61	51.62	24.44	2.65
12.0	22.85	35.60	51.61	24.44	2.58
12.9	22.84	36.60	51.60	24.43	2.51

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

Station: 05                      Latitude: 28:54.90 N    Hydrolab cast time: 11:45  
Date: 06/09/88                  Longitude: 90:29.23 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA  
=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
1.1	27.25	28.10	45.57	17.46	6.99
2.0	27.17	28.15	45.57	17.52	7.08
4.2	25.24	32.12	49.40	21.10	6.20
6.0	25.23	32.87	50.40	21.66	6.20
7.9	24.21	34.17	51.11	22.95	4.95
9.0	23.43	35.06	51.51	23.86	5.30
10.0	22.83	35.65	51.65	24.48	5.24
10.9	22.15	35.86	51.20	24.83	4.40
12.1	22.10	35.76	51.03	24.77	2.69
12.8	22.09	35.73	50.98	24.75	2.26
14.0	22.09	35.71	50.96	24.73	2.13
15.1	22.09	35.70	50.95	24.73	2.08
15.7	22.09	35.70	50.95	24.73	1.96

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

Station: 07                      Latitude: 28:50.06 N    Hydrolab cast time: 13:01  
Date: 06/09/88                  Longitude: 90:23.61 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
1.0	27.37	28.28	45.93	17.55	8.12
2.1	27.36	28.29	45.93	17.56	7.98
4.1	27.20	28.34	45.88	17.66	7.98
6.0	24.53	33.81	50.97	22.58	7.72
8.1	24.01	35.03	52.07	23.66	5.50
10.0	24.23	35.61	53.07	24.04	6.54
12.2	23.88	35.71	52.84	24.23	6.57
13.9	23.14	35.84	52.22	24.53	6.30
15.9	22.73	35.86	51.82	24.66	5.58
18.0	21.79	36.11	51.15	25.12	4.48
19.0	21.64	35.05	50.91	25.12	3.60
20.1	21.63	36.02	50.87	25.10	2.76
20.2	21.63	36.02	50.87	25.09	2.48

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

Station: 01                      Latitude: 29:03.40 N    Hydrolab cast time: ###  
Date: 06/21/88                      Longitude: 90:31.90 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA  
=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
0.8	27.75	30.23	49.10	18.89	5.42
3.0	27.77	30.31	49.24	18.95	5.58
4.6	27.65	30.51	49.42	19.14	5.25
4.8	27.63	30.51	47.41	19.14	5.20

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

Station: 02                      Latitude: 29:01.20 N    Hydrolab cast time: ##:##  
Date: 06/21/88                  Longitude: 90:29.67 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
1.0	27.48	31.13	50.15	19.66	4.94
2.3	27.46	31.14	50.15	19.67	4.74
3.9	27.46	31.15	50.16	19.68	5.00
5.2	27.46	31.17	50.19	19.70	5.41
6.2	27.44	31.19	50.20	19.71	5.54
7.0	27.44	31.19	50.21	19.71	5.82
8.1	27.45	31.22	50.26	19.74	5.56
8.3	27.44	31.22	50.25	19.74	5.40

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

Station: 03                      Latitude: 28:59.44 N    Hydrolab cast time: ##:##  
Date: 06/21/88                  Longitude: 90:31.25 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
2.8	27.61	30.90	49.95	19.44	5.94
3.9	27.61	30.91	49.96	19.45	5.93
4.5	27.58	30.90	49.92	19.45	5.95
6.1	27.50	30.90	49.85	19.48	5.97
8.6	26.30	32.60	51.09	21.14	5.97
10.5	26.08	32.65	50.96	21.24	4.28
10.8	26.08	32.65	50.95	21.24	2.57

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

Station: 04            Latitude: 28:57.00 N    Hydrolab cast time: ##:##  
Date: 06/21/88       Longitude: 90:31.46 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
1.0	27.79	31.30	50.69	19.68	6.50
2.2	27.80	31.29	50.70	19.68	6.04
3.8	27.78	31.30	50.69	19.69	6.01
5.9	27.47	31.50	50.69	19.94	6.00
7.7	26.98	32.50	51.62	20.85	5.80
10.3	26.46	32.76	51.48	21.21	5.32
12.8	25.84	33.13	51.38	21.68	3.36
13.2	25.89	33.08	51.36	21.62	2.76



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

Station: 05                      Latitude: 28:54.88 N    Hydrolab cast time: ###  
Date: 06/21/88                      Longitude: 90:29.35 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA  
=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
0.4	27.35	31.83	51.04	20.23	6.84
2.0	27.36	31.82	51.04	20.22	6.14
4.4	27.35	31.84	51.05	20.23	6.02
6.1	27.24	32.02	51.20	20.41	6.03
8.3	26.93	32.78	51.98	21.07	6.03
10.2	26.71	33.07	52.17	21.36	5.90
12.4	25.70	34.10	52.57	22.45	5.09
13.0	25.54	34.32	52.70	22.66	3.82
14.0	25.43	34.44	52.77	22.79	3.39
15.8	25.36	34.52	52.79	22.87	2.43

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

Station: 06                      Latitude: 28:51.44 N    Hydrolab cast time: ##:##  
Date: 06/21/88                      Longitude: 90:27.68 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA

=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
0.8	26.83	33.46	52.03	21.62	6.74
1.8	26.83	33.46	52.83	21.62	6.23
4.1	26.79	33.67	53.08	21.79	6.15
5.8	26.74	33.83	53.26	21.92	6.04
8.3	26.60	34.33	53.82	22.34	6.02
10.6	26.35	34.77	54.17	22.76	6.03
12.0	26.21	35.05	54.40	23.00	5.91
14.1	25.38	35.33	53.91	23.48	5.76
16.1	25.05	35.25	53.45	23.52	5.04
18.1	24.27	35.40	52.85	23.87	4.03
19.2	23.65	35.40	52.30	24.11	1.37

=====

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

Station: 07                      Latitude: 28:49.93 N    Hydrolab cast time: ##:##  
Date: 06/21/88                  Longitude: 90:23.53 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
0.9	26.69	33.33	52.50	21.56	5.93
2.0	26.70	33.32	52.50	21.55	5.94
4.2	26.68	33.39	52.58	21.61	5.89
6.1	25.48	34.04	53.29	22.16	5.93
8.2	26.33	34.59	53.90	22.62	5.88
12.2	26.12	35.24	54.57	23.17	5.76
14.6	25.96	35.35	54.55	23.31	5.87
16.1	25.06	35.15	53.34	23.44	5.52
18.0	23.72	35.51	52.42	24.11	3.77
20.1	23.64	35.53	52.36	24.15	2.48
20.4	23.61	35.54	52.34	24.17	1.88

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

Station: 08                      Latitude: 28:47.03 N    Hydrolab cast time: ###  
Date: 06/21/88                      Longitude: 90:16.60 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA  
=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
0.6	26.10	34.55	53.60	22.67	7.10
1.5	26.09	34.54	53.58	22.66	6.80
2.6	26.09	34.58	53.63	22.69	6.63
4.4	26.08	34.62	53.67	22.72	6.33
6.0	26.07	34.73	53.82	22.81	6.20
8.1	26.09	34.97	54.17	22.99	6.08
10.1	26.14	35.23	54.58	23.16	6.00
12.0	26.08	35.42	54.78	23.33	5.96
14.0	26.05	35.52	54.89	23.42	5.83
16.5	25.88	35.63	54.86	23.55	5.86
18.7	25.29	35.79	54.44	23.85	5.45
20.3	24.46	35.64	53.37	23.99	5.15
20.8	24.48	35.54	53.25	23.91	3.99

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

Station: 09                      Latitude: 28:45.50 N    Hydrolab cast time: ##:##  
Date: 06/21/88                  Longitude: 90:14.00 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
0.6	26.20	36.00	55.69	23.73	7.11
2.4	26.19	36.00	55.68	23.73	6.28
3.7	26.17	36.00	55.67	23.74	6.11
6.5	26.16	35.99	55.65	23.74	6.04
8.4	26.16	36.00	55.66	23.74	5.97
10.2	26.16	35.99	55.65	23.74	5.95
12.2	26.17	35.99	55.65	23.74	5.90
13.8	26.16	36.00	55.66	23.74	5.86
16.5	26.13	35.99	55.60	23.74	5.87
18.1	26.14	35.99	55.62	23.74	5.82
19.9	26.06	35.98	55.52	23.76	5.80
21.6	25.95	36.00	55.44	23.80	5.80
24.4	25.83	36.10	55.45	23.92	5.78
25.8	24.52	35.92	53.79	24.18	5.43
28.3	23.18	35.96	52.44	24.61	4.68
29.8	23.05	35.97	52.31	24.66	3.40

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

Station: P10                      Latitude: 28:41.10 N    Hydrolab cast time: ##:##  
Date: 06/21/88                    Longitude: 90:07.70 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
1.1	26.33	36.04	55.89	23.72	6.60
4.6	26.33	36.04	55.89	23.72	6.18
10.4	26.36	36.06	55.96	23.72	6.00
14.8	26.39	36.16	56.13	23.79	5.96
20.0	26.29	36.30	56.21	23.92	5.90
25.3	25.75	36.32	55.65	24.11	6.01
29.3	22.52	36.08	51.89	24.89	6.12
35.9	20.69	36.21	50.12	25.50	6.03
38.1	20.42	36.24	49.88	25.60	5.93

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

Station: 01            Latitude: 29:03.40 N    Hydrolab cast time: ##:##  
Date: 07/15/88        Longitude: 90:31.90 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA

=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
1.4	30.03	33.30	55.86	20.45	5.03
2.2	30.03	33.31	55.88	20.45	5.46
3.3	20.03	33.32	55.89	20.46	5.57
4.0	30.04	33.32	55.90	20.46	5.97

=====

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

Station: 03                      Latitude: 28:59.44 N    Hydrolab cast time: ##:##  
Date: 07/15/88                  Longitude: 90:31.25 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA

=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
1.1	29.12	32.75	54.12	20.33	5.72
2.3	29.16	32.73	54.12	20.31	5.72
3.7	29.14	32.74	54.13	20.33	4.38
6.4	28.99	32.89	54.20	20.48	5.75
8.1	28.13	33.65	54.42	21.34	6.62
9.2	27.74	34.34	55.02	21.99	6.24
10.6	27.56	34.56	55.14	22.21	5.59

=====



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

Station: 05                      Latitude: 28:54.88 N    Hydrolab cast time: ##:##  
Date: 07/15/88                  Longitude: 90:29.35 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA

=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
1.5	29.13	33.62	55.41	20.99	4.25
1.7	29.15	33.67	55.50	21.02	3.75
4.1	29.15	33.74	55.60	21.07	3.37
5.9	29.14	33.78	55.65	21.10	4.47
7.9	28.73	34.31	56.00	21.64	4.58
9.9	28.27	34.67	56.04	22.06	4.55
12.4	27.68	35.12	56.06	22.59	4.37
14.0	27.55	35.22	56.06	22.71	4.26
15.3	27.52	35.22	56.04	22.72	4.18

=====

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

Station: 07                      Latitude: 28:49.93 N    Hydrolab cast time: ##:##  
Date: 07/15/88                  Longitude: 90:23.53 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA

=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
1.5	28.64	34.50	56.17	21.81	4.13
2.7	28.70	34.50	56.24	21.79	3.30
4.0	28.67	34.49	56.31	21.80	4.42
6.3	28.64	34.59	56.32	21.89	5.49
7.9	28.58	34.64	56.32	21.94	4.88
10.0	28.43	34.76	56.33	22.08	4.19
12.0	28.32	34.84	56.32	22.17	4.29
14.0	27.89	35.15	56.32	22.55	4.91
16.1	27.70	35.27	56.29	22.70	5.18
18.2	27.54	35.29	56.15	22.76	4.94
20.2	27.54	35.21	56.03	22.71	5.46

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

Station: 09                      Latitude: 28:45.50 N    Hydrolab cast time: ###  
Date: 07/15/88                  Longitude: 90:14.00 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA  
=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
0.8	28.99	29.94	49.83	18.28	4.30
2.6	28.98	29.93	49.83	18.27	4.13
4.4	28.96	29.95	49.82	18.29	3.52
6.3	28.62	30.16	49.83	18.56	3.21
8.4	27.99	30.54	49.79	19.05	2.99
10.6	27.66	30.88	49.96	19.41	5.07
12.3	27.50	35.26	56.06	22.75	5.20
14.1	27.36	35.80	56.68	23.21	6.36
16.6	27.44	35.71	56.64	23.12	6.69
18.5	27.44	35.85	56.83	23.22	6.58
20.9	26.99	36.21	56.85	23.63	6.94
22.4	26.80	36.22	56.66	23.70	6.82
24.3	26.26	36.45	56.39	24.05	6.40
26.2	25.33	36.79	55.85	24.60	5.96
28.6	24.74	36.65	55.01	24.67	4.75
30.0	24.73	36.17	54.36	24.31	3.81

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

Station: P10                      Latitude: 28:41.10 N    Hydrolab cast time: ##:##  
Date: 07/15/88                    Longitude: 90:07.70 W    Secchi disk depth (m): #.#

HYDROGRAPHIC DATA

=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
1.0	28.44	35.30	57.12	22.48	5.61
4.8	28.37	33.32	57.07	22.51	4.45
10.4	28.14	35.41	56.96	22.66	6.14
14.7	27.45	35.80	56.77	23.18	6.01
20.0	26.92	35.83	56.24	23.37	5.61
24.8	26.40	35.93	55.84	23.62	5.15
29.4	25.29	36.07	54.82	24.06	4.84
35.0	21.16	36.37	50.81	25.50	6.06
40.2	20.48	36.25	49.95	25.59	4.12
45.4	19.91	36.31	49.43	25.79	3.90
50.7	18.95	36.38	48.51	26.09	4.04
55.0	18.86	36.38	48.41	26.11	4.16
57.3	18.76	36.36	48.30	26.13	4.05

=====

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

Station: P11                      Latitude:    28:39.50 N    Hydrolab cast time:    ##:##  
Date:    07/15/88                      Longitude:    90:05.80 W    Secchi disk depth (m):    #.#

HYDROGRAPHIC DATA

=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)
1.1	28.68	35.66	57.89	22.67	4.33
5.1	28.58	35.65	57.77	22.70	4.82
10.4	28.13	35.71	57.40	22.89	4.42
15.3	27.25	36.01	56.86	23.40	4.93
20.2	27.11	36.19	56.95	23.58	4.61
24.8	26.72	35.99	56.25	23.55	5.75
30.3	23.82	36.14	53.34	24.56	5.29
35.2	21.98	36.21	51.48	25.15	6.86
40.7	20.86	36.28	50.39	25.51	6.39
45.2	20.06	36.32	49.63	25.75	5.24
50.4	19.88	36.31	49.40	25.80	4.39
55.3	19.75	36.34	49.30	25.85	4.27
60.4	19.27	36.35	48.82	26.00	3.91
65.2	18.92	36.36	48.47	26.09	4.14
70.6	18.90	36.36	48.44	26.10	4.26
75.2	18.89	36.36	48.43	26.10	4.16
80.0	18.77	36.39	48.36	26.15	4.23
84.8	18.20	36.33	47.69	26.25	4.00
87.1	17.35	36.28	46.76	26.42	4.02

CRUISE DATA - TRANSECT X

(off Southwest Pass)

(surface sample only; just inside Southwest Pass)

Station: 01                      Latitude: 28:54.7 N    Hydrolab cast time: 10:45  
 Date: 08/13/88                  Longitude: 89:25.6 W    Secchi disk depth (m):##.#

HYDROGRAPHIC DATA

```
=====
Depth      Temperature  Salinity   Conductivity   Dissolved   Percent
(m)        (degrees C)  (ppt)      (mmho/cm)     Oxygen      Oxygen
                               Sigma-t    (mg/L)         Saturation
=====
0.3        28.81        8.69       15.13          2.54        7.38         100.8
=====
```

CHLOROPHYLL DATA

```
=====
Depth      Chlorophyll  Phaeopigments  Total   Acid
(m)        (ug/L)       (ug/L)         Pigments Ratio
                               (ug/L)        (Fo/Fa)
=====
0.3        11.6         4.1            15.70      1.7
=====
```

NUTRIENT DATA

```
=====
Depth      Ammonia     Nitrate       Nitrite      Phosphate   Silicate
(m)        (ug-at/L)  (ug-at/L)    (ug-at/L)   (ug-at/L)  (ug-at/L)
=====
0.3        0.3         31.0          1.0          1.9         5.8
=====
```

CRUISE DATA - TRANSECT X  
(off Southwest Pass)  
(not to bottom; total depth 49 m)

Station: 02                      Latitude: 28:50.5 N    Hydrolab cast time: 09:45  
Date: 08/13/88                  Longitude: 89:29.0 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
0.6	27.85	31.63	50.36	19.93	7.75	118.5
2.0	27.85	31.41	50.04	19.77	7.75	118.4
4.1	27.83	31.85	50.66	20.11	7.75	118.6
6.0	27.90	32.07	51.05	20.25	7.64	117.2
7.8	27.90	32.14	51.15	20.31	7.49	115.0
10.0	27.21	33.59	52.53	21.62	7.09	108.4
11.5	26.07	34.29	52.35	22.50	6.73	101.2
14.0	25.49	34.41	51.93	22.77	6.68	99.5
16.0	24.97	34.31	51.27	22.85	6.65	98.1
18.0	24.86	34.38	51.25	22.94	6.56	96.6
20.0	24.71	34.75	51.59	23.26	6.55	96.4
21.0	24.62	34.45	51.09	23.06	6.54	95.9
23.0	24.33	34.51	50.88	23.19	6.53	95.3
24.0	24.35	34.51	50.90	23.19	6.53	95.3
25.2	24.23	34.43	50.68	23.16	6.57	95.6
27.2	23.79	35.08	51.09	23.78	6.64	96.2

CHLOROPHYLL DATA  
=====

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.6	1.8	0.6	2.40	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)
0.6	1.2	0.8	0.1	0.5	1.6

CRUISE DATA - TRANSECT Y  
 (to west of Southwest Pass)  
 (not to bottom; total depth 36 m)

Station: 02                      Latitude: 28:54.0 N    Hydrolab cast time: 11:26  
 Date: 08/13/88                  Longitude: 89:30.0 W    Secchi disk depth (m): 2.5

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.7	27.66	28.56	45.73	17.70	7.81	117.0
2.0	27.65	28.56	45.72	17.70	7.73	115.7
4.1	27.22	30.58	48.25	19.35	7.50	112.7
6.0	27.26	31.60	49.76	20.11	7.44	112.6
8.0	27.13	32.19	50.46	20.58	7.10	107.5
10.0	26.58	33.34	51.55	21.63	7.11	107.3
12.1	25.30	34.03	51.22	22.54	6.77	100.2
15.0	24.83	34.01	50.72	22.67	6.76	99.3
18.3	24.38	34.21	50.54	22.96	6.68	97.4
21.0	24.70	34.01	50.58	22.70	6.55	95.9
24.0	23.93	34.42	50.36	23.24	6.46	93.5
27.5	23.94	34.20	50.08	23.07	6.54	94.6
30.0	23.97	34.27	50.21	23.12	6.53	94.5
33.5	23.23	34.61	49.91	23.59	6.44	92.1

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.7	7.6	1.1	8.70	1.9
33.5	4.1	1.9	6.00	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)
0.7	0.2	2.7	0.2	0.5	3.0
33.5	4.5	11.2	1.4	0.6	5.5



CRUISE DATA - TRANSECT Y  
 (to west of Southwest Pass)  
 (not to bottom; total depth 75m)

Station: 03                      Latitude: 28:49.2 N    Hydrolab cast time: 08:45  
 Date: 08/13/88                  Longitude: 89:34.0 W    Secchi disk depth (m): 3.2

HYDROGRAPHIC DATA  
 =====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.5	27.49	30.73	48.73	19.38	7.96	120.3
2.0	27.47	30.95	49.02	19.55	7.97	120.6
4.0	27.44	30.73	48.68	19.39	8.00	120.8
6.2	27.42	31.46	49.71	19.95	7.98	121.0
8.0	27.34	33.60	52.67	21.58	7.55	115.7
10.0	26.66	33.42	51.74	21.66	7.43	112.4
12.7	24.83	33.86	50.52	22.56	7.00	102.6
15.3	24.66	34.15	50.74	22.83	6.90	101.0
18.0	24.15	34.20	50.30	23.02	6.58	95.5
21.0	24.19	34.50	50.73	23.23	6.65	96.8
23.0	24.05	34.64	50.78	23.38	6.73	97.8
25.0	23.90	34.86	50.91	23.59	6.69	97.0
27.0	23.27	35.05	50.53	23.92	6.66	95.6

CHLOROPHYLL DATA  
 =====

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.5	4.6	1.8	6.40	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)
0.5	1.2	2.5	0.1	0.6	2.9

CRUISE DATA - TRANSECT Z

(off Tiger Pass towards Southwest Pass; named A' in 1986 and 1987)

Station: 02                      Latitude: 29:05.5 N    Hydrolab cast time: 15:26  
 Date: 08/13/88                  Longitude: 89:30.0 W    Secchi disk depth (m): 2.6

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.5	28.86	30.57	49.77	18.81	8.46	130.9
2.0	28.76	30.71	49.88	18.95	8.40	129.9
4.0	28.08	32.89	52.40	20.81	7.85	121.4
6.0	27.57	33.61	52.92	21.51	7.32	112.6
8.1	26.28	34.30	52.57	22.44	6.29	95.0
9.3	25.42	34.70	52.25	23.01	5.44	81.1

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.5	5.9	0.9	6.80	1.9
9.3	34.1	4.9	39.00	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)
0.5	6.9	1.5	0.5	0.4	3.8
9.3	6.1	1.7	0.2	0.8	4.7

CRUISE DATA - TRANSECT Z

(off Tiger Pass towards Southwest Pass; named A' in 1986 and 1987)

Station: 03                      Latitude: 29:02.0 N    Hydrolab cast time: 14:42  
 Date: 08/13/88                  Longitude: 89:32.0 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
0.3	28.60	29.90	48.54	18.40	7.81	119.9
2.0	28.55	29.97	48.60	18.47	7.79	119.5
4.0	28.35	30.47	49.15	18.91	7.75	118.8
6.0	27.91	33.40	52.97	21.25	7.79	120.5
8.0	27.84	33.40	52.89	21.27	7.58	117.1
9.3	27.41	33.75	52.96	21.67	6.95	106.7
11.8	24.98	34.54	51.58	23.02	7.30	107.7

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.3	3.4	0.0	3.40	2.3
11.8	8.0	0.9	8.90	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)
0.3	5.6	0.5	0.2	0.4	2.0
11.8	0.4	1.8	0.2	0.4	3.1

CRUISE DATA - TRANSECT Z

(off Tiger Pass towards Southwest Pass; named A' in 1986 and 1987)

Station: 04                      Latitude: 28:59.0 N    Hydrolab cast time: 13:45  
 Date: 08/13/88                  Longitude: 89:34.0 W    Secchi disk depth (m): 7.7

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.7	28.46	30.48	49.26	18.88	7.75	119.0
2.7	28.40	30.70	49.53	19.06	7.78	119.5
4.9	28.26	30.84	49.60	19.21	8.09	124.1
7.0	27.90	31.19	49.77	19.59	7.81	119.2
9.0	27.37	33.08	51.97	21.18	7.78	118.9
11.0	27.39	33.90	53.15	21.79	7.23	111.1
13.5	26.89	34.10	52.92	22.10	6.81	103.8
16.8	24.37	33.99	50.24	22.79	6.62	96.4
20.7	23.96	34.71	50.78	23.46	6.44	93.4
23.8	23.87	34.64	50.59	23.43	6.44	93.2
27.0	23.78	34.48	50.30	23.34	6.43	92.8
29.7	23.37	34.69	50.16	23.61	6.40	91.8
33.0	22.48	35.02	49.69	24.12	6.20	87.7

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.7	2.2	0.1	2.30	1.8
33.0	1.3	2.9	4.20	1.3

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	2.6	2.0	0.1	0.3	2.4
33.0	1.4	11.0	1.1	0.7	6.8

CRUISE DATA - TRANSECT Z

(off Tiger Pass towards Southwest Pass; named A' in 1986 and 1987)

Station: 05                      Latitude: 28:57.0 N    Hydrolab cast time: 12:30  
 Date: 08/13/88                  Longitude: 89:34.5 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
1.0	28.00	27.20	44.02	16.57	8.66	129.5
2.0	27.92	27.05	43.74	16.49	8.68	129.5
4.0	27.74	28.63	45.91	17.73	8.57	128.6
5.5	27.82	30.75	49.06	19.28	8.15	123.9
7.3	27.75	30.89	49.20	19.41	8.11	123.3
10.0	27.32	32.86	51.60	21.03	8.40	128.1
12.0	26.99	33.73	52.51	21.79	7.05	107.4
14.0	24.66	33.56	49.94	22.38	6.84	99.9
16.6	24.32	34.14	50.38	22.92	6.83	99.4
20.0	23.73	34.85	50.73	23.63	6.42	92.8
25.5	23.70	34.63	50.41	23.47	6.43	92.8
30.0	23.16	34.68	49.93	23.67	6.29	89.9
34.0	22.46	35.09	49.76	24.18	6.28	88.8
40.0	21.59	35.65	49.59	24.84	6.04	84.3
44.0	20.80	36.14	49.39	25.43	5.59	77.1
47.4	20.21	35.89	48.48	25.40	5.06	68.9
50.0	20.01	36.25	48.72	25.73	4.89	66.4
54.2	20.02	35.37	47.65	25.06	4.89	66.1

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
1.0	12.8	2.2	15.00	1.8
54.2	3.5	1.1	4.60	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	11.2	1.9	0.4	0.7	2.4
54.2	7.5	16.7	1.2	0.7	8.5

CRUISE DATA - TRANSECT A  
(off Barataria Bay)

Station: 02                      Latitude: 29:14.4 N    Hydrolab cast time: 23:10  
Date: 08/13/88                  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
0.3	28.30	30.84	49.64	19.20	7.33	112.5
2.0	28.31	31.28	50.29	19.52	7.38	113.6
3.8	28.32	31.35	50.41	19.58	7.47	115.0
5.8	28.30	31.79	51.03	19.91	7.55	116.5
8.2	28.16	32.45	51.85	20.45	7.51	116.0
9.6	28.03	32.89	52.35	20.82	7.41	114.5

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.3	1.0	0.4	1.40	1.6
9.6	6.4	2.1	8.50	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)
0.3	7.8	1.6	0.4	0.3	3.1
9.6	7.8	0.8	0.3	0.4	3.2

CRUISE DATA - TRANSECT A  
(off Barataria Bay)

Station: 04                      Latitude: 29:08.0 N    Hydrolab cast time: 21:38  
Date: 08/13/88                  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
0.5	28.25	31.57	50.66	19.76	7.15	110.1
2.5	28.25	31.42	50.44	19.65	7.18	110.5
4.0	28.25	31.57	50.66	19.76	7.21	111.0
5.6	28.16	31.71	50.78	19.90	7.34	112.9
8.0	26.54	33.27	51.41	21.58	7.85	118.3
10.0	26.07	33.92	51.83	22.22	7.45	111.8
12.0	26.07	34.14	52.14	22.38	6.83	102.6
14.0	26.31	34.52	52.91	22.60	6.42	97.1
16.0	26.17	34.89	53.27	22.92	6.05	91.5
18.5	23.96	35.16	51.37	23.79	5.94	86.4
20.0	23.46	35.36	51.12	24.09	4.97	71.7

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.5	0.8	0.4	1.20	1.6
20.0	13.1	4.7	17.80	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)
0.5	5.2	1.5	0.2	0.4	3.0
20.0	0.9	6.3	0.6	0.6	6.3

CRUISE DATA - TRANSECT A  
(off Baratavia Bay)

Station: 06                      Latitude: 29:00.5 N    Hydrolab cast time: 18:47  
Date: 08/13/88                  Longitude: 89:45.0 W    Secchi disk depth (m): 8.4

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.7	28.63	31.66	51.15	19.71	6.84	106.1
2.6	28.63	31.81	51.37	19.82	6.87	106.6
6.0	28.62	31.59	51.04	19.65	6.86	106.3
9.0	28.54	31.51	50.85	19.62	6.93	107.2
12.0	26.77	31.95	49.78	20.52	7.41	111.3
15.0	26.55	32.53	50.39	21.03	7.02	105.4
17.7	26.52	33.79	52.11	21.98	6.54	98.9
21.0	26.18	35.11	53.59	23.08	6.07	91.9
24.0	25.84	35.32	53.52	23.34	5.97	90.0
27.0	23.31	35.50	51.15	24.24	6.36	91.6
30.0	23.05	35.56	50.97	24.37	6.34	90.9
33.1	22.01	35.52	49.85	24.63	6.24	87.7
36.8	21.99	35.44	49.73	24.58	6.20	87.1
40.1	21.98	35.67	50.00	24.75	6.23	87.6

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.7	0.6	0.1	0.70	1.7
40.1	1.6	2.5	4.10	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)
0.7	8.5	1.5	0.2	0.3	1.2
40.1	0.5	11.7	1.0	0.4	4.8



CRUISE DATA - TRANSECT A  
(off Barataria Bay)

Station: 07                      Latitude: 28:56.5 N    Hydrolab cast time: 17:25  
Date: 08/13/88                  Longitude: 89:45.0 W    Secchi disk depth (m):10.0

HYDROGRAPHIC DATA  
=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.6	28.54	31.58	50.95	19.68	6.71	103.9
3.1	28.53	31.58	50.94	19.68	6.73	104.1
6.2	28.50	31.51	50.81	19.63	6.74	104.2
9.0	28.47	31.51	50.78	19.64	6.73	104.0
12.0	28.45	31.43	50.65	19.59	6.69	103.3
14.9	27.17	33.00	51.65	21.18	7.03	107.0
18.0	26.74	33.80	52.34	21.92	6.54	99.3
21.0	26.31	34.45	52.81	22.54	6.47	97.8
24.0	25.51	35.38	53.26	23.49	6.15	92.1
27.0	24.16	35.46	51.98	23.97	5.63	82.3
29.9	23.19	35.50	51.02	24.27	5.85	84.0
33.0	21.60	35.72	49.69	24.90	6.40	89.4
36.0	21.26	35.78	49.42	25.04	6.47	89.8
39.0	21.07	35.63	49.03	24.97	6.57	90.8
42.0	20.96	35.85	49.19	25.17	6.42	88.6
45.0	20.68	35.47	48.44	24.95	5.44	74.5
47.0	20.58	35.54	48.42	25.03	4.92	67.3
49.5	20.59	35.54	48.43	25.03	4.89	66.9

CHLOROPHYLL DATA  
=====

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.6	0.6	0.2	0.80	1.6
49.5	3.7	2.4	6.10	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	1.2	2.1	0.1	0.3	1.2
49.5	3.0	13.9	0.8	1.0	8.8

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

Station: 01                      Latitude: 29:04.6 N    Hydrolab cast time: 17:30  
Date: 08/12/88                      Longitude: 90:12.5 W    Secchi disk depth (m): 1.3

HYDROGRAPHIC DATA  
=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.3	29.61	28.92	47.99	17.33	11.13	173.0
2.0	29.57	28.85	47.84	17.29	10.78	167.3
4.0	29.27	29.12	47.99	17.60	9.43	145.8
6.1	29.10	29.26	48.05	17.76	9.12	140.7

CHLOROPHYLL DATA  
=====

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.3	29.3	6.4	35.70	1.8
6.1	45.7	5.7	51.40	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)
0.3	0.3	0.6	0.2	0.7	14.8
6.1	0.9	4.7	0.4	0.9	20.3

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

Station: 02                      Latitude: 29:04.3 N    Hydrolab cast time: 18:00  
Date: 08/12/88                      Longitude: 90:11.4 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
0.3	29.07	29.26	48.02	17.77	9.91	152.8
2.2	28.97	29.40	48.14	17.91	9.46	145.7
4.0	28.75	29.47	48.04	18.03	8.38	128.6
6.2	28.56	29.68	48.18	18.25	7.75	118.7
8.2	27.46	30.95	49.01	19.55	5.58	84.4
9.1	26.95	31.81	49.76	20.36	4.56	68.7

CHLOROPHYLL DATA  
=====

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.3	25.4	3.6	29.00	1.9
9.1	23.3	4.4	27.70	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)
0.3	0.5	11.1	1.0	0.8	19.2
9.1	6.0	38.1	3.7	1.4	30.7

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

Station: 04                      Latitude: 29:01.7 N    Hydrolab cast time: 18:40  
Date: 08/12/88                  Longitude: 90:07.3 W    Secchi disk depth (m): 1.3

HYDROGRAPHIC DATA  
=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.3	28.81	28.45	46.58	17.25	9.51	145.3
2.0	28.69	28.59	46.69	17.39	9.45	144.2
4.0	27.44	31.24	49.42	19.78	5.84	88.5
6.0	26.45	32.38	50.08	20.94	4.75	71.2
8.0	26.36	32.82	50.60	21.30	4.90	73.5
9.9	26.19	34.07	52.17	22.29	5.17	77.8
12.0	25.50	34.71	52.34	22.99	3.84	57.3
13.9	25.00	34.91	52.10	23.29	3.27	48.4
15.3	24.44	35.33	52.09	23.78	2.81	41.3

CHLOROPHYLL DATA  
=====

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.3	11.5	3.3	14.80	1.7
15.3	5.8	4.2	10.00	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)
0.3	0.1	1.9	0.1	0.6	13.0
15.3	4.8	39.9	3.6	1.5	28.7

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

Station: 06                      Latitude: 28:59.6 N    Hydrolab cast time: 19:21  
Date: 08/12/88                  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
0.7	28.82	29.69	48.43	18.17	8.47	130.3
2.2	28.71	30.05	48.86	18.47	8.27	127.3
4.0	28.19	31.27	50.17	19.56	7.29	111.9
6.0	27.65	31.55	50.05	19.94	7.00	106.6
8.0	26.16	33.40	51.21	21.80	5.59	83.8
10.0	25.54	34.12	51.57	22.53	5.03	74.9
12.3	24.68	35.12	52.05	23.55	4.90	72.2
14.0	24.21	35.32	51.84	23.84	4.23	61.9
16.1	22.89	35.78	51.08	24.58	2.92	41.8
18.1	22.60	35.62	50.58	24.54	3.19	45.4
20.6	22.52	35.69	50.59	24.61	3.51	49.9

CHLOROPHYLL DATA  
=====

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.7	3.9	1.7	5.60	1.7
20.6	4.8	2.4	7.20	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)
0.7	2.7	1.0	0.2	0.4	5.0
20.6	1.5	34.9	2.8	1.0	19.5

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

Station: 08                      Latitude: 28:55.5 N    Hydrolab cast time: 20:17  
Date: 08/12/88                  Longitude: 90:01.9 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
2.0	28.46	31.43	50.66	19.59	6.86	105.9
4.2	28.44	31.36	50.53	19.54	6.86	105.8
6.1	28.40	31.43	50.60	19.61	6.82	105.2
8.0	28.26	31.50	50.56	19.70	6.64	102.2
10.0	27.98	33.85	53.68	21.56	5.61	87.1
11.8	26.89	35.44	54.79	23.11	5.49	84.4
14.0	26.06	35.70	54.28	23.56	5.87	89.0
16.0	24.57	35.71	52.73	24.03	5.86	86.5
18.2	23.63	35.96	52.08	24.50	6.68	97.0
20.0	23.03	35.86	51.33	24.60	5.48	78.7
22.2	21.60	36.09	50.16	25.18	4.34	60.7
24.0	20.77	35.76	48.90	25.16	3.89	53.5
26.0	20.79	35.69	48.83	25.10	3.70	50.9
28.0	20.80	36.06	49.29	25.37	3.74	51.5
29.3	20.84	36.06	49.34	25.36	3.92	54.1

CHLOROPHYLL DATA  
=====

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
2.0	0.8	0.1	0.90	1.7
29.3	7.2	1.3	8.50	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)
2.0	2.8	1.3	0.2	0.2	1.5
29.3	0.8	11.9	0.3	0.9	16.7

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

Station: 09                      Latitude: 28:50.0 N    Hydrolab cast time: 21:40  
Date: 08/12/88                  Longitude: 90:00.0 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	28.38	32.09	51.54	20.11	7.04	109.0
2.7	28.37	32.02	51.42	20.06	7.05	109.1
5.0	28.36	32.02	51.41	20.06	7.06	109.2
8.4	28.34	31.94	51.29	20.01	7.03	108.6
11.2	27.96	32.29	51.43	20.40	6.90	106.1
14.0	27.57	35.18	55.13	22.69	5.90	91.6
17.0	26.22	35.34	53.94	23.24	6.09	92.4
19.7	23.01	35.64	51.02	24.43	6.85	98.2
23.3	22.33	35.83	50.57	24.77	6.49	91.9
26.2	21.15	35.78	49.30	25.06	5.54	76.7
29.0	20.86	35.92	49.18	25.25	5.64	77.7
32.0	20.21	35.82	48.39	25.35	4.70	63.9
35.0	20.16	35.74	48.25	25.30	4.46	60.6
38.4	20.16	35.59	48.07	25.19	4.56	61.9

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.7	0.5	0.0	0.50	1.7
38.4	2.2	0.8	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)
0.7	0.3	0.6	0.2	0.2	1.4
38.4	5.8	6.6	0.8	0.3	5.7

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

Station: 01                      Latitude: 29:03.4 N    Hydrolab cast time: 08:00  
Date: 08/12/88                  Longitude: 90:31.9 W    Secchi disk depth (m): 1.7

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.3	28.18	25.77	42.05	15.45	7.46	111.0
2.1	28.25	25.92	42.32	15.54	7.31	109.0
3.0	28.20	26.63	43.35	16.09	6.95	104.0
4.0	27.53	28.19	45.08	17.47	5.28	78.8
5.3	27.00	31.37	49.18	20.02	1.70	25.6

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.3	11.8	5.1	16.90	1.7
5.3	15.6	6.3	21.90	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)
0.3	9.7	19.9	1.5	1.1	17.6
5.3	6.6	58.1	3.7	2.2	30.5



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

Station: 03                      Latitude: 28:59.4 N    Hydrolab cast time: 09:30  
Date: 08/12/88                  Longitude: 90:31.2 W    Secchi disk depth (m): 2.2

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.3	28.19	26.27	42.80	15.82	8.25	123.1
2.2	28.24	26.92	43.81	16.29	8.15	122.2
4.0	28.03	27.78	44.90	17.00	7.65	114.8
6.5	27.18	31.23	49.16	19.85	4.40	66.4
7.5	26.47	34.38	52.88	22.44	3.27	49.6
8.5	26.04	34.95	53.23	23.01	3.10	46.8
9.5	25.57	35.01	52.82	23.19	2.74	41.0
10.6	25.58	35.16	53.03	23.30	2.64	39.6

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.3	16.3	5.5	21.80	1.7
10.6	9.4	3.0	12.40	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)
0.3	1.4	0.5	0.3	0.7	12.6
10.6	4.6	45.7	3.9	1.2	21.0

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

Station: 05                      Latitude: 28:54.9 N    Hydrolab cast time: 10:30  
Date: 08/12/88                  Longitude: 90:29.4 W    Secchi disk depth (m): 3.2

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.3	28.37	26.28	42.96	15.77	8.37	125.3
2.0	28.29	26.78	43.64	16.17	8.32	124.8
4.0	28.32	27.93	45.38	17.02	8.19	123.7
5.8	28.29	28.58	46.31	17.51	7.90	119.7
8.0	27.35	30.29	47.96	19.09	4.78	71.9
9.0	26.68	34.83	53.73	22.72	2.94	44.9
9.8	26.39	34.82	53.41	22.80	2.84	43.1
11.0	25.76	34.87	52.83	23.03	2.50	37.5
12.0	25.42	35.15	52.86	23.35	2.28	34.1
13.2	24.96	35.28	52.56	23.58	2.44	36.2
14.0	24.31	35.55	52.24	23.98	3.91	57.4
15.8	23.56	35.44	51.33	24.12	2.63	38.0

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.3	9.3	3.6	12.90	1.7
15.8	11.7	4.7	16.40	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)
0.3	4.1	2.0	0.2	0.7	11.3
15.8	2.2	37.6	2.9	1.2	20.1

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

Station: 07                      Latitude: 28:49.9 N    Hydrolab cast time: 12:00  
Date: 08/12/88                  Longitude: 90:23.5 W    Secchi disk depth (m): 4.5

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.5	28.34	28.73	46.57	17.61	8.20	124.4
1.9	28.28	28.80	46.63	17.68	8.21	124.5
3.7	28.16	28.79	46.51	17.71	8.11	122.7
5.7	27.53	30.59	48.56	19.26	6.89	104.1
7.7	27.66	31.18	49.53	19.66	6.57	99.9
10.0	26.24	34.81	53.25	22.84	4.41	66.7
11.8	25.78	35.17	53.25	23.25	4.10	61.7
14.1	22.87	35.63	50.87	24.47	4.24	60.6
15.8	22.37	35.83	50.61	24.76	4.37	61.9
17.9	22.13	35.75	50.26	24.77	4.23	59.7
18.7	22.05	35.52	49.89	24.62	4.13	58.1
20.1	22.03	35.52	49.87	24.62	4.15	58.3

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.5	4.3	2.1	6.40	1.7
20.1	10.2	4.2	14.40	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)
0.5	11.1	1.9	0.5	0.7	4.5
20.1	10.5	21.0	1.8	0.6	12.4

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

Station: 8A                      Latitude: 28:44.0 N    Hydrolab cast time: 14:00  
Date: 08/12/88                      Longitude: 90:19.5 W    Secchi disk depth (m):10.0

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.5	28.72	31.66	51.25	19.68	6.63	103.0
2.0	28.66	31.81	51.40	19.81	6.66	103.4
4.0	28.40	31.72	51.03	19.83	6.75	104.3
6.0	28.24	31.79	50.97	19.93	6.80	104.8
8.1	27.90	32.00	50.94	20.20	6.84	104.9
10.0	27.62	32.87	51.92	20.94	6.22	95.4
12.0	26.96	34.85	54.04	22.64	5.70	87.4
14.3	24.38	35.62	52.42	24.02	4.94	72.6
16.0	22.87	35.70	50.96	24.52	4.04	57.8
18.3	21.25	35.78	49.41	25.04	4.16	57.7
20.2	21.00	36.07	49.51	25.33	3.70	51.2
22.2	20.96	35.85	49.19	25.17	3.40	46.9
24.0	20.96	35.77	49.10	25.11	3.29	45.4
25.4	21.00	35.70	49.05	25.04	3.37	46.5

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.5	0.4	0.1	0.50	1.6
25.4	8.8	3.1	11.90	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)
0.5	0.1	2.3	0.2	0.3	2.2
25.4	4.4	20.7	1.6	0.9	16.9

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

Station: 9A                      Latitude: 28:40.5 N    Hydrolab cast time: 15:40  
Date: 08/12/88                  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
0.3	28.51	31.36	50.60	19.52	6.94	107.2
2.2	28.46	31.36	50.55	19.54	6.95	107.3
4.0	28.37	31.43	50.57	19.62	6.83	105.3
6.2	27.80	31.48	50.09	19.84	6.45	98.5
7.8	27.58	33.24	52.40	21.23	5.83	89.6
10.0	27.23	34.04	53.18	21.94	5.15	79.0
12.0	27.04	34.25	53.29	22.17	5.18	79.3
13.6	26.31	35.49	54.25	23.33	5.70	86.7
16.0	25.29	35.59	53.32	23.72	5.39	80.5
18.0	24.23	35.69	52.35	24.12	5.30	77.7
19.9	22.71	35.85	50.98	24.68	5.20	74.2
22.0	20.89	35.92	49.21	25.24	4.21	58.1
23.8	20.29	35.89	48.57	25.38	4.24	57.8
26.1	20.15	35.96	48.51	25.47	4.11	55.9
28.4	20.15	35.89	48.42	25.42	4.13	56.1
30.2	20.18	35.74	48.27	25.30	4.21	57.2

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.3	0.6	0.1	0.70	1.7
30.2	2.6	2.3	4.90	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)
0.3	7.8	0.2	0.3	0.4	1.1
30.2	2.1	12.9	0.4	0.7	13.8

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

Station: 01            Latitude: 28:59.0 N    Hydrolab cast time: 18:05  
Date: 08/14/88        Longitude: 90:50.0 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
0.3	29.51	27.18	45.27	16.07	8.54	131.2
2.0	29.51	27.11	45.16	16.01	8.55	131.3
4.3	29.37	27.17	45.14	16.11	8.57	131.3
6.0	29.11	27.38	45.23	16.35	8.06	123.1
7.2	29.04	27.59	45.49	16.53	7.63	116.5

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.3	10.8	3.2	14.00	1.8
7.2	8.8	3.1	11.90	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)
0.3	10.6	1.6	0.4	0.8	5.2
7.2	2.1	1.0	0.1	0.4	1.5

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

Station: 02                      Latitude: 28:50.5 N    Hydrolab cast time: 19:15  
Date: 08/14/88                  Longitude: 90:50.0 W    Secchi disk depth (m): 4.5

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.5	28.73	29.39	47.91	17.98	8.01	122.9
2.2	28.75	29.39	47.93	17.97	8.03	123.2
4.0	28.73	29.39	47.91	17.98	8.04	123.3
6.0	28.65	29.39	47.83	18.00	8.00	122.5
7.8	28.51	29.53	47.92	18.15	7.83	119.7
10.0	28.32	29.89	48.27	18.48	6.87	104.9
13.0	26.45	34.53	53.06	22.56	3.02	45.8
14.5	26.43	34.60	53.15	22.62	2.47	37.5

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.5	2.1	0.7	2.80	1.7
14.5	18.1	2.7	20.80	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	20.9	1.2	0.4	0.6	1.0
14.5	1.0	57.0	4.7	1.1	15.9

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

Station: 03                      Latitude: 28:43.0 N    Hydrolab cast time: 20:26  
Date: 08/14/88                  Longitude: 90:50.0 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
0.5	29.10	31.90	51.96	19.73	6.71	105.1
2.2	29.11	31.90	51.97	19.73	6.73	105.4
4.0	29.11	32.13	52.30	19.89	6.72	105.4
6.3	29.08	32.27	52.49	20.01	6.73	105.6
8.2	28.95	32.12	52.13	19.94	6.73	105.2
9.7	28.83	32.11	52.01	19.98	6.65	103.8
11.8	27.95	32.74	52.05	20.73	6.19	95.5
13.7	25.95	34.73	52.83	22.86	4.16	62.6
15.0	24.00	35.16	51.41	23.78	4.07	59.2
16.5	23.69	34.41	50.11	23.30	4.28	61.7

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.5	0.7	0.0	0.70	1.8
16.5	17.1	1.6	18.70	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	6.1	0.0	0.4	0.2	1.0
16.5	10.7	19.9	2.8	0.6	8.9



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

Station: 04                      Latitude: 28:36.5 N    Hydrolab cast time: 21:44  
Date: 08/14/88                  Longitude: 90:50.0 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
0.9	29.23	32.65	53.19	20.25	6.53	102.9
2.5	29.23	32.35	52.75	20.03	6.55	103.1
4.0	29.23	32.28	52.64	19.97	6.56	103.2
6.0	29.22	32.58	53.07	20.19	6.57	103.5
8.3	29.20	32.50	52.94	20.14	6.58	103.6
10.0	28.60	32.47	52.31	20.32	6.83	106.4
12.0	27.27	33.23	52.07	21.32	6.75	103.1
14.2	26.73	33.65	52.13	21.81	6.26	94.9
16.4	24.38	34.88	51.43	23.46	4.88	71.4
18.4	23.80	35.30	51.39	23.95	4.27	62.0

CHLOROPHYLL DATA  
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Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.9	0.4	0.0	0.40	1.7
18.4	15.8	1.6	17.40	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)
0.9	9.0	1.0	0.6	0.2	1.5
18.4	2.4	16.8	2.0	0.5	9.2

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

Station: 01                    Latitude: 28:58.0 N    Hydrolab cast time: 14:05  
Date: 08/16/88                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
0.6	30.80	29.49	49.92	17.36	7.22	114.9
2.6	30.03	29.45	49.17	17.59	7.36	115.6
3.8	29.64	29.58	49.01	17.81	7.51	117.2
5.0	29.59	29.50	48.85	17.77	7.69	119.8

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.6	2.5	0.3	2.80	1.8
5.0	4.9	1.2	6.10	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)
0.6	0.6	0.6	0.1	0.5	1.2
5.0	0.4	0.7	0.1	0.4	1.3

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

Station: 02                      Latitude: 28:51.5 N    Hydrolab cast time: 09:35  
Date: 08/15/88                      Longitude: 91:15.0 W    Secchi disk depth (m): 4.0

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.3	28.73	30.56	49.64	18.85	6.96	107.5
2.0	28.88	31.16	50.65	19.25	6.89	107.0
4.0	28.91	31.45	51.12	19.46	6.82	106.2
6.5	28.81	32.41	52.42	20.20	6.65	103.9
7.2	28.66	32.40	52.26	20.25	6.33	98.7

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.3	1.8	0.4	2.20	1.8
7.2	9.2	2.1	11.30	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)
0.3	1.8	1.1	0.1	0.4	1.5
7.2	1.0	2.2	0.2	0.7	5.1

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

Station: 2A                      Latitude: 28:44.5 N    Hydrolab cast time: 08:35  
Date: 08/15/88                    Longitude: 91:15.0 W    Secchi disk depth (m):11.0

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
0.5	28.75	32.18	52.03	20.06	6.70	104.4
2.0	28.75	32.11	51.92	20.00	6.72	104.7
4.0	28.75	32.11	51.92	20.00	6.74	105.0
6.0	28.83	32.85	53.09	20.53	6.81	106.7
8.2	28.60	32.92	52.95	20.65	6.81	106.3
10.2	28.47	32.84	52.71	20.64	6.70	104.3
12.0	28.14	32.89	52.47	20.79	6.17	95.6
13.2	27.75	33.25	52.58	21.18	5.58	86.0
15.0	27.05	33.88	52.78	21.88	5.25	80.2

CHLOROPHYLL DATA  
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Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.5	0.3	0.1	0.40	1.6
15.0	2.7	2.7	5.40	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)
0.5	11.4	1.1	0.4	0.2	2.6
15.0	4.9	3.4	0.6	0.4	5.1

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

Station: 03                      Latitude: 28:39.5 N    Hydrolab cast time: 07:00  
Date: 08/15/88                      Longitude: 91:15.0 W    Secchi disk depth (m):10.0

HYDROGRAPHIC DATA  
=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.5	28.98	32.34	52.49	20.10	6.60	103.4
2.0	28.99	32.34	52.50	20.10	6.61	103.6
4.0	28.98	32.49	52.71	20.21	6.62	103.8
5.8	28.98	32.27	52.38	20.04	6.63	103.8
8.0	28.98	32.19	52.27	19.99	6.69	104.7
10.0	28.96	32.49	52.69	20.22	6.66	104.4
12.0	28.20	32.60	52.10	20.55	6.90	106.8
13.0	27.35	33.01	51.84	21.13	6.64	101.4
15.9	26.69	33.65	52.08	21.82	5.79	87.8
18.0	26.08	34.58	52.77	22.72	3.56	53.7
20.0	25.58	34.71	52.43	22.97	3.28	49.0
22.2	25.51	34.71	52.35	22.99	3.38	50.5

CHLOROPHYLL DATA  
=====

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.5	0.2	0.0	0.20	1.5
22.2	11.0	3.7	14.70	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)
0.5	3.1	1.3	0.2	0.2	2.1
22.2	1.2	4.2	0.5	0.7	5.8

CRUISE DATA - TRANSECT F  
(off Atchafalaya Bay)

Station: 01                      Latitude: 29:11.0 N    Hydrolab cast time: 11:38  
Date: 08/16/88                      Longitude: 91:37.0 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
0.5	30.79	16.81	29.68	7.94	7.42	109.9
1.8	30.36	26.14	44.36	15.01	7.72	119.6
3.0	30.06	28.07	47.09	16.55	7.71	120.2
4.8	29.76	30.61	50.67	18.54	7.55	118.8
6.2	28.96	32.04	52.04	19.88	6.62	103.5

CHLOROPHYLL DATA  
=====

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.5	3.9	0.4	4.30	1.9
6.2	13.5	3.4	16.90	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)
0.5	1.2	0.7	0.1	0.7	8.8
6.2	1.7	1.8	0.1	0.7	3.4

CRUISE DATA - TRANSECT F  
(off Atchafalaya Bay)

Station: 02                      Latitude: 29:03.0 N    Hydrolab cast time: 10:34  
Date: 08/16/88                  Longitude: 91:37.0 W    Secchi disk depth (m): 5.2

HYDROGRAPHIC DATA  
=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.7	29.44	32.59	53.30	20.13	6.91	109.3
2.0	29.37	32.58	53.23	20.15	6.96	109.9
4.0	29.35	32.58	53.21	20.16	6.99	110.4
5.2	29.31	32.58	53.16	20.17	6.99	110.3
6.8	29.26	32.58	53.11	20.18	7.02	110.7

CHLOROPHYLL DATA  
=====

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.7	2.9	0.4	3.30	1.8
6.8	3.3	0.9	4.20	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)
0.7	0.3	0.7	0.1	0.5	2.1
6.8	8.2	0.1	0.2	0.4	1.5

CRUISE DATA - TRANSECT F  
(off Atchafalaya Bay)

Station: 03                      Latitude: 28:53.0 N    Hydrolab cast time: 11:34  
Date: 08/15/88                  Longitude: 91:37.0 W    Secchi disk depth (m):15.0

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.7	30.14	32.18	53.38	19.59	6.47	103.4
1.9	29.43	32.14	52.63	19.80	6.55	103.3
3.8	29.33	32.14	52.53	19.83	6.57	103.4
6.0	29.31	32.21	52.62	19.89	6.59	103.8
7.6	29.30	32.06	52.39	19.78	6.59	103.7
10.0	29.25	31.91	52.12	19.69	6.56	103.0
12.0	28.63	32.32	52.12	20.20	6.53	101.7
15.0	27.08	33.37	52.08	21.49	5.68	86.6
17.0	26.49	34.01	52.39	22.15	5.34	80.8
19.0	26.04	34.21	52.21	22.45	3.65	54.9

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.7	0.4	0.0	0.40	1.7
19.0	9.6	2.6	12.20	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)
0.7	5.8	1.4	0.3	0.6	2.7
19.0	2.2	27.6	3.4	0.6	13.1



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

Station: 01            Latitude: 29:15.5 N    Hydrolab cast time: 22:55  
Date: 08/15/88        Longitude: 92:00.0 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	30.18	31.15	51.87	18.80	9.49	150.8
2.0	30.17	31.07	51.75	18.75	9.39	149.2
4.1	29.37	31.03	50.93	18.99	8.21	128.6
6.0	29.12	31.17	50.90	19.17	7.08	110.5
7.5	28.97	31.68	51.50	19.60	6.36	99.3

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.6	11.3	0.0	11.30	16.8
7.5	8.3	3.8	12.10	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)
0.6	7.0	1.2	0.4	0.8	1.8
7.5	10.4	1.2	0.3	1.0	3.5

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

Station: 02                      Latitude: 29:08.0 N    Hydrolab cast time: 11:55  
Date: 08/15/88                  Longitude: 92:00.0 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	29.64	32.45	53.29	19.96	6.92	109.7
1.9	29.63	32.23	52.95	19.80	6.98	110.5
4.0	29.58	32.30	53.01	19.87	7.09	112.2
6.2	29.82	32.38	53.37	19.85	7.14	113.6
8.2	29.28	32.43	52.91	20.07	6.96	109.7
10.8	29.25	32.13	52.45	19.85	6.81	107.1

CHLOROPHYLL DATA  
=====

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.8	0.5	0.2	0.70	1.6
10.8	5.3	1.7	7.00	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)
0.8	3.5	1.2	0.1	0.3	4.5
10.8	13.0	1.8	0.4	1.3	5.6

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

Station: 03                      Latitude: 28:59.0 N    Hydrolab cast time: 08:20  
Date: 08/16/88                  Longitude: 92:00.0 W    Secchi disk depth (m):12.5

HYDROGRAPHIC DATA  
=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.6	29.42	32.44	53.06	20.02	6.57	103.8
2.0	29.42	32.44	53.06	20.02	6.59	104.1
4.0	29.42	32.51	53.17	20.08	6.65	105.1
5.7	29.41	32.59	53.27	20.14	6.67	105.4
8.0	29.41	32.44	53.05	20.03	6.67	105.3
10.0	29.39	32.51	53.14	20.09	6.70	105.8
12.0	29.39	32.51	53.14	20.09	6.68	105.5
14.0	29.35	32.66	53.32	20.21	6.68	105.5
16.0	29.19	32.57	53.04	20.20	6.50	102.3
18.0	25.24	34.62	51.96	23.00	4.70	69.8
20.0	24.73	34.97	51.91	23.42	5.20	76.6

CHLOROPHYLL DATA  
=====

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.6	0.4	0.0	0.40	1.6
20.0	27.2	5.1	32.30	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)
0.6	0.9	1.1	0.1	0.2	1.5
20.0	3.1	1.7	0.2	0.2	3.0

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

Station: 05                      Latitude: 28:47.5 N    Hydrolab cast time: 14:00  
Date: 08/15/88                  Longitude: 92:00.0 W    Secchi disk depth (m):16.0

HYDROGRAPHIC DATA  
=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.5	30.24	32.48	53.93	19.78	6.77	108.5
1.0	30.19	32.48	53.88	19.80	6.44	103.1
2.0	30.00	32.47	53.68	19.85	6.50	103.7
3.8	29.44	32.51	53.19	20.07	6.53	103.2
6.2	29.38	32.51	53.13	20.09	6.56	103.6
7.7	29.36	32.43	53.00	20.04	6.57	103.7
9.8	29.35	32.36	52.88	19.99	6.57	103.6
12.0	29.33	32.58	53.18	20.16	6.58	103.9
14.0	29.25	32.58	53.10	20.19	6.56	103.4
16.0	29.12	32.64	53.07	20.28	6.53	102.7
18.3	28.98	32.56	52.82	20.27	6.48	101.6
20.0	28.75	32.85	53.00	20.56	6.41	100.3
22.6	27.94	33.78	53.53	21.52	6.35	98.5
25.3	25.35	34.70	52.18	23.03	6.05	90.0
28.0	23.39	35.13	50.76	23.94	5.45	78.4
29.8	<del>5.37</del>	34.98	50.51	23.84	5.37	77.1

23.34

CHLOROPHYLL DATA  
=====

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.5	0.3	0.0	0.30	1.6
29.8	13.1	1.8	14.90	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)
0.5	20.6	0.2	0.4	0.1	1.9
29.8	24.6	3.2	0.9	0.6	8.5

CRUISE DATA - TRANSECT H  
(off White Lake)

Station: 02                      Latitude: 29:18.5 N    Hydrolab cast time: 20:40  
Date: 08/15/88                  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
0.6	30.51	31.61	52.88	19.04	7.00	112.2
2.2	30.49	31.68	52.97	19.10	7.09	113.6
4.0	30.00	31.58	52.35	19.19	7.44	118.2
6.0	29.85	31.57	52.19	19.23	7.62	120.7
7.7	29.76	31.57	52.10	19.26	7.63	120.7

CHLOROPHYLL DATA  
=====

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.6	0.6	0.1	0.70	1.6
7.7	5.6	0.9	6.50	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)
0.6	0.4	0.3	0.1	0.3	1.4
7.7	0.5	0.3	0.1	0.3	1.5

CRUISE DATA - TRANSECT H  
(off White Lake)

Station: 03                      Latitude: 29:09.5 N    Hydrolab cast time: 19:20  
Date: 08/15/88                      Longitude: 92:23.0 W    Secchi disk depth (m): 1.7

HYDROGRAPHIC DATA

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.6	30.55	31.98	53.48	19.30	7.23	116.2
1.9	30.60	31.99	53.53	19.29	7.27	117.0
4.2	29.29	31.77	51.94	19.56	7.36	115.6
5.9	29.25	31.84	52.01	19.63	7.09	111.3
7.5	29.31	31.99	52.29	19.72	7.15	112.4
9.8	29.39	31.99	52.37	19.70	6.95	109.5
11.9	29.28	31.91	52.15	19.68	6.54	102.7
14.5	28.82	32.11	52.00	19.98	5.54	86.5

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.6	2.1	0.6	2.70	1.7
14.5	6.6	0.7	7.30	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)
0.6	0.9	0.3	0.1	0.3	4.6
14.5	1.7	1.3	0.1	1.4	6.4

CRUISE DATA - TRANSECT H  
(off White Lake)

Station: 04                      Latitude: 29:02.0 N    Hydrolab cast time: 18:15  
Date: 08/15/88                  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
0.5	30.22	32.78	54.35	20.01	6.41	102.9
2.0	30.06	32.77	54.18	20.06	6.44	103.1
4.2	29.86	32.61	53.75	20.00	6.47	103.1
6.1	29.67	32.60	53.55	20.06	6.50	103.2
8.0	29.53	32.59	53.40	20.10	6.54	103.6
10.1	29.51	32.66	53.49	20.16	6.54	103.6
12.2	29.45	32.66	53.42	20.18	6.56	103.8
13.8	29.44	32.66	53.41	20.18	6.57	104.0
16.0	29.32	32.73	53.39	20.28	6.49	102.5
18.0	28.92	32.86	53.18	20.51	6.27	98.5
20.0	27.53	33.98	53.40	21.80	5.45	84.0
21.5	26.75	34.54	53.39	22.47	5.31	81.0
22.6	26.19	34.66	52.99	22.74	5.08	76.7

CHLOROPHYLL DATA

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.5	0.3	0.1	0.40	1.6
22.6	14.8	0.0	14.80	15.5

NUTRIENT DATA

Depth (m)	Ammonia (ug-at/L)	Nitrate (ug-at/L)	Nitrite (ug-at/L)	Phosphate (ug-at/L)	Silicate (ug-at/L)
0.5	0.4	0.5	0.1	0.2	1.8
22.6	0.2	2.3	0.4	0.4	12.7

CRUISE DATA - TRANSECT H  
(off White Lake)

Station: 05                      Latitude: 28:54.5 N    Hydrolab cast time: 16:31  
Date: 08/15/88                  Longitude: 92:23.0 W    Secchi disk depth (m):18.5

HYDROGRAPHIC DATA  
=====

Depth (m)	Temperature (degrees C)	Salinity (ppt)	Conductivity (mmho/cm)	Sigma-t	Dissolved Oxygen (mg/L)	Percent Oxygen Saturation
0.5	30.42	32.79	54.57	19.95	6.38	102.8
2.0	30.14	33.07	54.71	20.26	6.44	103.4
3.8	29.57	33.04	54.10	20.42	6.51	103.5
6.2	29.50	32.96	53.91	20.39	6.54	103.8
8.0	29.46	32.96	53.87	20.40	6.53	103.5
10.2	29.44	33.11	54.07	20.52	6.54	103.7
12.2	29.42	32.81	53.61	20.30	6.55	103.7
14.5	29.41	32.88	53.71	20.36	6.54	103.6
17.2	29.35	32.95	53.75	20.43	6.53	103.3
20.0	29.19	33.02	53.69	20.54	6.44	101.7
23.2	26.33	34.59	53.04	22.65	5.71	86.4
25.8	24.28	34.95	51.42	23.54	5.28	77.2
28.2	24.11	34.94	51.24	23.59	5.18	75.5

CHLOROPHYLL DATA  
=====

Depth (m)	Chlorophyll (ug/L)	Phaeopigments (ug/L)	Total Pigments (ug/L)	Acid Ratio (Fo/Fa)
0.5	0.2	0.0	0.20	1.6
28.2	5.4	2.6	8.00	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)
0.5	0.7	1.4	0.1	0.2	1.8
28.2	0.4	6.1	1.0	0.5	12.3