



TEXAS DEPARTMENT OF WATER RESOURCES

REPORT 231

CHEMICAL AND PHYSICAL CHARACTERISTICS
OF WATER IN ESTUARIES OF TEXAS
OCTOBER 1973-SEPTEMBER 1974

By

William B. Lind
and Karl W. Ratzlaff

This report was prepared by the U.S. Geological Survey
under cooperative agreement with the
Texas Department of Water Resources.

May 1979

TEXAS DEPARTMENT OF WATER RESOURCES

Harvey Davis, Executive Director

TEXAS WATER DEVELOPMENT BOARD

**A. L. Black, Chairman
Milton Potts
George W. McCleskey**

**John H. Garrett, Vice Chairman
Glen E. Roney
W. O. Bankston**

TEXAS WATER COMMISSION

Felix McDonald, Chairman

Dorsey B. Hardeman, Commissioner

Joe R. Carroll, Commissioner

Authorization for use or reproduction of any original material contained in this publication, i.e., not obtained from other sources, is freely granted. The Department would appreciate acknowledgement.

Published and distributed
by the
Texas Department of Water Resources
Post Office Box 13087
Austin, Texas 78711

TABLE OF CONTENTS

	Page
INTRODUCTION	1
Purpose and Scope of the Investigation	1
Status of the Project	1
Previous and Related Reports	3
International System of Units	3
Acknowledgements	3
DATA-COLLECTION METHODS	3
Field Instruments	4
Treatment of Samples	4
QUALITY OF WATER IN THE ESTUARIES	7
Sabine-Neches Estuary	7
Brazos Estuary	39
East Matagorda Estuary	53
Colorado Estuary	65
Lavaca-Tres Palacios Estuary	77
Guadalupe Estuary	105
Mission-Aransas Estuary	133
Nueces Estuary	155
Laguna Madre Estuary	181
SELECTED HYDROLOGIC RECORDS	209
Climatological Records	209
Streamflow and Water-Quality Records	210
REFERENCES CITED	217

TABLE OF CONTENTS (Cont'd.)

Page

TABLES

1.	Quality of Water in the Sabine-Neches Estuary, 1974 Water Year	
A.	Field Determinations	9
B.	Nutrient and Other Environmental Characteristics	20
C.	Chemical Analyses	25
D.	Selected-Ions Analyses	29
E.	Insecticide and Herbicide Analyses	34
F.	Bacteriological and Chlorophyll Analyses	36
2.	Quality of Water in the Brazos Estuary, 1974 Water Year	
A.	Field Determinations	41
B.	Nutrient and Other Environmental Characteristics	46
C.	Chemical Analyses	47
D.	Selected-Ions Analyses	48
E.	Insecticide and Herbicide Analyses	50
F.	Bacteriological and Chlorophyll Analyses	52
3.	Quality of Water in the East Matagorda Estuary, 1974 Water Year	
A.	Field Determinations	54
B.	Nutrient and Other Environmental Characteristics	56
C.	Chemical Analyses	57
D.	Selected-Ions Analyses	58
E.	Insecticide and Herbicide Analyses	61
F.	Bacteriological and Chlorophyll Analyses	63
4.	Quality of Water in the Colorado Estuary, 1974 Water Year	
A.	Field Determinations	67
B.	Nutrient and Other Environmental Characteristics	70
C.	Chemical Analyses	71

TABLE OF CONTENTS (Cont'd.)

	Page
D. Selected-Ions Analyses	72
E. Insecticide and Herbicide Analyses	74
F. Bacteriological and Chlorophyll Analyses	76
5. Quality of Water in the Lavaca-Tres Palacios Estuary, 1974 Water Year	
A. Field Determinations	78
B. Nutrient and Other Environmental Characteristics	89
C. Chemical Analyses	93
D. Selected-Ions Analyses	96
E. Insecticide and Herbicide Analyses	99
F. Bacteriological and Chlorophyll Analyses	103
6. Quality of Water in the Guadalupe Estuary, 1974 Water Year	
A. Field Determinations	106
B. Nutrient and Other Environmental Characteristics	117
C. Chemical Analyses	120
D. Selected-Ions Analyses	122
E. Insecticide and Herbicide Analyses	127
F. Bacteriological and Chlorophyll Analyses	131
7. Quality of Water in the Mission-Aransas Estuary, 1974 Water Year	
A. Field Determinations	134
B. Nutrient and Other Environmental Characteristics	142
C. Chemical Analyses	145
D. Selected-Ions Analyses	147
E. Insecticide and Herbicide Analyses	150
F. Bacteriological and Chlorophyll Analyses	152
8. Quality of Water in the Nueces Estuary, 1974 Water Year	
A. Field Determinations	156

TABLE OF CONTENTS (Cont'd.)

	Page
B. Nutrient and Other Environmental Characteristics	167
C. Chemical Analyses	171
D. Selected-Ions Analyses	174
E. Insecticide and Herbicide Analyses	177
F. Bacteriological and Chlorophyll Analyses	179
9. Quality of Water in the Laguna Madre Estuary, 1974 Water Year	
A. Field Determinations	183
B. Nutrient and Other Environmental Characteristics	192
C. Chemical Analyses	195
D. Selected-Ions Analyses	197
E. Insecticide and Herbicide Analyses	202
F. Bacteriological and Chlorophyll Analyses	206
10. Water-Quality Records for Selected Tributaries, 1974 Water Year	
A. Nutrient and Other Environmental Characteristics	213
B. Chemical Analyses	215
C. Bacteriological Analyses	216

FIGURES

1. Map Showing Locations of the Estuaries	2
2. Map Showing Data-Collection Sites in the Sabine-Neches Estuary	8
3. Map Showing Data-Collection Sites in the Brazos Estuary	40
4. Map Showing Data-Collection Sites in the East Matagorda Estuary	53
5. Map Showing Data-Collection Sites in the Colorado Estuary	66
6. Map Showing Data-Collection Sites in the Lavaca-Tres Palacios Estuary	77
7. Map Showing Data-Collection Sites in the Guadalupe Estuary	105
8. Map Showing Data-Collection Sites in the Mission-Aransas Estuary	133
9. Map Showing Data-Collection Sites in the Nueces Estuary	155

TABLE OF CONTENTS (Cont'd.)

	Page
10. Map Showing Data-Collection Sites in the Laguna Madre Estuary	182
11. Map Showing Locations of Selected Climatological Stations	209
12. Map Showing Location of Streamflow-Measuring Sites and Daily Water-Quality Data-Collection Sites	210
13. Map Showing Location of Selected Water-Quality and Streamflow Data-Collection Sites	212

**CHEMICAL AND PHYSICAL CHARACTERISTICS
OF WATER IN ESTUARIES OF TEXAS
OCTOBER 1973-SEPTEMBER 1974**

By

**William B. Lind and Karl W. Ratzlaff
United States Geological Survey**

INTRODUCTION

Purpose and Scope of the Investigation

Plans for development and utilization of water resources in Texas include provisions for the use and preservation of water in the estuaries of the State. These provisions require knowledge of the hydrodynamics and of the continuing changes in chemical and physical characteristics of water in the estuaries.

In September 1967, the U.S. Geological Survey and the Texas Water Development Board (a predecessor of the Texas Department of Water Resources) began a cooperative water-resources investigation of the principal estuaries along the Texas coast (Figure 1) except Galveston Bay, which was being studied by other agencies at that time, and the Rio Grande estuary, which is under the jurisdiction of the International Boundary and Water Commission, United States and Mexico.

The objectives of the investigation are to define: (1) The occurrence, source, and distribution of nutrients; (2) the physical, organic, and inorganic water-quality constituents and their areal distribution and time variations; (3) the chemical and physical characteristics of gulf water that enters the estuaries; (4) the occurrence, quality, quantity, and dispersion of drainage entering the estuarine systems; and (5) the current patterns, directions, and rates of water movement.

The coastal waters of Texas are not classical estuaries, but are similar to them in ecosystems and mixing phenomena. A description of various types of

estuaries is presented in "Estuaries", edited by Lauff (1967, p. 3-11). The term estuary, as used in this report, refers to concomitant water bodies in which streamflow mixes with seawater.

Status of the Project

The first three objectives of the project are being met by a three-phased water-quality data-collection program of: (1) Reconnaissance for establishment of an optimum data-collection network; (2) repetitive surveys throughout this network to determine the general chemical and physical characteristics of the estuarine systems; and (3) continued data collection at a reduced number of sites or at a reduced frequency to maintain definition of the chemical and physical characteristics of each estuarine system and of the relationship between systems. The first two phases have been completed and the third phase began in September 1973.

The fourth objective of the project is being met by data collection at six continuous streamflow-measuring stations and 11 stations at which monthly data on streamflow and water quality are obtained. The dispersion of water entering an estuary is being documented under data-collection activities to meet the first three objectives.

The fifth objective of the project is being met by short-duration, intensive studies of inflow. Two such studies will be completed for each estuary. The studies on the Guadalupe estuary were completed in November 1970 and August 1973; the studies on the Lavaca-Tres Palacios estuary were completed in March 1971 and October 1972; and the studies on the Mission-Aransas

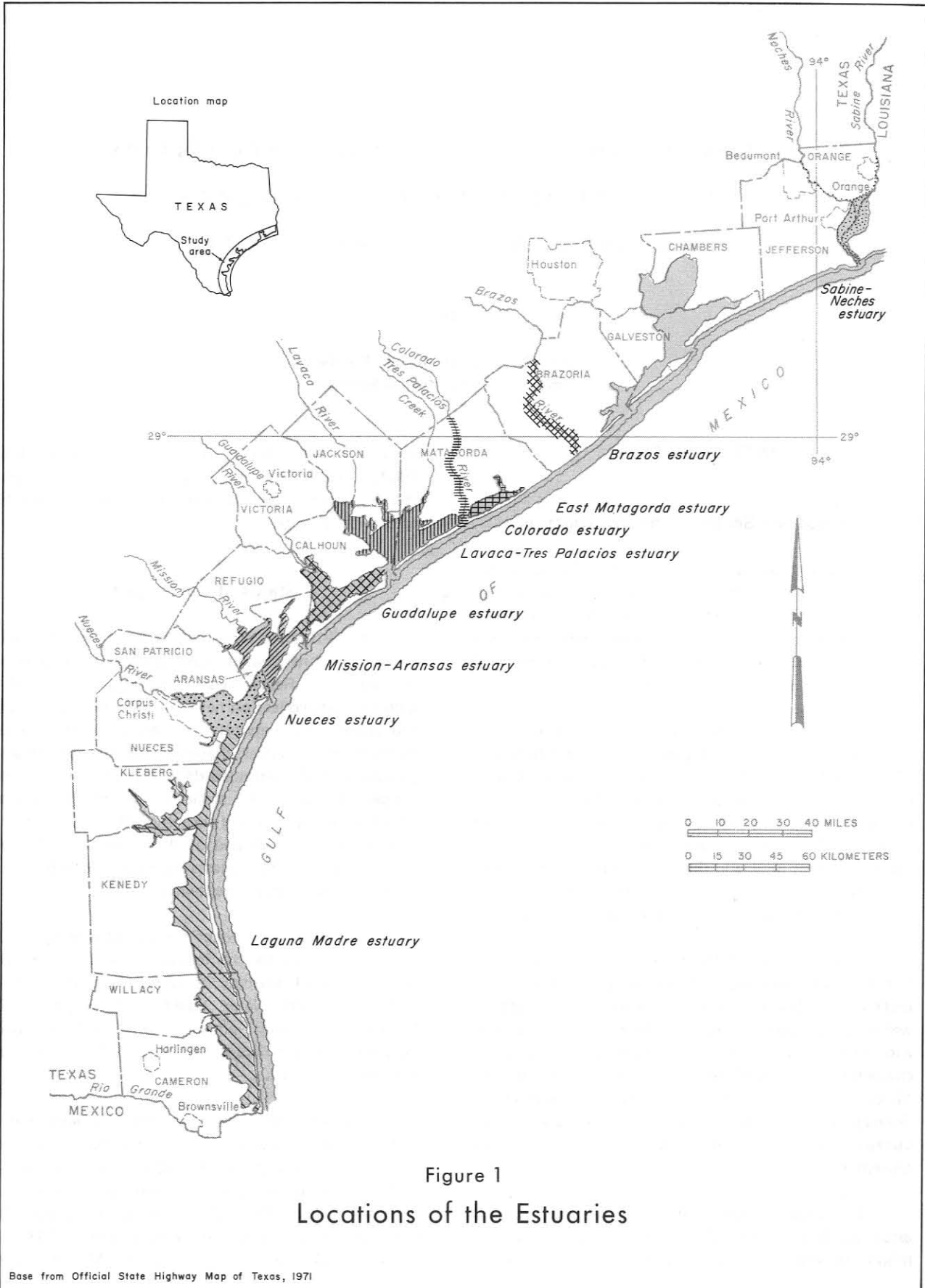


Figure 1
Locations of the Estuaries

Base from Official State Highway Map of Texas, 1971

and Nueces estuaries were completed in November 1971 and May-June 1974. One study on the Sabine-Neches estuary was completed in September 1974. These studies are providing data on inflow and exchange of water through the passes.

p. 47-61) includes data collected during flooding caused by Hurricane Beulah. Interpretive reports will be prepared after sufficient data become available to establish the characteristics of an estuary.

Previous and Related Reports

This report, sixth in an annual series of basic-data reports (Hahl and Ratzlaff, 1970, 1972, 1973, 1975, and Ratzlaff, 1976), presents data collected during water year 1974. A report by Grozier and others (1968,

International System of Units

Metric equivalents of English units of measurement are given in parentheses in the text. The English units used in this report may be converted to metric units by the following conversion factors:

From		Multiply by	To obtain	
Unit	Abbrevi- ation		Unit	Abbrevi- ation
inches	—	2.54	centimeters	cm
feet	—	.3048	meters	m
miles	—	1.609	kilometers	km
square miles	—	2.590	square kilometers	km ²
cubic feet per second	ft ³ /s	.02832	cubic meters per second	m ³ /s

Acknowledgements

The U.S. Army Corps of Engineers at Galveston, the Texas Parks and Wildlife Department, and the Texas Water Development Board provided data and field assistance. Many private citizens and commercial fishermen furnished information on historical changes and existing conditions in the bays.

DATA-COLLECTION METHODS

Approximately 400 data-collection sites were visited during the 1974 water year. About 55 percent of these sites are located adjacent to or between navigation aids, bridge piers, power poles, survey platforms, well structures, or other landmarks and can be reoccupied exactly. About 17 percent of the sites are close to shore features or reefs and are located by onboard radar or by compass heading and distance from the feature and water depth at the site; these sites can be reoccupied within 100 feet (30 m). About 28 percent of the sites are remote to any reference. They are reached

by traveling from a known landmark at a known speed on a predetermined compass course. Verification of site location is made by checking the alignment of one or more sites of distant landmarks by visual observation or by onboard radar. These sites can be reoccupied within 0.25 mile (0.4 km).

At each data-collection site, field data are collected from several points along a vertical. Samples for laboratory analyses are collected from a predetermined number of data-collection sites and at other sites in the network when significant changes in field data indicate a need for additional samples. Properties or constituents measured in the field are dissolved oxygen, specific conductance, temperature, pH, transparency by Secchi disk, and turbidity. Laboratory analysis include the principal inorganic ions, biochemical oxygen demand (BOD), phenol, total organic carbon (TOC), chlorophyll, coliform and streptococci bacteria, insecticides and herbicides, ammonium, nitrite, nitrate, ortho and total phosphate, and several other selected ions such as aluminum, arsenic, cadmium, chromium, cobalt, copper, iron, lead, lithium, manganese, mercury, nickel, strontium, and zinc.

Field Instruments

The field instruments used in this investigation are as follows, but mention herein of the

Parameter measured	Instrument	Model	Manufacturer
pH	Specific ion meter	401	Orion Research
pH	pH meter	175	Instrumentation Laboratory
pH	pH meter	7417	Leeds and Northrup
Dissolved oxygen	Oxygen meter	54	Yellow Springs Instruments
Specific conductance	Solubridge	RB-3	Industrial Instruments
Temperature	Research thermometer	ET-100 Marine	Applied Research
Turbidity	Colorimeter	DR	Hach Chemical

The instruments used for pH measurements were calibrated daily by using three standards: pH 4.0, 7.0, and 10.0. The dissolved-oxygen meter was calibrated at least twice daily by using the oxygen-saturation data compiled by the American Public Health Association and others (1971, p. 480). The conductivity meter was calibrated monthly by using at least two standards in each of the three conductivity ranges on the instrument. The electrical thermometer was calibrated weekly. The colorimeter was calibrated at each site.

Probes of the instruments are set in a manifold through which water to be sampled is drawn. Several tests were conducted to determine the effect of streaming potential on electrodes by monitoring instrument output. Dissolved-oxygen readings of water passing through the manifold deviated from the in situ readings by less than 0.1 mg/l (milligrams per liter), and pH readings differed by less than 0.05 pH units.

Treatment of Samples

All water samples except those for bacteriological, TOC, insecticide, and herbicide analyses were collected in plastic throwaway bottles.

manufacturers and their instruments does not constitute an endorsement. The information is for identification only.

The BOD, TOC, phenol, nutrient, bacteriological, and chlorophyll samples were chilled to about 1°C, stored in refrigerator or ice chest, and shipped to the laboratory as soon as possible. All other samples were stored to ambient temperature.

Phenol samples were treated with phosphoric acid and copper sulfate prior to shipment.

Chlorophyll samples were filtered through 0.45-micrometer membrane filters and the residues on the membrane filters were chilled until analysis.

Bacteriological samples were collected in sterilized glass bottles and chilled, and the analyses were completed in the field.

Water samples for heavy metals and selected trace constituents (except boron, bromide, fluoride, and iodide) were filtered through 0.45-micrometer membrane filters and collected in bottles prewashed with 10-percent nitric acid. Two milliliters of concentrated nitric acid were added to each liter of filtrate.

Water and bottom-sediment samples to be analyzed for herbicides and insecticides were collected in specially treated glass bottles, kept cool,

and shipped air mail to the laboratory as soon as possible. Most herbicide and some insecticide samples were depth-integrated water samples; however, most insecticide and some herbicide

samples were taken from bottom sediments. Most sediment samples were collected by coring with a 2-inch (5-cm) inside diameter lucite tube and selectively removing about 100 grams of material from the center of the core.

QUALITY OF WATER IN THE ESTUARIES

Sabine-Neches Estuary

The Sabine-Neches estuary covers an area of about 100 square miles (260 km²) and consists of the tidal parts of the Sabine and Neches Rivers and other tributaries, Sabine Lake, the Sabine-Neches Canal, the Port Arthur Canal, parts of the Intracoastal Waterway, and Sabine Pass (Figure 2). Water depth at mlw (mean low water) is greater

than 40 feet (12.2 m) in dredged parts of the river, canals, and pass; about 15 feet (4.6 m) in the Intracoastal Waterway; and generally 10 feet (3.0 m) in Sabine Lake.

Water-quality data (Table 1) were collected during October 1973 and April, June, and September 1974.

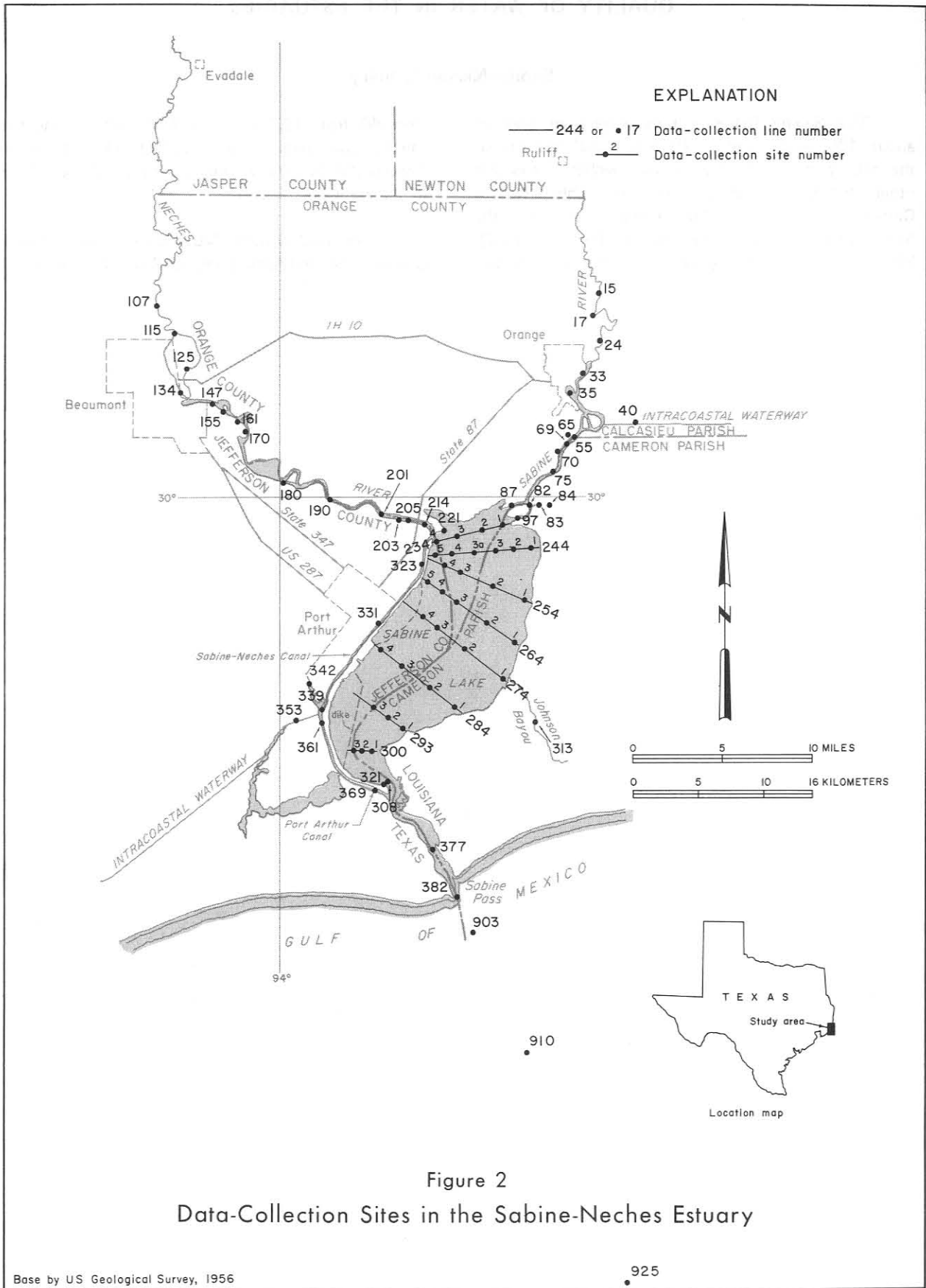


Figure 2
Data-Collection Sites in the Sabine-Neches Estuary

TABLE 1A--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE (NETEKS)	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
--------------------	------	---------------	----------------	---	----------------------	----	-------------------------	--------------------	-----------------	-------------------------------

LINE 15

OCT 01, 73	1530	2	0.3	120	25.9	6.4	6.2	76	--	46
			1.5	120	25.9	6.4	6.1	74	--	--
			4.6	120	25.9	6.4	6.1	74	--	--
			7.6	120	25.9	6.4	6.2	76	--	--
APR 08, 74	1630	2	0.3	140	21.5	6.6	6.7	75	45.	51
			1.5	140	21.5	6.6	6.7	75	45.	--
			3.0	140	21.4	6.6	6.7	75	50.	--
			6.1	140	21.4	6.6	6.7	75	50.	--
			8.5	130	21.5	6.6	6.7	75	50.	--
JUN 17, 74	1440	2	0.3	130	30.4	6.4	6.2	81	--	53
			1.5	130	30.3	6.4	6.2	81	--	--
			3.0	130	30.7	6.5	6.4	85	--	--
			6.1	130	30.6	6.5	6.4	85	--	--
			8.2	130	30.1	6.6	7.0	92	--	--
SEP 05, 74	1020	2	0.3	95	24.5	6.4	5.5	65	60.	36
			3.0	95	24.5	6.4	5.6	66	55.	--
			8.8	100	24.6	6.5	5.7	68	--	--
SEP 13, 74	1425	2	0.3	110	25.0	6.3	6.6	78	40.	61
			3.0	120	25.0	6.3	6.6	78	40.	--
			8.5	120	25.0	6.4	6.6	78	50.	--

LINE 24

OCT 01, 73	1620	2	0.3	120	26.0	6.1	5.9	72	--	46
			3.0	120	26.0	6.1	5.8	71	--	--
			6.1	120	26.0	6.1	5.9	72	--	--
			8.5	120	26.1	6.1	6.2	76	--	--

LINE 33

OCT 01, 73	1635	2	0.3	120	26.8	6.2	6.7	83	--	48
			3.0	120	26.4	6.2	6.2	76	--	--
			6.1	130	26.1	6.1	5.6	68	--	--
APR 08, 74	1725	2	0.3	130	21.9	6.4	7.2	81	30.	44
			1.5	130	21.8	6.4	7.0	79	30.	--
			3.0	130	21.7	6.3	6.9	78	35.	--
			6.1	130	21.5	6.3	7.0	79	35.	--
			9.8	120	21.1	6.2	7.0	78	45.	--
JUN 17, 74	1520	2	0.3	130	30.7	6.8	7.4	99	--	64
			1.5	130	29.3	6.6	6.4	82	--	--
			3.0	130	29.0	6.5	6.0	76	--	--
			6.1	150	29.0	6.5	5.8	74	--	--
			9.1	180	29.1	6.6	5.8	74	--	--
			12.2	230	29.3	6.6	6.0	76	--	--

LINE 40

SEP 05, 74	1140	2	0.3	1400	24.2	6.6	6.2	73	55.	36
			3.0	1400	24.1	6.6	6.1	72	70.	--
			5.8	1400	24.0	6.6	6.2	73	150.	--
SEP 13, 74	1720	2	0.3	1900	26.0	6.7	6.1	75	30.	53
			3.0	2600	26.0	6.7	5.9	73	20.	--
			6.1	3700	26.0	6.8	5.8	72	40.	--

LINE 55

OCT 01, 73	1650	2	0.3	180	26.4	6.2	6.0	73	--	48
------------	------	---	-----	-----	------	-----	-----	----	----	----

TABLE 1A--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY DISK (CM)
--------------------	------	------	----------------	---	----------------------	----	-------------------------	--------------------	-----------------	------------------------

LINE 55 CONTINUED

OCT 01, 73	1650	2	3.0	180	26.4	6.2	5.9	72	--	--
			6.1	180	26.4	6.2	6.0	73	--	--
			9.1	170	26.3	6.1	6.2	76	--	--
APR 08, 74	1740	2	.3	320	22.3	6.7	7.3	83	30.	53
			1.5	320	22.3	6.7	7.4	84	30.	--
			3.0	320	22.0	6.6	7.3	83	30.	--
			6.1	260	22.0	6.6	7.3	83	30.	--
			8.2	240	22.3	6.5	7.4	84	25.	--
JUN 17, 74	1550	2	.3	260	29.4	6.8	7.0	90	--	57
			3.0	220	28.9	6.6	6.3	80	--	--
			6.1	220	28.7	6.6	6.0	76	--	--
			9.8	260	28.8	6.6	6.0	76	--	--
SEP 05, 74	1230	2	.3	1400	25.3	6.8	6.5	78	50.	61
			3.0	2500	25.4	6.8	6.0	73	50.	--
			4.6	4100	25.4	6.8	5.7	70	50.	--
			6.1	13000	26.6	6.9	4.3	55	45.	--
			9.1	18000	27.9	7.0	3.0	40	50.	--
SEP 13, 74	1900	2	.3	1500	--	--	--	--	--	51
			3.0	2000	25.5	6.8	6.0	73	15.	--
			4.6	6300	--	7.0	--	--	--	--
			6.1	14000	26.0	7.0	5.0	63	20.	--
			8.5	19000	25.0	7.1	4.5	5	25.	--

LINE 83

SEP 05, 74	1250	2	.3	3500	23.2	6.8	4.9	57	60.	--
			1.5	3600	23.1	6.8	5.1	59	60.	--
			2.9	3600	23.1	6.8	5.9	69	60.	--

LINE 87

OCT 01, 73	1715	2	.3	350	27.1	6.2	6.2	77	--	48
			1.5	400	27.2	6.3	5.5	68	--	--
			3.0	400	27.2	6.3	5.4	67	--	--
			4.6	410	27.0	6.3	5.3	65	--	--
			6.1	600	27.1	6.3	5.8	72	--	--
			8.5	1400	26.9	6.4	5.2	64	--	--
APR 08, 74	1400	2	.3	430	22.3	6.7	7.1	81	0.	43
			1.5	440	22.3	6.7	7.1	81	0.	--
			3.0	430	22.2	6.7	7.2	82	0.	--
			6.1	430	22.1	6.7	7.2	82	0.	--
			9.8	430	21.8	6.7	7.3	82	30.	--
JUN 17, 74	1620	2	.3	1000	30.5	7.2	6.8	89	--	--
			3.0	1300	30.1	7.1	6.0	79	--	--
			6.1	4400	30.1	7.1	4.7	63	--	--
			9.8	9000	30.4	7.0	2.8	38	--	--
SEP 05, 74	1200	2	.3	4700	25.9	6.9	6.4	102	50.	56
			1.5	5100	25.8	7.0	6.1	108	50.	--
			3.0	9000	25.9	7.0	5.4	68	50.	--
			4.6	16000	26.6	7.1	4.6	61	45.	--
			6.1	20000	27.0	7.2	3.8	51	45.	--
			10.8	26000	27.1	7.1	3.9	52	60.	--
SEP 13, 74	1655	2	.3	5900	26.5	7.2	6.6	82	20.	66
			3.0	14000	26.5	7.3	5.2	65	25.	--
			6.1	21000	26.5	7.4	3.9	51	25.	--
			10.4	21000	26.5	7.4	3.9	51	30.	--

LINE 107

OCT 01, 73	1610	2	.3	140	26.6	6.8	5.8	72	150.	--
------------	------	---	----	-----	------	-----	-----	----	------	----

TABLE 1A--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY DISK (CM)
--------------------	------	------	----------------	-----------------------------------	----------------------	----	-------------------------	--------------------	-----------------	------------------------

LINE 107 CONTINUED

OCT 01, 73	1610	2	1.5	130	26.7	6.8	5.9	73	41.	--
			3.0	140	26.9	7.0	6.0	74	43.	--
			7.0	140	27.1	7.3	6.2	77	--	--
APR 06, 74	1635	2	.3	130	19.8	6.6	8.6	93	60.	28
			3.0	140	20.4	6.7	8.6	95	--	--
			7.9	140	21.2	6.9	8.3	92	--	--
JUN 17, 74	1530	2	.3	170	30.9	7.2	6.6	91	70.	30
			1.5	160	30.6	7.0	6.4	85	80.	--
			3.0	160	30.4	6.9	6.4	84	70.	--
			4.6	140	30.3	6.9	6.4	84	70.	--
SEP 05, 74	1030	2	.3	150	25.5	6.9	6.7	61	35.	33
			1.5	140	25.5	6.9	6.6	80	25.	--
			3.0	150	25.0	7.0	6.6	78	40.	--
			7.6	150	25.0	7.2	7.1	84	45.	--
SEP 13, 74	1500	2	.3	140	26.0	7.0	6.6	80	35.	38
			3.0	96	26.0	7.2	6.8	83	35.	--
			7.3	110	26.5	7.7	6.6	80	35.	--

LINE 147

OCT 01, 73	1725	2	.3	580	25.0	6.8	5.2	62	40.	--
			1.5	580	25.0	6.7	5.2	62	39.	--
			3.0	580	25.1	6.8	5.2	62	35.	--
			6.1	1500	25.1	6.9	4.9	56	40.	--
			9.1	1600	25.2	6.8	4.4	52	40.	--
13.1	14000	25.3	6.7	.6	6	170.	--			
APR 08, 74	1715	2	.3	380	21.1	6.7	7.7	86	60.	28
			6.1	320	21.1	6.8	7.2	80	60.	--
			9.1	900	21.1	6.7	7.2	80	60.	--
			13.4	7500	21.4	6.6	4.8	55	10.	--
JUN 17, 74	1600	2	.3	230	31.1	7.0	7.2	96	90.	33
			1.5	250	30.8	6.9	6.3	84	100.	--
			3.0	260	30.6	6.8	5.5	72	95.	--
			6.1	520	30.5	6.9	4.5	59	95.	--
			9.1	650	30.5	6.7	1.7	22	60.	--
			12.8	1200	30.7	6.7	1.1	14	40.	--
SEP 05, 74	1200	2	.3	2100	27.0	7.0	5.6	70	35.	51
			1.5	2400	27.0	6.9	4.4	61	35.	--
			3.0	5600	27.5	6.8	3.0	38	25.	--
			4.6	11000	29.0	6.6	.2	3	10.	--
			6.1	16000	29.5	6.6	.0	0	10.	--
			9.1	20000	29.0	6.8	.0	0	10.	--
			12.8	31000	29.5	7.0	.0	0	5.	--
SEP 13, 74	1530	2	.3	5900	26.5	7.0	4.9	61	25.	46
			3.0	8500	26.5	7.0	4.7	58	15.	--
			6.1	12000	27.0	6.9	2.3	29	5.	--
			9.1	19000	27.0	6.9	.6	8	10.	--
			13.4	22000	27.0	6.9	.0	0	10.	--

LINE 170

SEP 05, 74	1115	1	.3	2200	27.0	7.0	5.7	71	50.	41
			1.5	2400	27.0	7.0	5.4	68	50.	--
			3.0	4500	26.5	6.9	4.9	61	25.	--
			4.6	12000	29.0	6.5	.0	0	20.	--
			6.1	20000	29.0	6.6	.0	0	20.	--
			9.1	21000	29.0	6.9	.3	4	15.	--
			12.2	29000	29.5	6.9	.8	11	10.	--
SEP 13, 74	1545	1	.3	9800	27.0	6.9	4.7	59	25.	51

TABLE 1A--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHMS/CM)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
--------------------	------	------	----------------	--------------------------------------	----------------------	----	-------------------------	--------------------	-----------------	-------------------------------

LINE 170 CONTINUED

SEP 13, 74	1545	1	3.0	10000	26.5	6.9	4.5	56	20.	--
			6.1	15000	26.5	6.9	2.0	3	10.	--
			9.1	20000	26.0	6.9	.8	10	15.	--
			12.8	22000	26.0	7.0	.5	6	35.	--
SEP 05, 74	1130	2	.3	2800	27.0	7.0	.0	0	40.	46
			1.5	2800	27.0	7.0	.0	0	40.	--
			3.0	7100	28.0	6.6	.0	0	25.	--
			4.6	11000	29.0	6.6	.0	0	10.	--
			6.1	20000	29.0	6.6	2.3	30	10.	--
			9.1	21000	29.0	6.9	5.2	65	10.	--
13.1	30000	29.5	7.0	5.4	68	10.	--			
SEP 13, 74	1555	2	.3	7400	27.0	7.0	4.2	53	25.	38
			3.0	9300	27.0	6.9	3.6	46	20.	--
			6.1	15000	26.5	6.9	2.0	26	5.	--
			9.1	20000	26.0	6.9	1.0	13	10.	--
			14.0	22000	26.0	7.0	.6	8	15.	--
SEP 05, 74	1145	3	.3	2800	27.5	7.0	4.9	62	35.	46
			1.5	3300	28.0	7.0	3.4	44	40.	--
			3.0	8700	28.0	6.5	.5	6	20.	--
			4.6	11000	29.0	6.5	.0	0	10.	--
			6.1	20000	29.0	6.6	.0	0	10.	--
			9.1	21000	29.0	6.7	.0	0	55.	--
SEP 13, 74	1550	3	.3	7500	27.0	7.0	4.1	52	20.	51
			3.0	9800	27.0	6.9	4.4	56	25.	--
			6.1	15000	26.5	6.9	2.0	26	20.	--
			9.1	20000	26.0	6.9	.8	10	15.	--
			12.2	22000	26.0	6.9	.5	6	30.	--

LINE 180

OCT 01, 73	1745	2	.3	930	25.5	6.7	4.4	53	40.	--
			3.0	1500	25.3	6.7	3.8	46	40.	--
			6.1	1300	25.4	6.7	3.6	43	40.	--
			9.1	6500	25.5	6.6	1.2	15	30.	--
			13.1	14000	25.3	6.7	.7	9	31.	--
APR 08, 74	1745	2	.3	850	20.7	6.8	8.8	97	40.	33
			3.0	900	20.7	6.8	8.2	90	--	--
			9.1	1500	20.8	6.9	7.3	81	90.	--
			13.1	7500	20.8	6.8	5.8	66	90.	--
JUN 17, 74	1615	2	.3	680	30.7	6.7	4.7	63	80.	36
			1.5	740	30.6	6.7	3.9	51	70.	--
			3.0	740	30.5	6.8	3.7	49	75.	--
			6.1	3600	30.5	6.7	2.6	35	60.	--
			9.1	9000	30.5	6.7	2.1	28	60.	--
			12.2	16000	30.0	7.0	.9	12	120.	--

LINE 214

OCT 01, 73	1805	2	.3	3000	29.5	6.8	6.8	89	--	47
			1.5	3100	29.2	6.8	6.5	84	--	--
			3.0	3200	29.0	6.8	5.3	69	--	--
			6.1	3400	28.1	6.8	4.8	62	--	--
			9.1	8200	27.6	7.0	3.1	40	--	--
			10.7	16000	27.9	7.3	2.9	39	--	--
			13.7	28000	27.9	7.9	2.5	35	--	--
OCT 02, 73	0810	2	.3	2700	28.1	6.8	4.6	59	--	48
			1.5	2600	27.7	6.8	4.7	59	--	--
			3.0	3200	27.7	6.9	4.5	57	--	--
			4.6	5000	27.5	6.9	3.7	47	--	--
			6.1	12000	27.8	7.1	3.5	45	--	--

TABLE 1A--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO- MHOS) (FIELD)	TEMPER- ATURE (DEG. C)	PH	DIS- SOLVED OXYGEN (MG/L)	PERCENT SATUR- ATION	TUR- BIDITY (JTU)	TRANS- PARENCY SECCHI DISK (CM)
--------------------------	------	------	-------------------	--	------------------------------	----	------------------------------------	----------------------------	-------------------------	---

LINE 214 CONTINUED

OCT 02, 73	0810	2	7.6	18000	27.8	7.6	3.1	42	--	--
			10.7	30000	27.7	8.0	2.6	37	--	--
			13.7	32000	27.6	8.0	2.7	38	--	--
APR 08, 74	1800	2	.3	3200	21.8	7.5	7.7	89	50.	36
			3.0	2900	21.7	7.4	7.5	85	50.	--
			6.1	4000	21.5	7.1	6.9	78	50.	--
			11.3	7500	21.1	7.1	6.8	77	210.	--
JUN 17, 74	1645	2	.3	2700	31.3	7.2	5.7	77	60.	38
			1.5	2700	30.9	7.1	5.1	69	55.	--
			3.0	3300	30.8	7.1	4.4	59	60.	--
			6.1	9000	30.4	7.2	3.0	41	50.	--
			9.1	16000	30.5	7.3	2.3	30	100.	--
12.2	20000	31.0	7.3	3.3	47	90.	--			
SEP 05, 74	1320	2	.3	8800	26.5	7.1	5.2	65	20.	86
			1.5	8900	27.0	7.1	4.8	61	20.	--
			3.0	11000	27.0	7.1	4.1	52	10.	--
			4.6	18000	27.0	7.3	3.5	46	10.	--
			6.1	22000	26.5	7.6	4.8	63	10.	--
			9.1	27000	27.0	7.7	4.6	63	10.	--
13.1	27000	27.0	7.7	4.8	66	10.	--			
SEP 13, 74	1635	2	.3	15000	28.0	7.3	2.7	36	20.	76
			3.0	14000	27.0	7.3	3.2	41	20.	--
			6.1	23000	26.0	7.5	4.1	54	25.	--
			9.1	26000	26.0	7.6	4.6	61	20.	--
14.0	26000	26.0	7.6	4.7	63	40.	--			

LINE 244

OCT 02, 73	1200	1	.3	2100	28.9	7.0	7.1	92	--	67
			1.8	2700	28.6	6.9	6.6	86	--	--
APR 09, 74	1040	1	.3	--	20.6	7.3	--	--	90.	25
			1.2	--	20.5	7.3	--	--	90.	--
SEP 05, 74	1325	1	.3	3600	23.1	7.9	8.5	99	60.	46
			2.0	3600	23.2	7.9	8.7	101	60.	--
SEP 13, 74	1445	1	.3	9400	26.9	7.5	8.8	111	10.	79
			1.5	9600	26.9	7.4	8.8	111	--	--
			1.8	10000	26.9	7.3	8.0	101	10.	--
OCT 02, 73	1207	2	.3	1700	29.2	7.4	7.6	97	--	61
			2.1	1800	27.9	6.8	6.2	78	--	--
APR 09, 74	1010	2	.3	5000	20.4	7.4	8.4	94	90.	23
			1.5	5200	20.4	7.5	8.2	92	100.	--
JUN 18, 74	0950	2	.5	2400	29.1	7.3	6.0	78	70.	42
			2.0	3000	29.1	7.3	5.7	74	80.	--
SEP 05, 74	1330	2	.3	4500	23.8	7.3	7.4	88	45.	61
			1.5	4500	23.7	7.3	7.7	90	40.	--
			2.3	13000	24.4	6.9	4.9	60	65.	--
SEP 13, 74	1450	2	.3	9600	26.9	7.7	10.2	127	10.	85
			1.5	9600	26.7	7.5	9.9	125	--	--
			2.1	10000	26.7	7.4	10.2	129	10.	--
OCT 02, 73	1225	3	.3	1800	29.6	7.8	8.3	108	--	57
			1.8	1800	28.2	7.0	6.5	82	--	--
APR 09, 74	1000	3	.3	5200	20.4	7.2	7.9	89	60.	46
			1.2	5200	20.4	7.4	7.9	89	55.	--
JUN 18, 74	0940	3	.3	2400	28.6	7.2	6.1	79	80.	30

TABLE 1A--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS) (FIELD)	TEMPER- ATURE (DEG. C)	PH	DIS- SOLVED OXYGEN (MG/L)	PERCENT SATUR- ATION	TUR- BIDITY (JTU)	TRANS- PARENCY SECCHI DISK (CM)
--------------------------	------	------	-------------------	---	------------------------------	----	------------------------------------	----------------------------	-------------------------	---

LINE 244 CONTINUED

JUN 18, 74	0940	3	1.7	2700	28.6	7.4	6.1	79	90.	--
SEP 05, 74	1345	3	.3	7700	24.1	7.3	5.1	61	45.	61
			2.0	8000	24.2	7.3	4.9	59	40.	--
SEP 13, 74	1505	3	.3	11000	27.3	7.7	--	--	5.	94
			2.1	11000	27.1	7.6	--	--	5.	--
OCT 02, 73	1235	4	.3	3000	29.1	7.7	8.0	104	--	61
			1.8	3700	28.1	6.8	5.0	64	--	--
APR 09, 74	0945	4	.3	5200	20.8	7.3	8.5	97	50.	41
			1.2	5200	20.8	7.3	8.5	97	40.	--
JUN 18, 74	0930	4	.3	3800	29.1	7.3	5.9	77	45.	51
			1.4	4000	29.1	7.3	5.9	77	50.	--
SEP 05, 74	1400	4	.3	14000	25.3	7.2	6.5	81	20.	45
			1.7	14000	25.2	7.2	5.4	67	45.	--
SEP 13, 74	1515	4	.3	12000	27.1	7.4	--	--	10.	84
			1.8	12000	26.8	7.3	--	--	10.	--
OCT 02, 73	1245	5	.3	3600	29.5	6.7	5.2	68	--	53
			1.2	4100	28.8	6.8	5.1	66	--	--
APR 09, 74	0930	5	.3	5200	21.7	7.3	8.7	100	60.	43
			1.2	5200	21.7	7.4	8.7	100	80.	--
JUN 18, 74	0915	5	.3	6600	29.6	7.3	5.0	67	50.	46
			1.2	5600	30.3	7.3	4.8	65	50.	--
SEP 05, 74	1410	5	.3	14000	26.5	7.4	6.1	77	30.	51
			1.1	14000	26.4	7.4	5.9	75	30.	--
SEP 13, 74	1525	5	.3	12000	27.6	7.8	--	--	5.	80
			1.2	18000	27.6	7.5	--	--	5.	--

LINE 254

SEP 13, 74	1430	1	.3	12000	27.1	7.8	7.9	101	0.	127
			1.5	12000	26.9	7.7	8.3	106	5.	--
			2.1	13000	26.9	7.2	6.3	80	5.	--

LINE 274

OCT 02, 73	1045	1	.3	4700	27.2	7.3	5.9	74	--	69
			1.5	4600	27.0	7.2	5.5	69	--	--
			2.1	4800	27.1	7.4	5.8	72	--	--
APR 09, 74	1105	1	.3	--	18.6	7.5	--	--	150.	17
			1.2	--	18.5	7.4	--	--	165.	--
SEP 05, 74	1500	1	.3	10000	23.4	7.6	8.1	96	80.	33
			1.8	10000	23.4	7.6	8.2	98	95.	--
SEP 13, 74	1315	1	.3	14000	26.7	7.9	7.7	98	0.	109
			.9	14000	26.7	7.9	8.0	102	0.	--
			1.2	14000	26.7	7.9	7.7	98	0.	--
			1.5	22000	26.4	7.4	4.7	62	0.	--
			2.1	26000	26.5	7.4	4.2	56	0.	--
OCT 02, 73	1055	2	.3	5000	27.8	7.4	6.3	81	--	183
			1.5	5000	27.2	7.4	6.3	79	--	--
			2.4	5000	27.2	7.3	6.1	76	--	--
APR 09, 74	1115	2	.3	--	18.6	7.3	--	--	160.	15

TABLE 1A--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICROHMUS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
--------------------	------	------	----------------	--	----------------------	----	-------------------------	--------------------	-----------------	-------------------------------

LINE 274 CONTINUED

APR 09, 74	1115	2	1.8	--	18.6	7.4	--	--	160.	--
SEP 05, 74	1445	2	.3 2.1	11000 11000	23.3 23.3	7.4 7.4	8.0 8.0	95 95	60. 70.	41 --
SEP 13, 74	1300	2	.3 1.5 2.4	16000 16000 18000	26.7 26.7 26.7	7.8 7.8 7.8	7.7 7.7 7.0	98 98 92	0. -- 0.	160 -- --
OCT 02, 73	1105	3	.3 1.5 2.4	4600 4600 4600	27.7 27.6 27.7	7.5 7.4 7.4	6.0 6.7 6.8	76 85 86	-- -- --	142 -- --
APR 09, 74	1125	3	.3 1.8	-- --	18.6 18.7	7.4 7.5	-- --	-- --	110. 110.	18 --
SEP 13, 74	1250	3	.3 1.5 2.1	19000 19000 19000	27.0 26.9 26.9	7.8 7.8 7.8	7.0 6.8 6.7	92 89 88	0. 2. 5.	117 -- --
OCT 02, 73	1120	4	.3 1.5 2.1	3100 3100 4600	28.0 28.0 28.5	7.3 7.3 7.4	6.3 6.1 6.4	81 78 82	-- -- --	102 -- --
APR 09, 74	1135	4	.3 1.5	-- --	18.6 18.7	7.3 7.3	-- --	-- --	80. 80.	20 --
SEP 05, 74	1425	4	.3 1.7 2.1	13000 13000 11000	24.7 24.7 24.2	7.5 7.5 7.3	7.6 7.0 7.1	94 86 86	40. 40. 35.	46 -- --
SEP 13, 74	1245	4	.3 1.8	19000 19000	27.1 27.1	7.8 7.8	7.0 6.3	92 82	0. 0.	168 --

LINE 300

OCT 02, 73	1040	1	.3 1.5 2.7	4400 4700 4700	28.5 28.5 28.6	7.4 7.4 7.4	7.1 7.0 6.9	91 90 90	-- -- --	79 -- --
APR 09, 74	1200	1	.3 1.8	-- --	19.4 19.7	7.5 7.5	-- --	-- --	70. 70.	25 --
JUN 18, 74	1125	1	.3 2.1	9200 14000	29.4 29.5	7.9 7.7	7.0 5.9	93 80	60. 60.	79 --
SEP 05, 74	1600	1	.3 1.5 3.0	12000 12000 12000	23.0 23.0 23.0	7.4 7.4 7.4	6.7 6.6 6.7	80 78 80	40. 45. 50.	43 -- --
SEP 13, 74	1150	1	.3 1.5 2.1	28000 28000 28000	26.9 26.9 26.9	8.0 8.0 7.9	6.4 6.2 5.9	87 84 80	5. 5. 10.	91 -- --
OCT 02, 73	1045	2	.3 1.5 3.0	5000 5000 6000	28.4 28.4 28.4	-- 7.3 7.5	6.6 6.6 6.0	85 85 78	-- -- --	-- -- --
APR 09, 74	1210	2	.3 1.8	-- --	21.4 21.5	7.5 7.5	-- --	-- --	70. 80.	25 --
JUN 18, 74	1130	2	.3 1.2 2.4	-- -- 21000	30.3 29.4 29.3	7.8 7.8 7.7	-- -- 4.8	-- -- 67	75. 70. 90.	58 -- --
SEP 05, 74	1610	2	.3 2.1	14000 14000	23.0 23.0	7.6 7.6	7.5 7.5	89 89	90. 145.	25 --
SEP 13, 74	1155	2	.3	25000	27.0	8.0	7.1	95	5.	89

TABLE 1A--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY (SECCHI DISK) (CM)
--------------------	------	------	----------------	---	----------------------	----	-------------------------	--------------------	-----------------	---------------------------------

LINE 300 CONTINUED

SEP 13, 74	1155	2	1.5	26000	26.7	7.9	7.1	95	5.	--
			2.4	26000	26.7	7.9	6.7	90	5.	--
OCT 02, 73	1105	3	.3	2500	28.9	7.3	7.2	94	--	81
			1.5	3100	28.6	7.3	7.3	95	--	--
			2.4	3200	28.6	7.3	7.1	92	--	--
APR 09, 74	1225	3	.3	--	19.2	7.4	--	--	80.	25
			1.5	--	19.3	7.4	--	--	75.	--
JUN 18, 74	1140	3	.3	15000	30.3	7.8	5.6	77	90.	79
			1.8	16000	30.4	7.8	6.1	84	90.	--
SEP 05, 74	1620	3	.3	15000	23.0	7.7	7.5	90	60.	28
			1.2	15000	23.0	7.7	7.6	92	70.	--
SEP 13, 74	1205	3	.5	24000	27.1	7.9	7.7	102	0.	89
			1.8	28000	26.8	7.9	7.3	100	0.	--

LINE 308

SEP 06, 74	0950	2	.3	13000	21.7	7.7	7.4	87	40.	46
			1.5	13000	21.7	7.7	7.3	86	40.	--
			4.6	15000	22.0	7.8	7.1	84	35.	--
			6.1	19000	22.5	7.8	6.4	78	55.	--
			8.8	23000	23.9	8.0	6.1	77	40.	--

LINE 313

SEP 05, 74	1805	2	.3	4400	24.2	7.3	6.8	81	100.	18
			2.4	4700	24.1	7.3	6.4	76	105.	--
SEP 13, 74	1330	2	.3	15000	27.0	7.7	7.8	101	10.	104
			.9	15000	27.0	7.7	8.0	103	10.	--
			1.2	19000	26.7	7.4	6.1	80	5.	--
			1.5	21000	26.5	7.3	5.5	72	5.	--
			2.4	25000	26.4	7.2	5.2	70	15.	--

LINE 323

OCT 02, 73	0830	2	.3	3800	28.0	6.9	4.9	63	--	43
			1.5	4200	28.0	7.0	4.9	63	--	--
			3.0	5000	28.1	7.0	4.7	60	--	--
			4.6	8100	28.2	7.2	4.0	52	--	--
			6.1	12000	28.2	7.3	3.5	46	--	--
			7.6	24000	28.0	7.9	3.0	41	--	--
			10.7	31000	27.9	8.1	2.9	41	--	--
			13.7	33000	27.9	8.1	2.6	38	--	--
APR 09, 74	0900	2	.6	4000	22.5	7.0	6.7	77	90.	33
			1.5	4000	20.1	7.1	6.7	74	110.	--
			3.0	4200	20.2	7.1	6.7	74	130.	--
			6.1	4400	20.3	7.0	6.6	73	130.	--
			9.1	5500	20.2	7.0	6.0	67	25.	--
			11.6	5800	20.1	7.0	5.8	64	400.	--
APR 09, 74	1250	2	.3	8500	18.0	7.5	7.5	82	20.	--
			3.0	8500	18.1	7.5	7.4	80	40.	--
			6.1	9500	18.0	7.6	7.2	78	30.	--
			9.1	26000	17.9	7.7	6.1	70	100.	--
			13.1	31000	17.8	7.7	5.2	60	500.	--
JUN 18, 74	0855	2	.3	8000	29.7	7.3	4.2	56	30.	53
			1.5	7000	29.7	7.3	4.2	56	30.	--
			3.0	7000	29.7	7.3	4.2	56	25.	--
			6.1	9000	29.6	7.4	4.0	53	30.	--

TABLE 1A--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICROMHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
--------------------	------	------	----------------	--	----------------------	----	-------------------------	--------------------	-----------------	-------------------------------

LINE 323 CONTINUED

JUN 18, 74	0855	2	10.7	16000	29.7	7.4	2.3	32	180.	--
SEP 05, 74	1345	2	.3	15000	26.0	7.5	5.2	67	45.	69
			1.5	15000	26.0	7.6	6.5	83	15.	--
			3.0	17000	26.0	7.6	5.7	74	15.	--
			4.6	19000	25.5	7.7	6.2	80	15.	--
			6.1	21000	25.5	7.8	6.0	78	10.	--
			9.1	22000	25.5	7.8	5.8	75	10.	--
			12.8	30000	26.0	7.8	4.9	67	10.	--
SEP 13, 74	1600	2	.3	19000	27.5	7.6	--	--	10.	81
			3.0	20000	27.3	7.6	--	--	10.	--
			4.6	21000	27.0	7.6	--	--	10.	--
			7.6	28000	26.6	7.7	--	--	10.	--
			12.5	28000	26.5	7.7	--	--	30.	--

LINE 339

OCT 02, 73	0900	2	.3	8700	28.1	7.1	4.2	55	--	50
			1.5	10000	28.1	7.1	4.0	52	--	--
			3.0	15000	28.1	7.4	3.6	48	--	--
			4.6	19000	28.1	7.7	3.6	49	--	--
			6.1	25000	28.1	8.0	3.9	54	--	--
			7.6	36000	28.0	8.1	4.0	58	--	--
			10.7	40000	27.9	8.1	4.1	60	--	--
			12.5	42000	27.9	8.0	4.1	61	--	--
JUN 18, 74	1045	2	.3	13000	29.5	7.3	3.3	45	80.	51
			1.5	14000	29.2	7.5	3.5	46	60.	--
			3.0	17000	29.1	7.6	3.3	45	90.	--
			6.1	35000	28.7	7.8	3.0	44	100.	--
			9.1	32000	28.7	7.8	2.4	35	110.	--
			12.2	29000	28.9	7.8	4.4	63	110.	--
			SEP 13, 74	1630	2	.3	26000	26.8	7.8	--
3.0	28000	26.7	7.8	--	--	0.	--			
7.6	30000	26.8	7.9	--	--	10.	--			
12.8	32000	26.3	7.9	--	--	30.	--			

LINE 342

SEP 05, 74	1430	2	.3	18000	28.0	7.0	1.6	22	10.	76
			1.5	18000	27.5	7.0	1.3	17	5.	--
			3.0	20000	27.0	7.2	2.9	39	0.	--
			6.1	23000	26.0	7.6	4.5	59	0.	--
			9.1	27000	27.0	7.7	3.2	44	0.	--
			12.5	32000	28.0	7.6	2.2	31	15.	--
SEP 13, 74	1700	2	.3	13000	27.9	8.0	9.7	127	20.	38
			.9	14000	27.5	7.5	8.5	110	40.	--
			1.5	21000	26.7	6.9	--	--	20.	--
			4.6	25000	26.0	7.0	--	--	10.	--
SEP 13, 74	1725	2	.3	19000	27.9	7.6	--	--	--	56
			1.5	20000	27.9	7.5	--	--	25.	--
			3.7	24000	27.2	7.2	--	--	--	--

LINE 353

OCT 02, 73	0915	2	.3	4100	28.0	6.8	2.9	37	--	28
			1.5	6500	28.1	6.9	2.9	38	--	--
			3.0	8700	28.1	6.9	2.9	38	--	--
			4.6	9200	28.1	6.9	3.0	39	--	--
APR 09, 74	1240	2	.3	8500	18.1	7.3	7.2	78	40.	41
			4.6	8500	17.9	7.3	7.7	84	50.	--

TABLE 1A--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
--------------------	------	------	----------------	---	----------------------	----	-------------------------	--------------------	-----------------	-------------------------------

LINE 353 CONTINUED

JUN 18, 74	1030	2	.3	6000	29.0	7.4	4.6	61	110.	41
			1.5	6600	29.0	7.3	3.8	50	100.	--
			3.0	7200	29.0	7.3	4.1	53	90.	--
			5.2	8100	28.7	7.4	5.1	67	90.	--
SEP 05, 74	1505	2	.3	7100	26.0	7.0	4.2	52	35.	46
			1.5	7700	25.0	7.0	4.6	56	40.	--
			3.0	8900	25.0	7.1	4.8	58	30.	--
			4.9	9300	25.0	7.1	5.0	61	180.	--
SEP 13, 74	1640	2	.3	25000	26.9	7.5	--	--	25.	56
			1.5	25000	26.9	7.5	--	--	20.	--
			3.0	25000	26.8	7.6	--	--	30.	--

LINE 369

OCT 02, 73	0935	2	.3	9000	27.8	7.3	5.4	70	--	46
			1.5	9000	27.8	7.3	5.0	65	--	--
			3.0	12000	28.1	7.3	4.1	54	--	--
			4.6	19000	28.2	7.9	4.4	59	--	--
			6.1	28000	28.1	8.0	3.9	55	--	--
			7.6	37000	28.2	8.2	4.9	71	--	--
			10.7	44000	28.0	8.2	4.4	67	--	--
			12.8	44000	28.0	8.1	4.3	65	--	--
APR 09, 74	1215	2	.3	14000	17.7	7.9	8.1	88	--	66
			10.7	34000	17.4	7.8	6.2	73	250.	--
JUN 18, 74	1000	2	.3	29000	28.4	7.9	5.2	73	--	56
			1.5	32000	28.3	7.9	4.3	61	--	--
			3.0	35000	28.2	7.9	3.9	57	--	--
			6.1	37000	28.2	7.9	3.8	55	60.	--
			9.1	37000	28.2	7.9	3.8	55	80.	--
			13.1	37000	28.1	7.9	3.9	57	100.	--
SEP 05, 74	1535	2	.3	16000	23.5	7.9	7.6	93	5.	--
			3.0	17000	23.5	7.9	7.3	90	5.	--
			6.1	17000	24.0	7.8	6.9	86	10.	--
			9.1	24000	25.0	8.0	5.8	74	10.	--
			12.8	28000	26.5	8.0	5.4	70	45.	--
SEP 06, 74	1015	2	.3	17000	22.3	7.8	7.3	88	20.	51
			1.5	17000	22.4	7.9	7.2	87	30.	--
			3.0	19000	22.8	7.9	7.1	87	25.	--
			4.6	29000	24.6	8.0	6.1	80	30.	--
			6.1	30000	25.2	8.0	5.9	79	30.	--
			9.1	32000	25.7	8.0	5.7	77	90.	--
			12.5	32000	25.8	8.0	5.5	75	250.	--
SEP 13, 74	1800	2	.3	33000	27.1	8.1	--	--	5.	104
			4.6	33000	26.9	8.0	--	--	--	--
			7.6	33000	26.9	8.0	--	--	15.	--
			13.1	33000	26.8	7.8	--	--	90.	--

LINE 377

OCT 02, 73	1010	2	.3	9000	28.1	7.6	6.0	78	--	61
			1.5	9700	28.0	7.6	5.6	73	--	--
			3.0	14000	28.1	7.8	5.2	68	--	--
			4.6	27000	28.3	8.1	4.6	65	--	--
			7.6	42000	28.1	8.1	4.0	60	--	--
			10.7	44000	28.1	8.1	3.9	59	--	--
			13.4	44000	28.1	8.0	3.9	59	--	--
APR 09, 74	1140	2	.3	26000	17.3	8.0	7.7	87	15.	46
			16.5	28000	17.1	7.9	7.7	88	80.	--
SEP 06, 74	0930	2	.3	20000	22.9	8.0	7.1	88	50.	61

TABLE 1A--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
--------------------	------	------	----------------	---	----------------------	----	-------------------------	--------------------	-----------------	-------------------------------

LINE 377 CONTINUED

SEP 06, 74	0930	2	1.5	21000	23.2	8.0	7.2	89	40.	--
			3.0	22000	23.4	8.0	7.0	88	45.	--
			4.6	30000	24.9	8.1	6.3	84	40.	--
			9.1	34000	25.9	8.1	6.2	86	45.	--
			13.7	35000	26.1	8.1	6.0	83	55.	--
SEP 13, 74	1115	2	.6	33000	27.2	8.0	7.1	100	0.	84
			3.0	33000	27.0	8.0	6.8	95	0.	--
			6.1	33000	26.9	8.0	6.6	92	5.	--
			9.1	33000	26.9	8.0	6.6	92	10.	--
			13.7	33000	26.8	7.9	6.6	92	40.	--

LINE 903

OCT 02, 73	0950	1	.5	26000	27.4	8.2	6.2	85	--	--
			1.5	29000	27.6	8.4	6.9	96	--	--
			3.0	26000	27.3	8.2	5.3	73	--	--
			7.0	40000	26.7	8.0	3.1	45	--	--
APR 09, 74	1110	1	1.5	28000	17.3	8.1	8.1	92	0.	99
			13.7	42000	17.1	7.8	4.7	57	30.	--
JUN 18, 74	0900	1	.3	37000	28.2	7.9	4.8	70	--	58
			1.5	37000	28.2	7.9	4.8	70	110.	--
			3.0	37000	28.2	7.9	4.8	70	110.	--
			6.1	37000	28.2	7.9	4.8	70	120.	--
			9.1	37000	28.2	7.7	4.6	67	120.	--
SEP 06, 74	0900	1	1.5	32000	24.9	8.1	6.3	84	50.	84
			4.6	34000	25.2	8.1	6.2	84	50.	--
			7.6	35000	25.4	8.0	5.9	81	50.	--
SEP 13, 74	1045	1	1.5	35000	26.5	7.9	7.3	101	0.	137
			4.6	37000	26.4	7.9	7.2	100	0.	--
			7.6	37000	26.3	7.8	6.8	94	90.	--

LINE 910

OCT 02, 73	0910	1	.3	32000	25.6	8.3	6.4	86	--	117
			1.5	32000	25.4	8.3	6.4	86	--	--
			3.0	32000	25.5	8.2	6.1	82	--	--
			6.1	32000	24.3	8.1	6.1	80	--	--
			11.3	46000	23.6	7.8	2.2	31	--	--
APR 09, 74	1035	1	1.5	35000	15.6	8.0	9.8	113	--	102
			6.1	33000	17.2	8.1	7.9	92	--	--
			9.1	42000	17.3	7.8	4.9	60	--	--
			12.5	42000	15.6	7.7	4.2	50	10.	--

TABLE 1B--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR

NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS ORTHO (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (MG/L)
LINE 15												
OCT 01, 73	1530	2	.3	5.2	.08	.42	.01	.01	.04	.4	0	6.5
APR 08, 74	1630	2	.3	10.0	.07	.07	.01	--	.04	1.0	--	5.5
JUN 17, 74	1440	2	.3	8.2	.03	.04	.00	--	.03	2.0	--	--
SEP 05, 74	1020	2	.3 8.8	-- 8.0	.02 .03	.04 .03	.01 .01	-- --	.04 .05	.7 .6	-- --	-- --
SEP 13, 74	1825	2	.3 8.5	-- --	.01 .01	.02 .01	.01 .01	-- --	.06 .05	1.0 1.1	-- --	-- --
LINE 83												
SEP 10, 74	1200	2	.3	--	.16	.04	.02	--	.06	1.9	--	--
SEP 10, 74	1800	2	.3	--	.14	.03	.01	--	.06	1.7	--	--
SEP 10, 74	0700	2	.3	--	.16	.06	.02	--	.07	1.3	--	--
SEP 11, 74	0600	2	.3	--	--	--	--	--	--	2.6	--	--
SEP 11, 74	1210	2	.3	--	.17	.03	.05	--	.07	2.2	--	--
LINE 87												
OCT 01, 73	1715	2	.3 8.5	11.0 5.7	.08 .07	.15 .07	.02 .02	.01 .01	.07 .07	.7 .6	0 0	13.0 --
APR 08, 74	1800	2	.3 9.8	7.5 6.5	.16 .16	.16 .14	.01 .01	-- --	.06 .05	1.1 1.5	-- --	6.5 7.0
JUN 17, 74	1620	2	.3 9.8	-- --	.09 .16	.06 .16	.01 .04	-- --	.05 .11	1.6 .8	-- --	-- --
SEP 05, 74	1200	2	.3 10.8	-- --	.05 .03	.05 .06	.01 .04	-- --	.05 .09	.6 .7	-- --	-- --
SEP 09, 74	1945	2	.3	--	.13	.06	.07	--	.07	2.0	--	--
SEP 10, 74	1200	2	.3	--	.15	.05	.06	--	.06	2.2	--	--
SEP 10, 74	0800	2	.3	--	.15	.07	.05	--	.07	1.7	--	--
SEP 10, 74	1800	2	.3	--	.14	.05	.06	--	.07	1.6	--	--
SEP 10, 74	2400	2	.3	--	.12	.05	.03	--	.05	1.3	--	--
SEP 11, 74	0600	2	.3	--	.13	.05	.05	--	.05	1.8	--	--
SEP 11, 74	1200	2	.3	--	.14	.05	.06	--	.07	1.4	--	--
SEP 11, 74	1800	2	.3	--	.13	.05	.06	--	.06	1.7	--	--
SEP 12, 74	0045	2	.3	--	.09	.04	.02	--	.04	1.2	--	--
SEP 12, 74	0600	2	.3	--	.08	.05	.04	--	.05	2.8	--	--
SEP 12, 74	1200	2	.3	--	.10	.02	.04	--	.05	2.4	--	--
SEP 12, 74	1800	2	.3	--	.23	.05	.06	--	.05	2.1	--	--
SEP 13, 74	1655	2	.3 10.4	-- --	.06 .16	.05 .08	.01 .07	-- --	.04 .08	1.2 1.2	-- --	-- --

TABLE 18--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR--CONTINUED

NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED SILICA (SiO2) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS ORTHO (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (MG/L)
LINE 107												
OCT 01, 73	1610	2	.3	8.4	.04	.04	.01	.02	.05	.6	--	--
APR 08, 74	1635	2	.3	8.1	.09	.07	.00	--	.04	1.1	--	5.0
JUN 17, 74	1530	2	.3	--	--	--	--	--	--	6.3	--	9.7
SEP 05, 74	1030	2	.3 7.6	-- 9.2	.03 .03	.00 .01	.00 .00	-- --	.04 .08	.5 .6	-- --	-- 5.8
SEP 13, 74	1500	2	.3 7.3	-- --	.05 .05	.02 .02	.00 .00	-- --	.04 .06	.9 1.3	-- --	-- --
LINE 214												
OCT 01, 73	1805	2	.3	7.3	.01	.13	.03	.01	.04	1.3	>	.0
K?w			13.7	3.9	.08	.16	.10	.02	.07	.8	0	4.5
APR 08, 74	1800	2	.3 11.3	6.3 6.1	.05 .10	.18 .29	.00 .01	-- --	.05 .08	2.9 1.3	-- --	7.5 --
JUN 17, 74	1645	2	12.2	--	.23	.16	.10	--	.05	--	--	--
SEP 05, 74	1320	2	.3 13.1	-- --	.05 .05	.10 .03	.07 .07	-- --	.06 .07	2.7 1.0	-- --	-- --
SEP 09, 74	1800	2	.3	--	.11	.00	.09	--	.07	6.9	--	--
SEP 09, 74	2400	2	.3	--	.10	.00	.09	--	.07	4.1	--	--
SEP 10, 74	0600	2	.3	--	.11	.00	.09	--	.07	1.9	--	--
SEP 10, 74	1200	2	.3	--	.07	.01	.07	--	.07	3.0	--	--
SEP 10, 74	1800	2	.3	--	.06	.00	.09	--	.10	3.0	--	--
SEP 10, 74	2400	2	.3	--	.16	.06	.08	--	.06	2.6	--	--
SEP 11, 74	0600	2	.3	--	.14	.04	.08	--	.07	2.6	--	--
SEP 11, 74	1200	2	.3	--	.15	.01	.08	--	.06	1.6	--	--
SEP 11, 74	1800	2	.3	--	.06	.00	.09	--	.10	5.1	--	--
SEP 11, 74	1900	2	.3	--	.10	.00	.08	--	.08	5.1	--	--
SEP 11, 74	2400	2	.3	--	.15	.02	.09	--	.07	3.7	--	--
SEP 12, 74	0600	2	.3	--	.15	.00	.08	--	.07	3.1	--	--
SEP 12, 74	1200	2	.3	--	.14	.00	.08	--	.07	2.5	--	--
SEP 12, 74	1800	2	.3	--	.12	.01	.07	--	.07	--	--	--
SEP 13, 74	1635	2	.3 14.0	-- --	.10 .15	.05 .07	.08 .05	-- --	.07 .10	2.3 1.0	-- --	-- --
LINE 244												
OCT 02, 73	1207	2	.3 2.1	5.7 6.0	.10 .10	.03 .10	.02 .02	.01 .02	.06 .05	1.9 1.1	-- --	-- --
APR 09, 74	1010	2	.3 1.5	7.3 6.5	.10 .09	.09 .08	.01 .01	-- --	.05 .05	.6 .7	-- --	8.5 --
JUN 18, 74	0950	2	.5	6.7	.22	.04	.00	--	.01	1.2	--	--

TABLE 1B--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR--CONTINUED

NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS ORTHO (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (MG/L)
LINE 244 CONTINUED												
JUN 18, 74	0950	2	2.0	--	.17	.08	.01	--	.08	2.2	--	--
SEP 05, 74	1400	4	.3 1.7	-- --	.08 .09	.05 .06	.05 .08	-- --	.07 .08	1.2 .9	-- --	-- --
SEP 13, 74	1515	4	.3 1.8	-- --	.16 .17	.05 .06	.05 .05	-- --	.05 .06	-- --	-- --	-- --
OCT 02, 73	1245	5	.3 1.2	7.5 7.3	.09 .09	.15 .20	.04 .04	.01 .02	.05 .05	1.6 1.3	-- --	-- --
APR 09, 74	0930	5	.3 1.2	7.5 6.2	.12 .11	.16 .12	.00 .01	-- --	.05 .06	.8 1.1	-- --	3.0 --
JUN 18, 74	0915	5	.3 1.2	6.3 --	.32 .22	.04 .05	.05 .03	-- --	.07 .07	2.1 1.4	-- --	-- --
LINE 274												
SEP 05, 74	1445	2	.3 2.1	-- --	.03 .06	.01 .05	.03 .04	-- --	.06 .07	1.1 1.0	-- --	-- --
SEP 13, 74	1300	2	.3 2.4	-- --	.16 .15	.01 .02	.05 .05	-- --	.06 .04	1.0 1.0	-- --	-- --
LINE 300												
OCT 02, 73	1045	2	.3 3.0	5.6 5.6	.09 .10	.06 .11	.01 .02	.00 .02	.04 .05	.9 1.0	0	9.0 --
APR 09, 74	1210	2	.3 1.8	6.6 5.6	.05 .12	.18 .13	.01 .01	-- --	.07 .08	1.3 .9	-- --	6.0 --
JUN 18, 74	1130	2	.3 2.4	-- --	.11 .10	.07 .08	.04 .05	-- --	.04 .06	.9 .9	-- --	7.2 6.7
SEP 05, 74	1610	2	.3 2.1	6.3 --	.05 .06	.03 .04	.04 .03	-- --	.08 .12	.7 1.1	-- --	11.0 --
SEP 13, 74	1155	2	.3 2.4	-- --	.11 .12	.00 .02	.03 .02	-- --	.06 .07	1.5 1.1	-- --	-- --
LINE 308												
SEP 09, 74	1815	2	.3	--	.10	.00	.01	--	.10	1.2	--	--
SEP 10, 74	0400	2	.3	--	.11	.01	.01	--	.11	1.2	--	--
SEP 10, 74	0600	2	.3	--	.10	.01	.01	--	.08	1.2	--	--
SEP 11, 74	1210	2	.3	--	.10	.00	.02	--	.07	2.0	--	--
SEP 11, 74	1800	2	.3	--	.11	.00	.01	--	.10	3.0	--	--
SEP 12, 74	1800	2	.3	--	.10	.00	.02	--	.09	2.0	--	--
SEP 12, 74	0015	2	.3	--	.12	.02	.02	--	.08	1.5	--	--
SEP 12, 74	0600	2	.3	--	.12	.00	.01	--	.08	1.6	--	--
SEP 12, 74	1200	2	.3	--	.09	.00	.01	--	.08	2.0	--	--
LINE 323												
SEP 13, 74	1600	2	.3	--	.15	.05	.08	--	.07	1.7	--	--

TABLE 18--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR--CONTINUED

NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS ORTHO (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (MG/L)
LINE 323 CONTINUED												
SEP 13, 74	1600	2	12.5	--	.14	.08	.05	--	.08	1.4	--	--
LINE 342												
SEP 13, 74	1655	2	.3 4.6	-- --	.04 .00	9.80 1.30	.04 .01	-- --	3.40 .59	8.6 1.4	-- --	-- --
LINE 353												
APR 09, 74	1240	2	.3 4.6	6.1 5.9	.09 .07	.18 .24	.01 .01	-- --	.07 .08	2.0 1.8	-- --	7.0 --
JUN 18, 74	1030	2	.3 5.2	-- --	.18 .21	.40 .32	.05 .05	-- --	.14 .34	2.5 1.7	-- --	12.0 --
LINE 369												
UCT 02, 73	0935	2	.3 12.8	5.8 1.0	.10 .10	.16 .06	.05 .09	.00 .00	.07 .04	1.1 .6	-- --	12.0 4.5
APR 09, 74	1215	2	.3 10.7	5.2 2.7	.10 .01	.20 .18	.01 .06	-- --	.06 .31	1.8 3.5	-- --	-- 1.5
JUN 18, 74	1000	2	.3 13.1	-- --	.05 .04	.05 .05	.08 .08	-- --	.05 .15	2.4 1.9	-- --	6.7 --
SEP 05, 74	1535	2	.3 12.8	-- --	.05 .03	.01 .06	.01 .00	-- --	.04 .12	1.0 1.1	-- --	5.5 --
SEP 09, 74	1830	2	.3	--	.11	.00	.01	--	.08	1.4	--	--
SEP 09, 74	2400	2	.3	--	.11	.01	.01	--	.09	1.0	--	--
SEP 10, 74	1200	2	.3	--	.10	.01	.01	--	.07	1.3	--	--
SEP 10, 74	0600	2	.3	--	.10	.01	.01	--	.08	.8	--	--
SEP 10, 74	1800	2	.3	--	.10	.02	.02	--	.08	1.3	--	--
SEP 10, 74	2400	2	.3	--	.13	.06	.04	--	.08	1.6	--	--
SEP 11, 74	0600	2	.3	--	.11	.00	.02	--	.08	1.3	--	--
SEP 11, 74	1200	2	.3	--	.11	.01	.01	--	.07	1.7	--	--
SEP 11, 74	1800	2	.3	--	.13	.03	.03	--	.08	2.2	--	--
SEP 11, 74	2400	2	.3	--	.13	.03	.05	--	.08	1.6	--	--
SEP 12, 74	0600	2	.3	--	.11	.00	.02	--	.10	1.0	--	--
SEP 12, 74	1200	2	.3	--	.10	.00	.01	--	.07	2.2	--	--
SEP 12, 74	1800	2	.3	--	.08	.00	.01	--	.07	1.6	--	--
SEP 13, 74	1800	2	.3 13.1	-- --	.05 .15	.00 .04	.01 .01	-- --	.07 .12	1.8 1.6	-- --	-- --
LINE 903												
UCT 02, 73	0950	1	.5 7.0	3.6 2.0	.03 .10	.16 .08	.02 .07	.00 .02	.04 .29	.5 .5	-- --	-- --
APR 09, 74	1110	1	1.5 13.7	1.7 2.0	.04 .01	.07 .16	.01 .03	-- --	.00 .22	2.2 2.0	-- --	-- --

TABLE 1B--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR--CONTINUED

NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-	TOTAL	AMMONIA	TOTAL	DIS-	TOTAL	BIO-	PHENOLS	TOTAL
				SOLVED SILICA (SI02) (MG/L)	NITRATE (N) (MG/L)	NITROGEN (N) (MG/L)	NITRITE (N) (MG/L)	PHOS- PHORUS (P) (MG/L)	PHOS- PHORUS (P) (MG/L)	CHEMICAL OXYGEN DEMAND (BOD) (MG/L)		ORGANIC CARBON (MG/L)

LINE 903 CONTINUED

JUN 18, 74	0900	1	1.5	--	.41	.02	.11	--	.06	1.4	--	4.3
			12.8	--	.04	.02	.13	--	.06	1.5	--	5.7
SEP 06, 74	0900	1	1.5	--	.01	.02	.03	--	.06	.7	--	--
			7.6	.5	.01	.00	.04	--	.12	.6	--	--
SEP 13, 74	1045	1	1.5	--	.09	.00	.02	--	.05	.8	--	--
			7.6	--	.05	.01	.01	--	.12	1.4	--	--

LINE 910

OCT 02, 73	0910	1	.3	1.4	.00	.04	.01	.01	.03	.2	0	9.0
			11.3	1.8	.04	.10	.07	.02	.05	.3	--	--
APR 09, 74	1035	1	1.5	1.3	.01	.04	.01	--	.13	1.7	--	7.0
			12.5	1.8	.03	.13	.01	--	.22	2.0	--	--

TABLE IC--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICROMHOS (CM))	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)	DISSOLVED SODIUM + POTASSIUM (NA+K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	
LINE 15												
OCT 01, 73	1530	2	.3	145	7.5	3.0	15	26	15	19	79	
APR 08, 74	1630	2	.3	147	8.6	2.6	17	31	18	18	90	
JUN 17, 74	1440	2	.3	139	7.5	2.3	18	28	16	20	87	
SEP 05, 74	1020	2	.3	130	--	--	--	--	--	--	--	
			8.8	127	5.9	2.3	--	24	12	15	70	
SEP 13, 74	1825	2	.3	411	--	--	--	--	--	--	--	
			8.5	130	--	--	--	--	--	--	--	
LINE 83												
SEP 10, 74	1200	2	.3	4970	--	--	--	--	--	--	--	
SEP 10, 74	1800	2	.3	10100	--	--	--	--	--	--	--	
SEP 10, 74	0700	2	.3	8400	--	--	--	--	--	--	--	
SEP 11, 74	0600	2	.3	10600	--	--	--	--	--	--	--	
SEP 11, 74	1210	2	.3	11000	--	--	--	--	--	--	--	
LINE 87												
OCT 01, 73	1715	2	.3	421	--	--	--	--	--	--	--	
			8.5	1380	--	--	--	--	--	--	--	
SEP 05, 74	1200	2	.3	4610	--	--	--	--	--	--	--	
			10.8	19900	--	--	--	--	--	--	--	
SEP 09, 74	1945	2	.3	14200	--	--	--	--	--	--	--	
SEP 10, 74	1200	2	.3	13100	--	--	--	--	--	--	--	
SEP 10, 74	0800	2	.3	12400	--	--	--	--	--	--	--	
SEP 10, 74	1800	2	.3	12500	--	--	--	--	--	--	--	
SEP 10, 74	2400	2	.3	6590	--	--	--	--	--	--	--	
SEP 11, 74	0600	2	.3	8310	--	--	--	--	--	--	--	
SEP 11, 74	1200	2	.3	10400	--	--	--	--	--	--	--	
SEP 11, 74	1800	2	.3	9760	--	--	--	--	--	--	--	
SEP 12, 74	0045	2	.3	5270	--	--	--	--	--	--	--	
SEP 12, 74	0600	2	.3	5740	--	--	--	--	--	--	--	
SEP 12, 74	1200	2	.3	5790	--	--	--	--	--	--	--	
SEP 12, 74	1800	2	.3	5420	--	--	--	--	--	--	--	
SEP 13, 74	1655	2	.3	5350	--	--	--	--	--	--	--	
			10.4	19600	--	--	--	--	--	--	--	
LINE 107												
OCT 01, 73	1610	2	.3	180	8.0	2.9	15	26	16	19	83	
APR 08, 74	1635	2	.3	--	9.3	3.1	18	25	17	19	89	

TABLE 1C--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY.

1974 WATER YEAR--CONTINUED

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (CM)	CALCIUM (CA) (MG/L)	MAGNESIUM (MG/L)	DISSOLVED SILICUM (MG/L)	DISSOLVED SODIUM + POTASSIUM (NA+K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (SUM OF IONS) (MG/L)
--------------------	------	------	----------------	--	---------------------	------------------	--------------------------	--	---------------------------	--------------------------------	--------------------------------	---------------------------------------

LINE 107 CONTINUED

SEP 05, 74	1030	2	.3	143	8.8	3.0	--	28	14	19	86
			7.6	252	--	--	--	--	--	--	--

SEP 13, 74	1500	2	.3	171	--	--	--	--	--	--	--
------------	------	---	----	-----	----	----	----	----	----	----	----

LINE 214

OCT 01, 73	1805	2	.3	3030	--	--	--	--	--	--	--
			13.7	26500	--	--	--	--	--	--	--

SEP 05, 74	1320	2	.3	8270	--	--	--	--	--	--	--
			13.1	25800	--	--	--	--	--	--	--

SEP 09, 74	1800	2	.3	16000	--	--	--	--	--	--	--
------------	------	---	----	-------	----	----	----	----	----	----	----

SEP 09, 74	2400	2	.3	15600	--	--	--	--	--	--	--
------------	------	---	----	-------	----	----	----	----	----	----	----

SEP 11, 74	0600	2	.3	15000	--	--	--	--	--	--	--
------------	------	---	----	-------	----	----	----	----	----	----	----

SEP 11, 74	1200	2	.3	15300	--	--	--	--	--	--	--
------------	------	---	----	-------	----	----	----	----	----	----	----

SEP 11, 74	1800	2	.3	15600	--	--	--	--	--	--	--
------------	------	---	----	-------	----	----	----	----	----	----	----

SEP 11, 74	1900	2	.3	15200	--	--	--	--	--	--	--
------------	------	---	----	-------	----	----	----	----	----	----	----

SEP 11, 74	2400	2	.3	14900	--	--	--	--	--	--	--
------------	------	---	----	-------	----	----	----	----	----	----	----

SEP 12, 74	0600	2	.3	14600	--	--	--	--	--	--	--
------------	------	---	----	-------	----	----	----	----	----	----	----

SEP 12, 74	1200	2	.3	15500	--	--	--	--	--	--	--
------------	------	---	----	-------	----	----	----	----	----	----	----

SEP 12, 74	1800	2	.3	15900	--	--	--	--	--	--	--
------------	------	---	----	-------	----	----	----	----	----	----	----

SEP 13, 74	1635	2	.3	15400	--	--	--	--	--	--	--
			14.0	24000	--	--	--	--	--	--	--

LINE 244

OCT 02, 73	1207	2	.3	1650	--	--	--	--	--	--	--
			2.1	2040	--	--	--	--	--	--	--

APR 09, 74	1010	2	.3	--	22.0	32.0	320	31	85	540	1020
------------	------	---	----	----	------	------	-----	----	----	-----	------

JUN 18, 74	0950	2	.5	--	36.0	59.0	510	41	130	920	1700
------------	------	---	----	----	------	------	-----	----	-----	-----	------

SEP 05, 74	1400	4	.3	13600	--	--	--	--	--	--	--
			1.7	13900	--	--	--	--	--	--	--

SEP 13, 74	1515	4	.3	10700	--	--	--	--	--	--	--
			1.8	11400	--	--	--	--	--	--	--

OCT 02, 73	1245	5	.3	3700	--	--	--	--	--	--	--
			1.2	4020	--	--	--	--	--	--	--

APR 09, 74	0930	5	.3	--	32.0	60.0	530	33	130	950	1750
------------	------	---	----	----	------	------	-----	----	-----	-----	------

JUN 18, 74	0915	5	.3	--	63.0	150.0	1300	53	310	2300	4210
------------	------	---	----	----	------	-------	------	----	-----	------	------

LINE 274

SEP 05, 74	1445	2	.3	10700	--	--	--	--	--	--	--
			2.1	10400	--	--	--	--	--	--	--

SEP 13, 74	1300	2	.3	15300	--	--	--	--	--	--	--
			2.4	16500	--	--	--	--	--	--	--

LINE 300

OCT 02, 73	1045	2	.3	4270	36.0	81.0	730	40	190	1300	2320
------------	------	---	----	------	------	------	-----	----	-----	------	------

TABLE 1C--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR--CONTINUED

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (LAB)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)	DISSOLVED SODIUM + POTASSIUM (NA+K) (MG/L)	BICARBONATE (HCO3) (MG/L)	SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (SUM OF UNSTABLE)
--------------------	------	------	----------------	---	-------------------------------	----------------------------	--	---------------------------	----------------------	--------------------------------	------------------------------------

LINE 300 CONTINUED

OCT 02, 73	1045	2	3.0	6300	--	--	--	--	--	--	--
APR 09, 74	1210	2	.3	--	100.0	270.0	200.0	59	530	3900	6880
SEP 05, 74	1610	2	.3	12200	95.0	230.0	--	53	520	3800	7020
			2.1	12100	--	230.0	--	--	--	--	--
SEP 13, 74	1155	2	.3	27200	--	--	--	--	--	--	--
			2.4	27000	--	--	--	--	--	--	--

LINE 308

SEP 09, 74	1815	2	.3	33400	--	--	--	--	--	--	--
SEP 10, 74	0400	2	.3	33200	--	--	--	--	--	--	--
SEP 10, 74	0600	2	.3	33900	--	--	--	--	--	--	--
SEP 11, 74	1210	2	.3	33900	--	--	--	--	--	--	--
SEP 11, 74	1800	2	.3	32600	--	--	--	--	--	--	--
SEP 12, 74	1800	2	.3	28900	--	--	--	--	--	--	--
SEP 12, 74	0015	2	.3	27600	--	--	--	--	--	--	--
SEP 12, 74	0600	2	.3	32500	--	--	--	--	--	--	--
SEP 12, 74	1200	2	.3	31600	--	--	--	--	--	--	--

LINE 323

SEP 13, 74	1600	2	.3	18200	--	--	--	--	--	--	--
			12.5	25800	--	--	--	--	--	--	--

LINE 342

SEP 13, 74	1655	2	.3	12600	--	--	--	--	--	--	--
			4.6	23100	--	--	--	--	--	--	--

LINE 369

OCT 02, 73	0935	2	.3	9500	76.0	200.0	1800	56	470	3100	5610
			12.8	43800	--	--	--	--	--	--	--
SEP 05, 74	1535	2	.3	14900	--	--	--	--	--	--	--
			12.8	27700	--	--	--	--	--	--	--
SEP 09, 74	1830	2	.3	33800	--	--	--	--	--	--	--
SEP 09, 74	2400	2	.3	33500	--	--	--	--	--	--	--
SEP 10, 74	1200	2	.3	34800	--	--	--	--	--	--	--
SEP 10, 74	0600	2	.3	34600	--	--	--	--	--	--	--
SEP 10, 74	1800	2	.3	32300	--	--	--	--	--	--	--
SEP 10, 74	2400	2	.3	26400	--	--	--	--	--	--	--
SEP 11, 74	0600	2	.3	34100	--	--	--	--	--	--	--
SEP 11, 74	1200	2	.3	34600	--	--	--	--	--	--	--
SEP 11, 74	1800	2	.3	27400	--	--	--	--	--	--	--

TABLE IC--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY.

1974 WATER YEAR--CONTINUED

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO- MHQS) (LAB)	DIS- SOLVED CALCIUM (CA) (MG/L)	DIS- SOLVED MAGNE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM + POTAS- SIUM (NA+K) (MG/L)	DIS- SOLVED BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLORIDE (CL) (MG/L)	DIS- SOLVED (SUM OF SOLIDS (CONSTI- TUENTS) (MG/L)

LINE 369 CONTINUED

SEP 11, 74	2400	2	.3	23300	--	--	--	--	--	--	--
SEP 12, 74	0600	2	.3	32500	--	--	--	--	--	--	--
SEP 12, 74	1200	2	.3	33500	--	--	--	--	--	--	--
SEP 12, 74	1800	2	.3	33400	--	--	--	--	--	--	--
SEP 13, 74	1800	2	.3	31500	--	--	--	--	--	--	--
			13.1	33000	--	--	--	--	--	--	--

LINE 903

OCT 02, 73	0950	1	.5	27300	--	--	--	--	--	--	--
			7.0	44300	--	--	--	--	--	--	--
APR 09, 74	1110	1	1.5	--	270.0	690.0	6900	118	1600	12000	21600
SEP 08, 74	0900	1	1.5	31500	240.0	830.0	--	132	1600	12000	21400
			7.6	34700	--	--	--	--	--	--	--
SEP 13, 74	1045	1	1.5	33500	--	--	--	--	--	--	--
			7.6	35700	--	--	--	--	--	--	--

LINE 910

OCT 02, 73	0910	1	.3	35000	270.0	820.0	6900	124	1700	12000	21800
			11.3	49300	--	--	--	--	--	--	--

TABLE 10--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR

SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED ALUMI- NUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	BOTTOM DEPOSIT ARSENIC (AS) (UG/GM)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	BOTTOM DEPOSIT CADMIUM (CD) (UG/GM)	DIS- SOLVED FLUORIDE (F) (MG/L)
LINE 15											
OCT 01, 73	1530	2	.3	--	0	--	--	0	--	--	.1
LINE 87											
OCT 01, 73	1715	2	.3 8.5	-- --	0 0	-- --	-- --	0 0	-- --	-- --	-- --
LINE 107											
OCT 01, 73	1610	2	.3	--	0	--	--	0	--	--	.1
LINE 214											
OCT 01, 73	1805	2	.3 13.7	-- --	2 8	-- --	-- --	0 0	-- --	-- --	-- --
LINE 244											
OCT 02, 73	1245	5	.3 1.2	-- --	0 --	-- --	-- 3	0 --	-- --	-- 0	-- --
LINE 300											
OCT 02, 73	1040	1	2.7	--	--	--	5	--	--	0	--
OCT 02, 73	1045	2	.3	--	0	--	--	0	--	--	.2
LINE 369											
OCT 02, 73	0935	2	.3 12.8	-- --	4 0	-- --	-- --	0 0	-- --	-- --	.3 --
LINE 910											
OCT 02, 73	0910	1	.3	--	5	--	--	0	--	--	.6

TABLE 1D--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR--CONTINUED

SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	BOTTOM DEPOSIT COBALT (CU) (UG/GM)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	BOTTOM DEPOSIT COPPER (CU) (UG/GM)
LINE 15											
OCT 01, 73	1530	2	.3	--	--	0	--	--	7	--	--
LINE 87											
OCT 01, 73	1715	2	.3	--	--	1	--	--	8	--	--
			8.5	--	--	0	--	--	0	--	--
LINE 107											
OCT 01, 73	1610	2	.3	--	--	0	--	--	5	--	--
LINE 214											
OCT 01, 73	1805	2	.3	--	--	0	--	--	7	--	--
			13.7	--	--	0	--	--	8	--	--
LINE 244											
OCT 02, 73	1245	5	.3	--	--	1	--	--	8	--	--
			1.2	--	--	--	--	6	--	--	7
LINE 300											
OCT 02, 73	1040	1	2.7	--	--	--	--	7	--	--	4
OCT 02, 73	1045	2	.3	--	--	1	--	--	8	--	--
LINE 369											
OCT 02, 73	0935	2	.3	--	--	0	--	--	6	--	--
			12.8	--	--	1	--	--	9	--	--
LINE 910											
OCT 02, 73	0910	1	.3	--	--	0	--	--	4	--	--

TABLE 10--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR--CONTINUED

SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED CYANIDE (CN) (MG/L)	BOTTOM DEPOSIT CYANIDE (CN) (UG/GM)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL IRON (FE) (UG/L)	BOTTOM DEPOSIT IRON (FE) (UG/GM)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	BOTTOM DEPOSIT LEAD (PB) (UG/GM)
LINE 15											
OCT 01, 73	1530	2	.3	--	--	260	--	--	0	--	--
LINE 87											
OCT 01, 73	1715	2	.3	--	--	350	--	--	0	--	--
			8.5	--	--	260	--	--	0	--	--
LINE 107											
OCT 01, 73	1610	2	.3	--	--	300	--	--	0	--	--
LINE 214											
OCT 01, 73	1805	2	.3	--	--	330	--	--	0	--	--
			13.7	--	--	130	--	--	0	--	--
LINE 244											
OCT 02, 73	1245	5	.3	--	--	240	--	--	1	--	--
			1.2	--	--	--	--	13000	--	--	10
LINE 300											
OCT 02, 73	1040	1	2.7	--	--	--	--	10000	--	--	10
OCT 02, 73	1045	2	.3	--	--	130	--	--	0	--	--
LINE 369											
OCT 02, 73	0935	2	.3	--	--	70	--	--	0	--	--
			12.8	--	--	80	--	--	0	--	--
LINE 910											
OCT 02, 73	0910	1	.3	--	--	50	--	--	2	--	--

TABLE 10--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR--CONTINUED

SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED LITHIUM (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	BOTTOM DEPOSIT MANGANESE (MN) (UG/GM)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY (HG) (UG/L)	BOTTOM DEPOSIT MERCURY (HG) (UG/GM)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)
LINE 15												
OCT 01, 73	1530	2	.3	0	70	--	--	.0	--	--	6	120
LINE 87												
OCT 01, 73	1715	2	.3	0	50	--	--	.0	--	--	6	270
			8.5	20	90	--	--	.2	--	--	7	380
LINE 107												
OCT 01, 73	1610	2	.3	10	60	--	--	.1	--	--	4	110
LINE 214												
OCT 01, 73	1805	2	.3	20	130	--	--	.1	--	--	3	470
			13.7	100	25	--	--	.0	--	--	4	3500
LINE 244												
OCT 02, 73	1245	5	.3	10	130	--	--	.1	--	--	6	530
			1.2	--	--	--	420	--	--	.0	--	--
LINE 300												
OCT 02, 73	1040	1	2.7	--	--	--	340	--	--	.0	--	--
OCT 02, 73	1045	2	.3	10	25	--	--	.1	--	--	6	640
LINE 369												
OCT 02, 73	0935	2	.3	20	50	--	--	.1	--	--	2	1300
			12.8	130	50	--	--	.2	--	--	3	5200
LINE 910												
OCT 02, 73	0910	1	.3	100	38	--	--	.0	--	--	6	4300

TABLE 1D--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR--CONTINUED

SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED ZINC (Zn) (UG/L)	TOTAL ZINC (Zn) (UG/L)	BOTTOM DEPOSIT ZINC (Zn) (UG/GM)
LINE 15						
OCT 01, 73	1530	2	.3	40	--	--
LINE 87						
OCT 01, 73	1715	2	.3 8.5	50 20	-- --	-- --
LINE 107						
OCT 01, 73	1610	2	.3	180	--	--
LINE 214						
OCT 01, 73	1805	2	.3 13.7	10 40	-- --	-- --
LINE 244						
OCT 02, 73	1245	5	.3 1.2	50 --	-- --	-- 42
LINE 300						
OCT 02, 73	1040	1	2.7	--	--	40
OCT 02, 73	1045	2	.3	40	--	--
LINE 369						
OCT 02, 73	0935	2	.3 12.8	50 60	-- --	-- --
LINE 910						
OCT 02, 73	0910	1	.3	150	--	--

TABLE 1E--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY.

1974 WATER YEAR

INSECTICIDE AND HERBICIDE ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL ALDRIN (UG/L)	BOTTOM DEPOSIT ALDRIN (UG/KG)	TOTAL CHLOR-DANE (UG/L)	BOTTOM DEPOSIT CHLOR-DANE (UG/KG)	TOTAL DDD (UG/L)	BOTTOM DEPOSIT DDD (UG/KG)	TOTAL DDE (UG/L)	BOTTOM DEPOSIT DDE (UG/KG)
--------------------	------	------	----------------	---------------------	-------------------------------	-------------------------	-----------------------------------	------------------	----------------------------	------------------	----------------------------

LINE 15

OCT 01, 73	1530	2	.3	.00	--	.0	--	.00	--	.00	--
			7.6	--	.0	--	.0	--	.6	--	.6

LINE 107

OCT 01, 73	1610	2	.3	.00	--	.0	--	.00	--	.00	--
			7.0	--	.0	--	.0	--	.7	--	.8

LINE 244

OCT 02, 73	1207	2	2.1	--	.0	--	.0	--	.0	--	.0
OCT 02, 73	1245	5	1.2	--	.0	--	--	--	.0	--	.0

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL DDT (UG/L)	BOTTOM DEPOSIT DDT (UG/KG)	TOTAL DRIN (UG/L)	BOTTOM DEPOSIT DRIN (UG/KG)	TOTAL ENDRIN (UG/L)	BOTTOM DEPOSIT ENDRIN (UG/KG)	TOTAL HEPTA-CHLOR (UG/L)	BOTTOM DEPOSIT HEPTA-CHLOR (UG/KG)
--------------------	------	------	----------------	------------------	----------------------------	-------------------	-----------------------------	---------------------	-------------------------------	--------------------------	------------------------------------

LINE 15

OCT 01, 73	1530	2	.3	.00	--	.00	--	.00	--	.00	--
			7.6	--	.0	--	.0	--	.0	--	.0

LINE 107

OCT 01, 73	1610	2	.3	.00	--	.00	--	.00	--	.00	--
			7.0	--	.0	--	.0	--	.0	--	.0

LINE 244

OCT 02, 73	1207	2	2.1	--	.0	--	.0	--	.0	--	.0
OCT 02, 73	1245	5	1.2	--	.0	--	.0	--	.0	--	.0

TABLE 1E--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR--CONTINUED

INSECTICIDE AND HERBICIDE ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL		BOTTOM		TOTAL		TOTAL		TOTAL DIAZ- INON
				HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE (UG/KG)	TOTAL LINDANE (UG/L)	BOTTOM LINDANE (UG/KG)	PARA- THION (UG/L)	METHYL PARA- THION (UG/L)	MALA- THION (UG/L)		

LINE 15

OCT 01, 73	1530	2	.3 7.6	.00 --	-- .0	.00 --	-- .0	.00 --	.00 --	.00 --	.00 --
------------	------	---	-----------	-----------	----------	-----------	----------	-----------	-----------	-----------	-----------

LINE 107

OCT 01, 73	1610	2	.3 7.0	.00 --	-- .0	.00 --	-- .0	.00 --	.00 --	.00 --	.00 --
------------	------	---	-----------	-----------	----------	-----------	----------	-----------	-----------	-----------	-----------

LINE 244

OCT 02, 73	1207	2	2.1	--	.0	--	.0	--	--	--	--
OCT 02, 73	1245	5	1.2	--	.0	--	.0	--	--	--	--

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL		BOTTOM		TOTAL		TOTAL		TOTAL SILVEX DEPOSITI (UG/KG)
				PCB (UG/L)	PCB (UG/KG)	TOTAL 2,4-D (UG/L)	BOTTOM 2,4-D (UG/KG)	TOTAL 2,4,5-T (UG/L)	BOTTOM 2,4,5-T (UG/KG)			

LINE 15

OCT 01, 73	1530	2	.3 7.6	.0 --	-- .0	.00 --	-- --	.00 --	-- --	.00 --	-- --
------------	------	---	-----------	----------	----------	-----------	----------	-----------	----------	-----------	----------

LINE 107

OCT 01, 73	1610	2	.3 7.0	.0 --	-- .0	.00 --	-- --	.00 --	-- --	.02 --	-- --
------------	------	---	-----------	----------	----------	-----------	----------	-----------	----------	-----------	----------

LINE 244

OCT 02, 73	1207	2	.3 2.1	-- --	-- .0	.00 --	-- --	.00 --	-- --	.06 --	-- --
OCT 02, 73	1245	5	.3 1.2	-- --	-- .0	.00 --	-- --	.00 --	-- --	.01 --	-- --

TABLE 1F--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR

BACTERIOLOGICAL AND CHLOROPHYLL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	IMPERIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COL. PER 100 ML)	CHLOROPHYLL A (UG/L)
--------------------	------	------	----------------	--------------------------------------	----------------------------------	--------------------------------	----------------------

LINE 15

OCT 01, 73	1530	2	.3	200	33	210	--
APR 08, 74	1630	2	.3	300	210	220	--
JUN 17, 74	1440	2	.3	1	1	35	--
SEP 05, 74	1020	2	.3	0	0	55	--

LINE 67

OCT 01, 73	1715	2	.3	230	55	99	--
APR 06, 74	1800	2	.3	500	410	420	--
JUN 17, 74	1620	2	.3	1	1	7	--
SEP 05, 74	1200	2	.3	0	0	13	--

LINE 107

OCT 01, 73	1610	2	.3	230	30	160	--
APR 08, 74	1635	2	.3	230	150	130	--
JUN 17, 74	1530	2	.3	1	1	24	--
SEP 05, 74	1030	2	.3	0	0	46	--

LINE 214

OCT 01, 73	1805	2	.3	250	42	100	--
APR 08, 74	1800	2	.3	210	150	160	.00
JUN 17, 74	1645	2	.3	1	1	10	--
SEP 05, 74	1320	2	.3	0	0	*	--

LINE 244

OCT 02, 73	1207	2	.3	18	10	30	--
APR 09, 74	1010	2	.3	9	3	3	--
JUN 18, 74	0950	2	.5	45	41	99	--
OCT 02, 73	1245	5	.3	60	16	40	--
APR 09, 74	0930	5	.3	7	4	4	.40
JUN 18, 74	0915	5	.3	60	42	30	--

LINE 300

OCT 02, 73	1045	2	.3	14	6	24	--
APR 09, 74	1210	2	.3	4	1	2	--
JUN 18, 74	1130	2	.3	9	1	20	--

* - TOO NUMEROUS TO COUNT

TABLE 1F--QUALITY OF WATER IN THE SABINE-NECHES ESTUARY,

1974 WATER YEAR--CONTINUED

BACTERIOLOGICAL AND CHLOROPHYLL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	CHLORO- PHYLL A (UG/L)
--------------------------	------	------	-------------------	--	---	---	---------------------------------

LINE 353

APR 09, 74 1240 2 .3 -- -- -- .70

LINE 369

OCT 02, 73 0935 2 .3 40 35 48 --
 APR 09, 74 1215 2 .3 9 4 5 --
 JUN 18, 74 1000 2 .3 10 4 12 --
 SEP 05, 74 1535 2 .3 0 0 5 --

LINE 903

JUN 18, 74 0900 1 .3 2 1 21 --
 SEP 06, 74 0900 1 1.5 0 0 1 --

LINE 910

OCT 02, 73 0910 1 .3 4 1 4 --

Brazos Estuary

The Brazos estuary covers an area of about 3 square miles (8 km²) and consists of the tidal parts of the Brazos River and parts of the Intracoastal Waterway (Figure 3). Although Freeport Harbor is not directly connected with the estuary,

wastes from industrial operations around the harbor are discharged into the estuary.

Water-quality data (Table 2) were collected during October 1973 and April and June 1974.

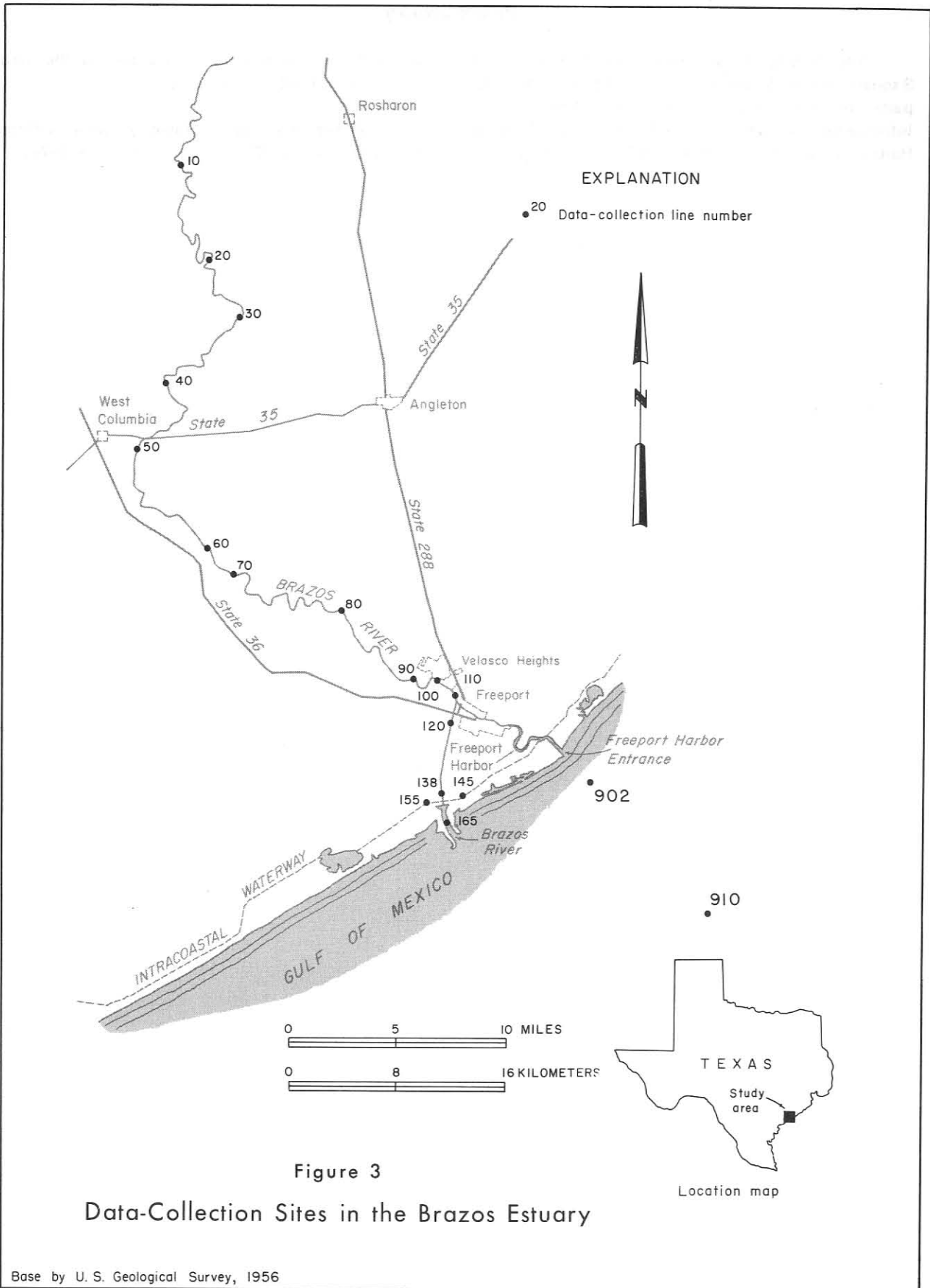


TABLE 2A--QUALITY OF WATER IN THE BRAZOS ESTUARY,

1974 WATER YEAR

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
LINE 10										
OCT 03, 73	1210	2	.3	650	27.0	7.8	6.1	75	--	0
			1.5	650	27.0	7.7	5.6	69	--	--
			3.0	650	27.0	7.7	5.7	70	--	--
LINE 20										
JUN 19, 74	1500	2	.3	650	31.8	8.0	7.1	96	120.	23
			1.5	650	32.1	8.0	7.0	95	130.	--
LINE 30										
OCT 03, 73	1255	2	.3	550	25.2	7.6	5.7	68	--	3
			1.5	570	25.2	7.6	5.7	68	--	--
			3.0	570	25.2	8.0	5.7	68	--	--
			4.6	560	25.3	8.0	5.8	70	--	--
			6.1	550	25.4	8.0	6.1	73	--	--
APR 10, 74	1305	2	.3	--	21.9	7.2	--	--	45.	33
			1.5	--	21.9	7.3	--	--	45.	--
			3.7	--	21.9	7.3	--	--	55.	--
JUN 19, 74	1410	2	.3	680	31.4	8.0	7.5	101	90.	30
			2.1	710	31.6	8.0	7.6	102	100.	--
LINE 50										
OCT 03, 73	1340	2	.3	580	27.1	7.2	5.9	73	--	3
			1.5	580	27.1	7.2	5.8	72	--	--
			3.0	580	27.1	7.2	5.8	72	--	--
			4.6	600	27.1	7.3	5.8	72	--	--
			6.1	580	27.1	7.2	5.6	69	--	--
			9.4	600	27.0	7.3	5.2	64	--	--
APR 10, 74	1335	2	.3	--	22.1	7.3	--	--	35.	33
			1.5	--	22.1	7.3	--	--	35.	--
			3.0	--	22.0	7.3	--	--	35.	--
			4.6	--	22.0	7.3	--	--	35.	--
JUN 19, 74	1330	2	.3	680	31.1	7.9	6.7	89	90.	28
			3.0	680	31.1	7.9	6.4	85	200.	--
			7.0	710	31.1	7.9	6.5	87	160.	--
LINE 70										
OCT 03, 73	1415	2	.3	820	28.1	7.8	8.4	106	--	13
			1.5	820	28.2	7.8	8.5	108	--	--
			3.0	820	28.1	7.8	8.9	113	--	--
			5.8	820	28.1	7.8	9.3	118	--	--
APR 10, 74	1410	2	.3	--	22.4	7.4	--	--	35.	36
			1.5	--	22.3	7.3	--	--	35.	--
			3.0	--	22.3	7.3	--	--	45.	--
			4.6	--	22.5	7.3	--	--	40.	--
JUN 19, 74	1310	2	.3	680	31.1	7.9	8.4	112	120.	25
			3.0	710	31.0	7.9	6.3	84	130.	--
			6.4	740	31.1	7.9	6.1	81	125.	--
LINE 80										
OCT 03, 73	1440	2	.3	800	28.2	7.1	6.1	77	--	--

TABLE 2A--QUALITY OF WATER IN THE BRAZOS ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
LINE 80 CONTINUED										
OCT 03, 73	1440	2	1.5	830	28.2	7.1	6.1	77	--	--
			3.0	770	28.2	7.0	6.1	77	--	--
			4.6	830	28.2	7.1	6.1	77	--	--
			6.7	830	28.2	7.2	5.9	75	--	--
APR 10, 74	1430	2	.3	--	23.8	7.6	--	--	20.	56
			1.5	--	23.9	7.6	--	--	20.	--
			2.4	--	24.3	7.5	--	--	25.	--
			3.0	--	24.5	7.4	--	--	10.	--
			4.6	--	25.4	7.4	--	--	5.	--
6.4	--	26.0	7.5	--	--	0.	--	--		
JUN 19, 74	1215	2	.3	13000	31.5	7.8	4.5	63	80.	48
			1.5	15000	31.5	7.8	3.6	51	90.	--
			2.4	17000	31.5	7.8	2.2	31	90.	--
			3.0	29000	32.1	8.1	.0	0	120.	--
			5.5	35000	32.1	8.2	1.0	16	115.	--
LINE 90										
OCT 03, 73	1450	1	.3	900	28.4	8.0	7.9	100	--	25
			1.5	920	28.3	7.9	7.9	100	--	--
			3.0	900	28.3	7.9	8.1	103	--	--
			4.0	880	28.1	7.9	8.1	103	--	--
OCT 03, 73	1455	2	.3	820	28.2	8.0	7.1	90	--	18
			3.0	900	28.0	7.9	5.9	75	--	--
			4.0	880	28.0	7.9	5.3	67	--	--
APR 10, 74	1450	2	.3	--	25.4	7.8	--	--	10.	76
			1.5	--	26.0	7.8	--	--	10.	--
			3.0	--	26.5	7.8	--	--	5.	--
			5.2	--	26.5	7.8	--	--	20.	--
JUN 19, 74	1155	2	.3	19000	31.7	8.0	4.8	69	70.	66
			1.5	27000	31.8	8.1	2.1	31	80.	--
			3.0	37000	32.0	8.4	1.2	19	80.	--
			7.3	40000	32.0	8.4	.9	14	135.	--
OCT 03, 73	1500	3	.3	830	28.6	7.3	6.4	82	--	--
			1.5	850	28.6	7.3	5.8	74	--	--
			3.0	870	28.6	7.3	5.8	74	--	--
			4.6	830	28.6	7.3	5.7	73	--	--
			6.4	830	28.7	7.3	5.3	68	--	--
LINE 100										
OCT 03, 73	1245	1	.3	3200	29.5	8.2	6.8	89	--	41
			1.5	5000	29.7	8.2	6.3	83	--	--
			3.0	15000	30.3	7.9	6.0	82	--	--
			4.6	18000	30.3	8.2	6.1	85	--	--
APR 10, 74	1240	1	.3	28000	24.9	8.3	6.0	79	5.	81
			2.4	35000	24.6	8.4	6.2	84	10.	--
JUN 19, 74	1115	1	.3	24000	31.4	8.2	3.4	49	70.	84
			1.5	37000	31.7	8.4	2.2	34	80.	--
			3.4	43000	32.0	8.5	3.6	58	90.	--
OCT 03, 73	1255	2	.3	3400	28.9	8.1	7.9	103	--	39
			1.5	6000	29.4	8.0	7.7	103	--	--
			2.7	17000	29.6	7.8	5.8	81	--	--
APR 10, 74	1235	2	.3	28000	24.6	8.3	6.8	89	5.	71
			3.0	38000	24.6	8.6	7.3	100	80.	--
JUN 19, 74	1125	2	.3	26000	31.8	8.5	4.2	68	115.	--

TABLE 2A--QUALITY OF WATER IN THE BRAZOS ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC	TEMPER-	DIS-	PERCENT	TUR-	TRANS-
				CONDUCT- ANCE (MICRO- MHOS) (FIELD)					

LINE 100 CONTINUED

JUN 19, 74	1125	2	1.5	37000	31.8	8.4	2.5	39	0.	--
			3.0	45000	31.6	8.2	3.6	54	10.	--
OCT 03, 73	1305	3	.3	6200	29.3	8.0	8.1	108	--	38
			1.5	8300	29.4	7.9	7.4	99	--	--
			2.1	13000	29.0	7.8	7.2	96	--	--
APR 10, 74	1245	3	.3	28000	24.2	8.3	6.2	81	--	74
			3.0	38000	25.0	8.6	6.3	86	30.	--
JUN 19, 74	1145	3	.3	27000	31.7	8.2	3.5	52	75.	79
			1.5	37000	32.0	8.4	1.6	25	80.	--
			2.4	40000	31.9	8.4	2.5	40	70.	--

LINE 110

OCT 03, 73	1210	1	.3	6000	30.3	8.2	7.9	107	--	48
			1.5	14000	30.4	8.1	7.8	107	--	--
			3.0	22000	30.7	8.4	8.0	116	--	--
			3.7	23000	30.4	8.4	7.6	109	--	--
APR 10, 74	1205	1	.3	30000	24.2	8.4	5.5	72	0.	76
			3.0	35000	24.4	8.5	5.6	75	0.	--
			5.5	36000	24.6	8.5	5.9	81	0.	--
JUN 19, 74	1050	1	.3	37000	31.8	8.5	3.3	52	50.	93
			1.5	40000	31.8	8.5	3.5	56	70.	--
			3.7	43000	31.6	8.7	3.7	60	85.	--
OCT 03, 73	1220	2	.3	9500	29.7	8.2	7.5	100	--	41
			1.5	10000	30.1	8.2	7.1	96	--	--
			3.4	22000	30.4	8.4	6.4	91	--	--
APR 10, 74	1215	2	.3	34000	24.5	8.6	6.0	80	0.	--
			4.3	36000	24.6	8.5	6.2	85	30.	--
JUN 19, 74	1100	2	.3	37000	32.0	8.5	3.3	52	60.	102
			1.5	40000	32.2	8.6	4.1	65	60.	--
			3.7	43000	32.1	8.7	3.9	63	140.	--
OCT 03, 73	1230	3	.3	8500	29.8	8.1	7.9	107	--	38
			1.5	9800	29.7	8.2	7.3	97	--	--
			2.7	16000	29.6	8.2	6.9	95	--	--
APR 10, 74	1220	3	.3	30000	24.2	8.4	5.9	78	10.	--
			3.0	36000	24.6	8.6	5.4	73	60.	--
JUN 19, 74	1105	3	.3	37000	31.9	8.4	3.2	50	55.	81
			1.5	40000	31.9	8.5	3.3	52	55.	--
			2.7	43000	31.9	8.7	3.8	61	140.	--

LINE 120

OCT 03, 73	1140	1	.3	11000	29.7	8.1	5.9	80	--	41
			1.5	11000	29.7	8.1	5.9	80	--	--
			3.0	18000	29.7	8.2	5.0	69	--	--
			5.2	19000	29.6	8.2	4.9	68	--	--
OCT 03, 73	1150	2	.3	11000	29.8	8.1	6.7	91	--	41
			1.5	11000	29.8	8.1	6.6	89	--	--
			3.0	16000	30.0	8.2	6.6	90	--	--
			5.5	19000	29.7	8.2	5.1	71	--	--
APR 10, 74	1155	2	.3	36000	24.3	8.4	4.6	61	5.	79
			6.1	36000	24.7	8.4	3.7	50	10.	--
JUN 19, 74	1040	2	.3	35000	31.3	8.3	1.9	29	15.	102

TABLE 2A--QUALITY OF WATER IN THE BRAZOS ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
--------------------	------	------	----------------	---	----------------------	----	-------------------------	--------------------	-----------------	-------------------------------

LINE 120 CONTINUED

JUN 19, 74	1040	2	1.5	37000	31.6	8.4	.7	11	25.	--
			3.0	40000	31.8	8.6	.4	6	30.	--
			4.6	40000	31.8	8.5	.2	3	180.	--

OCT 03, 73	1200	3	.3	11000	29.6	8.1	6.7	89	--	41
			1.5	11000	29.7	8.2	6.5	87	--	--
			3.0	14000	30.1	8.2	5.7	78	--	--
			4.6	18000	30.5	8.2	4.9	68	--	--

LINE 138

OCT 03, 73	1140	1	.3	11000	29.7	8.1	5.8	80	--	41
			1.5	11000	29.7	8.1	5.9	80	--	--
			3.0	18000	29.7	8.2	5.0	69	--	--
			5.2	19000	29.6	8.2	4.9	68	--	--

OCT 03, 73	1115	2	.3	11000	30.1	8.0	6.0	81	--	61
			1.5	12000	30.1	8.0	5.1	70	--	--
			3.0	17000	30.0	7.9	4.6	64	--	--
			6.1	20000	29.9	7.9	4.0	56	--	--
			7.6	20000	29.5	7.9	3.7	51	--	--

APR 10, 74	1140	2	.3	32000	22.0	8.3	4.9	62	0.	46
			3.0	36000	23.8	8.3	3.7	49	--	--
			6.4	38000	21.9	8.1	6.1	79	20.	--

JUN 19, 74	1020	2	.3	32000	31.0	8.3	2.8	42	40.	104
			1.5	35000	31.0	8.3	1.3	20	30.	--
			3.0	43000	31.4	8.4	.0	0	40.	--
			4.6	43000	29.8	8.0	4.8	75	15.	--
			5.5	46000	29.2	7.8	5.4	84	45.	--

OCT 03, 73	1130	3	.3	12000	29.5	8.0	5.8	78	--	61
			1.5	12000	29.8	8.0	5.6	77	--	--
			3.0	14000	29.9	7.9	5.2	71	--	--
			4.3	18000	29.9	7.9	4.5	62	--	--

LINE 145

OCT 03, 73	1015	2	.3	22000	29.1	8.0	2.9	40	--	51
			1.5	24000	28.5	8.0	3.0	42	--	--
			3.0	24000	28.2	8.0	3.2	44	--	--
			4.9	24000	27.6	8.0	2.7	36	--	--

APR 10, 74	1110	2	.3	32000	21.3	8.2	6.8	85	20.	51
			4.6	32000	21.3	8.1	7.0	88	30.	--

JUN 19, 74	0940	2	.3	32000	29.9	8.2	3.8	56	40.	30
			1.5	35000	29.8	8.2	2.8	42	80.	--
			3.7	40000	29.1	8.2	3.9	59	240.	--

LINE 155

APR 10, 74	1120	2	.3	35000	21.3	8.1	7.1	91	30.	46
			4.0	38000	21.3	8.1	7.3	95	30.	--

JUN 19, 74	1005	2	.3	35000	29.9	8.1	5.6	84	115.	53
			1.5	35000	29.8	8.1	5.4	81	125.	--
			4.0	43000	29.4	8.0	4.7	72	135.	--

LINE 165

OCT 03, 73	1030	1	.3	13000	29.5	8.0	4.6	62	--	46
			1.5	14000	29.5	8.0	4.3	58	--	--
			3.0	21000	29.8	8.2	2.3	32	--	--

TABLE 2A--QUALITY OF WATER IN THE BRAZUS ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS) (FIELD)	TEMPER- ATURE (DEG. C)	PH	DIS- SOLVED OXYGEN (MG/L)	PERCENT SATUR- ATION	TUR- BIDITY (JTU)	TRANS- PARENCY SECCHI DISK (CM)
--------------------------	------	------	-------------------	---	------------------------------	----	------------------------------------	----------------------------	-------------------------	---

LINE 165 CONTINUED

OCT 03, 73	1030	1	4.3	23000	29.2	8.2	2.1	29	--	--
OCT 03, 73	1040	2	.3	12000	29.2	8.0	4.8	64	--	46
			1.5	14000	29.2	8.0	4.0	53	--	--
			3.0	19000	29.5	8.1	2.6	37	--	--
			4.3	22000	29.3	8.1	2.1	30	--	--
APR 10, 74	1100	2	.3	42000	20.7	8.0	8.7	113	0.	71
			3.0	42000	20.4	7.9	9.0	117	10.	--
			5.2	42000	20.5	7.9	8.7	113	10.	--
JUN 19, 74	0955	2	.3	37000	30.8	8.4	2.1	32	50.	84
			1.5	40000	30.7	8.5	.6	9	60.	--
			2.4	43000	30.3	8.3	2.7	42	50.	--
			3.0	43000	29.0	8.0	5.1	78	40.	--
			4.6	46000	28.7	7.8	5.4	83	190.	--
OCT 03, 73	1050	3	.3	13000	29.2	8.0	4.6	61	--	48
			1.5	14000	29.3	8.0	4.4	59	--	--
			3.0	20000	29.6	8.1	2.6	36	--	--
			3.7	21000	29.7	8.1	2.6	36	--	--

LINE 902

OCT 03, 73	0945	30	.5	36000	28.0	8.2	6.0	87	--	297
			3.0	36000	27.9	8.2	6.0	87	--	--
			6.1	38000	27.7	8.2	5.8	84	--	--
			9.1	38000	27.4	8.2	5.4	78	--	--
			12.5	44000	27.4	7.7	.0	0	--	--
JUN 19, 74	0900	30	.6	46000	27.7	8.1	5.8	88	10.	198
			1.5	46000	27.7	8.1	5.9	89	5.	--
			3.0	46000	27.6	8.1	5.6	85	5.	--
			6.1	46000	27.1	8.1	3.3	49	5.	--
			9.1	46000	26.0	7.9	2.6	38	5.	--
			11.6	37000	25.7	7.7	1.0	14	0.	--

LINE 910

OCT 03, 73	0910	30	.5	38000	27.5	8.2	5.8	84	--	671
			3.0	38000	27.4	8.2	5.8	84	--	--
			6.1	38000	27.4	8.2	5.6	81	--	--
			9.1	40000	27.3	8.2	4.2	61	--	--
			12.2	46000	27.2	7.8	.0	0	--	--
			15.2	48000	27.0	7.8	.0	0	--	--
			18.6	48000	26.7	7.7	.0	0	--	--

TABLE 2B--QUALITY OF WATER IN THE BRAZOS ESTUARY,

1974 WATER YEAR

NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED SILICA (SiO2) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS-SOLVED PHOS-ORTHOPHOS (P) (MG/L)	TOTAL PHOS-PHOS (P) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (MG/L)
LINE 10												
OCT 03, 73	1210	2	.3	8.1	.40	.05	.08	.04	.90	1.1	0	5.5
			3.0	6.9	.60	.06	.07	.05	.82	1.3	--	--
LINE 20												
JUN 19, 74	1500	2	.3	8.9	.00	.04	.00	--	.12	2.3	--	--
LINE 50												
OCT 03, 73	1340	2	.3	9.3	.50	.05	.05	.04	.80	1.3	--	--
			9.4	9.4	.40	.07	.04	.05	.90	1.1	--	5.5
APR 10, 74	1335	2	.3	7.4	.03	.08	.00	--	.07	3.0	--	--
			4.6	7.1	.00	.08	.00	--	.09	3.0	--	--
JUN 19, 74	1330	2	.3	--	.01	.03	.00	--	.08	1.2	--	--
			7.0	--	.00	.09	.00	--	.03	2.5	--	--
LINE 100												
OCT 03, 73	1255	2	.3	10.0	.04	.00	.02	.04	.12	1.4	1	5.0
			2.7	5.9	.60	.18	.07	.03	.15	3.3	0	--
APR 10, 74	1235	2	.3	2.5	.22	2.30	.04	--	.15	3.6	--	3.0
			3.0	2.0	.57	.97	.06	--	.19	6.8	--	2.5
JUN 19, 74	1125	2	.3	5.8	.10	1.60	.04	--	.08	2.3	--	--
			3.0	3.1	.44	1.10	.10	--	.06	7.9	--	--
LINE 138												
OCT 03, 73	1115	2	.3	8.9	.20	.46	.05	.04	.09	2.5	0	2.5
			7.6	6.7	.40	.10	.07	.04	.15	3.5	--	2.5
APR 10, 74	1140	2	.3	3.1	.19	2.40	.03	--	.17	3.7	--	1.0
			6.4	1.0	.07	1.20	.02	--	.20	2.9	--	.0
JUN 19, 74	1020	2	.3	--	.16	1.70	.06	--	.04	2.2	--	--
			3.0	--	.17	2.60	.16	--	.03	2.6	--	--
			5.5	--	--	--	--	--	--	.7	--	--
LINE 902												
OCT 03, 73	0945	30	.5	.4	.00	.08	.01	.00	.15	.6	--	--
			12.5	2.8	.03	.17	.11	.02	.15	.7	--	--
JUN 19, 74	0900	30	1.5	.3	.00	.01	.01	--	.03	.8	--	--
			11.6	--	.14	.03	.02	--	.05	.8	--	--
LINE 910												
OCT 03, 73	0910	30	.5	.2	.00	.04	.01	.02	.03	.4	0	5.0
			18.6	2.2	.20	.04	.01	.01	.28	.5	--	--

TABLE 2C--QUALITY OF WATER IN THE BRAZOS ESTUARY,

1974 WATER YEAR

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (LAB)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG)	DISSOLVED SODIUM + POTASSIUM (NA+K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (SUM OF IONS) (MG/L)	
LINE 10												
UCT 03, 73	1210	2	.3 3.0	738 720	53.0 --	10.0 --	81 --	122 --	77 --	120 --	410 --	
LINE 20												
JUN 19, 74	1500	2	.3	667	56.0	13.0	72	195	61	100	409	
LINE 50												
UCT 03, 73	1340	2	.3 9.4	655 657	-- --	-- --	-- --	-- --	-- --	-- --	-- --	
LINE 100												
UCT 03, 73	1255	2	.3 2.7	3520 21400	90.0 200.0	66.0 490.0	560 4400	240 180	180 1100	940 7600	1970 13800	
APR 10, 74	1235	2	.3 3.0	37000 38000	310.0 380.0	690.0 810.0	7300 8200	179 170	1700 2000	13000 14000	23200 25600	
JUN 19, 74	1125	2	.3 3.0	25700 45000	240.0 290.0	480.0 810.0	5500 10000	215 185	1200 1900	9500 16000	17100 29400	
LINE 138												
UCT 03, 73	1115	2	.3 7.6	11300 20000	-- --	-- --	-- --	-- --	-- --	-- --	-- --	
LINE 902												
UCT 03, 73	0945	30	.5 12.5	40200 49300	-- --	-- --	-- --	-- --	-- --	-- --	-- --	
JUN 19, 74	0900	30	1.5	45900	390.0	1100.0	10000	141	2400	18000	32300	
LINE 910												
UCT 03, 73	0910	30	.5 18.6	40700 52700	310.0 --	980.0 --	8100 --	129 --	2000 --	14000 --	25800 --	

TABLE 2D--QUALITY OF WATER IN THE BRAZOS ESTUARY,

1974 WATER YEAR

SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED ALUMI-NUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	BOTTOM DEPOSIT ARSENIC (AS) (UG/GM)	DIS-SOLVED CADMIUM (CD) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	BOTTOM DEPOSIT CADMIUM (CD) (UG/GM)	DIS-SOLVED CADMIUM FLUORIDE (CF) (MG/L)
--------------------	------	------	----------------	----------------------------------	--------------------------------	---------------------------	-------------------------------------	--------------------------------	---------------------------	-------------------------------------	---

LINE 10

OCT 03, 73 1210 2 .3 -- 1 -- -- 0 -- -- .3

LINE 100

OCT 03, 73 1255 2 .3 -- 6 -- -- 0 -- -- .4
2.7 -- 1 -- -- 0 -- -- .6

LINE 910

OCT 03, 73 0910 30 .5 -- -- -- -- -- -- -- .7

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED CHROMIUM (CR) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	BOTTOM DEPOSIT COBALT (CO) (UG/GM)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	BOTTOM DEPOSIT COPPER (CU) (UG/GM)
--------------------	------	------	----------------	---------------------------------	----------------------------	-------------------------------	--------------------------	------------------------------------	-------------------------------	--------------------------	------------------------------------

LINE 10

OCT 03, 73 1210 2 .3 -- -- 0 -- -- 16 -- --

LINE 100

OCT 03, 73 1255 2 .3 -- -- 0 -- -- 6 -- --
2.7 -- -- 0 -- -- 12 -- --

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED CYANIDE (CN) (UG/L)	BOTTOM DEPOSIT CYANIDE (CN) (UG/GM)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL IRON (FE) (UG/L)	BOTTOM DEPOSIT IRON (FE) (UG/GM)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	BOTTOM DEPOSIT LEAD (PB) (UG/GM)
--------------------	------	------	----------------	--------------------------------	-------------------------------------	-----------------------------	------------------------	----------------------------------	-----------------------------	------------------------	----------------------------------

LINE 10

OCT 03, 73 1210 2 .3 -- -- 150 -- -- 2 -- --

LINE 100

OCT 03, 73 1255 2 .3 -- -- 50 -- -- 0 -- --
2.7 -- -- 60 -- -- 0 -- --

TABLE 2E--QUALITY OF WATER IN THE BRAZOS ESTUARY,

1974 WATER YEAR

INSECTICIDE AND HERBICIDE ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL ALDRIN (UG/L)	BOTTOM DEPOSIT ALDRIN (UG/KG)	TOTAL CHLOR-DANE (UG/L)	BOTTOM DEPOSIT CHLOR-DANE (UG/KG)	TOTAL DDE (UG/L)	BOTTOM DEPOSIT DDE (UG/KG)	TOTAL DDE (UG/L)	BOTTOM DEPOSIT DDE (UG/KG)
--------------------	------	------	----------------	---------------------	-------------------------------	-------------------------	-----------------------------------	------------------	----------------------------	------------------	----------------------------

LINE 10

OCT 03, 73 1210 2 .3 .00 -- .0 -- .00 -- .01 --

LINE 100

OCT 03, 73 1255 2 .3 .00 -- .0 -- .00 -- .00 --

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL DDT (UG/L)	BOTTOM DEPOSIT DDT (UG/KG)	TOTAL DRIN (UG/L)	BOTTOM DEPOSIT DRIN (UG/KG)	TOTAL ENDRIN (UG/L)	BOTTOM DEPOSIT ENDRIN (UG/KG)	TOTAL HEPTA-CHLOR (UG/L)	BOTTOM DEPOSIT HEPTA-CHLOR (UG/KG)
--------------------	------	------	----------------	------------------	----------------------------	-------------------	-----------------------------	---------------------	-------------------------------	--------------------------	------------------------------------

LINE 10

OCT 03, 73 1210 2 .3 .00 -- .00 -- .00 -- .00 --

LINE 100

OCT 03, 73 1255 2 .3 .00 -- .00 -- .00 -- .00 --

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	BOTTOM DEPOSIT HEPTA-CHLOR EPOXIDE (UG/KG)	TOTAL LINDANE (UG/L)	BOTTOM DEPOSIT LINDANE (UG/KG)	TOTAL PARA-THION (UG/L)	BOTTOM DEPOSIT PARA-THION (UG/L)	TOTAL MALA-THION (UG/L)	TOTAL DIAZ-INON (UG/L)
--------------------	------	------	----------------	----------------------------------	--	----------------------	--------------------------------	-------------------------	----------------------------------	-------------------------	------------------------

LINE 10

OCT 03, 73 1210 2 .3 .00 -- .00 -- .00 .00 .00 .01

LINE 100

OCT 03, 73 1255 2 .3 .00 -- .00 -- .00 .00 .00 .01

TABLE 2E--QUALITY OF WATER IN THE BRAZOS ESTUARY,

1974 WATER YEAR--CONTINUED

INSECTICIDE AND HERBICIDE ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL	BOTTOM	TOTAL	BOTTOM	TOTAL	BOTTOM	TOTAL	BOTTOM
				PCB (UG/L)	PCB (UG/KG)	2,4-D (UG/L)	2,4-D (UG/KG)	2,4,5-T (UG/L)	2,4,5-T (UG/KG)	SILVEX (UG/L)	SILVEX (UG/KG)

LINE 10

OCT 03, 73 1210 2 .3 .0 -- .05 -- .02 -- .00 --

LINE 100

OCT 03, 73 1255 2 .3 .0 -- .00 -- .00 -- .00 --

TABLE 2F--QUALITY OF WATER IN THE BRAZOS ESTUARY,

1974 WATER YEAR

BACTERIOLOGICAL AND CHLOROPHYLL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	IMMF- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	CHLORO- PHYLL A (UG/L)				
--------------------------	------	------	-------------------	--	---	---	---------------------------------	--	--	--	--

LINE 10

OCT 03, 73 1210 2 .3 1950 700 120 --

LINE 50

OCT 03, 73 1340 2 .3 1680 1220 280 --

APR 10, 74 1335 2 .3 13 8 35 --

LINE 100

OCT 03, 73 1255 2 .3 450 190 700 --

APR 10, 74 1235 2 .3 45 38 26 --

LINE 138

OCT 03, 73 1115 2 .3 460 110 700 --

APR 10, 74 1140 2 .3 15 7 32 --

JUN 19, 74 1020 2 .3 9 6 25 --

LINE 910

OCT 03, 73 0910 30 .5 6 1 1 --

East Matagorda Estuary

The East Matagorda estuary covers an area of about 56 square miles (145 km²) and consists of East Matagorda Bay, part of the Intracoastal Waterway, the tidal reaches of Caney Creek and Live Oak Bayou, and the tidal part of small tributaries (Figure 4). The maximum water depth at

mlw is 5 feet (1.5 m) in East Matagorda Bay and about 15 feet (4.6 m) in the Intracoastal Waterway.

Water-quality data (Table 3) were collected during October 1973 and April and June 1974.

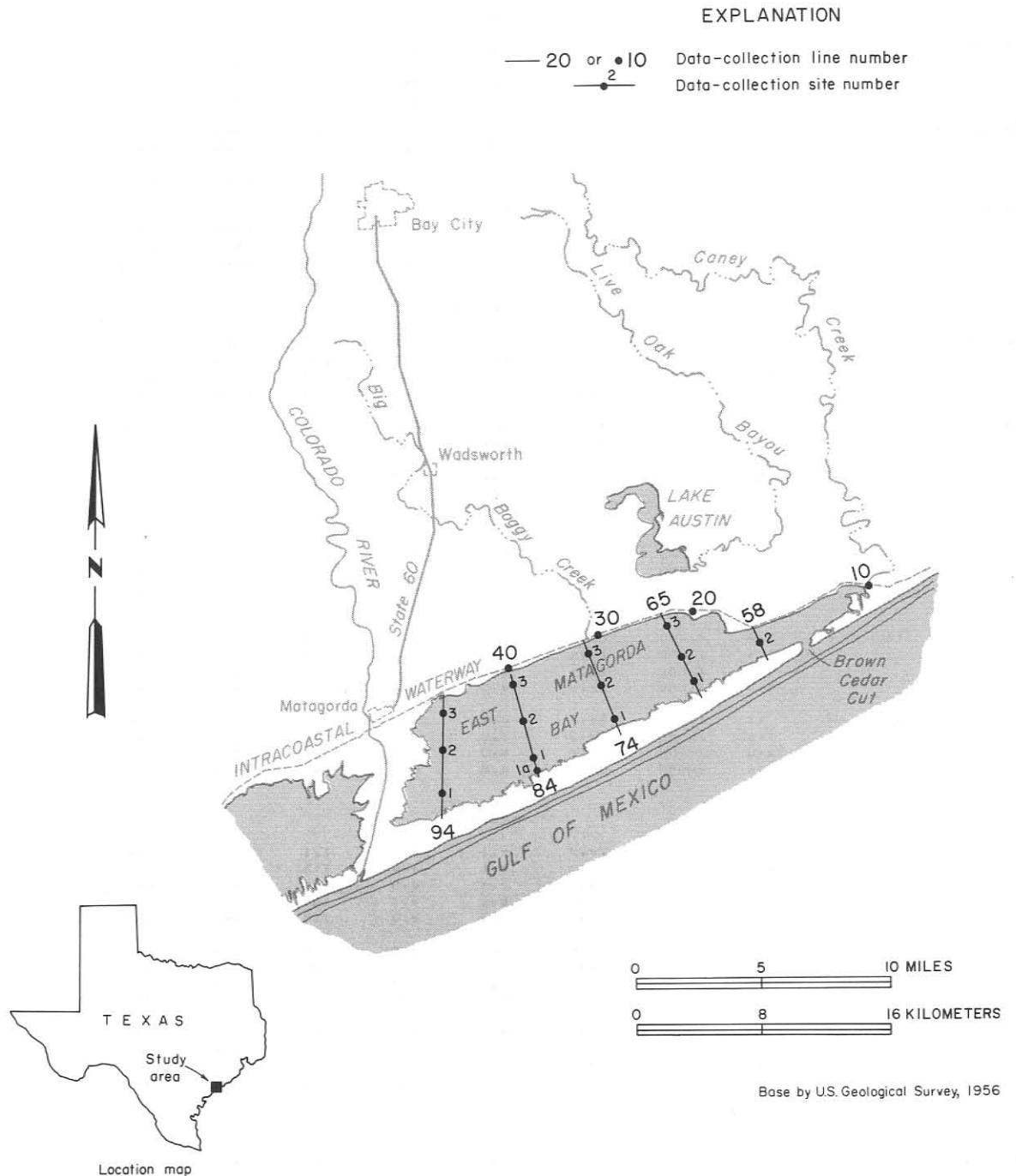


Figure 4.—Data-Collection Sites in the East Matagorda Estuary

TABLE 3A--QUALITY OF WATER IN THE EAST MATAGORDA ESTUARY,

1974 WATER YEAR

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS (FIELD))	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
LINE 10										
OCT 04, 73	0955	2	.3	12000	29.6	8.1	6.9	93	--	46
			1.5	14000	29.6	8.1	6.6	89	--	--
			3.0	14000	29.6	8.1	6.6	89	--	--
			5.2	14000	29.5	8.1	6.9	93	--	--
APR 11, 74	1205	2	.3	--	22.3	8.1	--	--	160.	15
			1.5	41000	22.2	8.1	8.1	107	150.	--
			3.0	41000	22.2	8.1	7.7	101	80.	--
			4.6	--	22.1	8.1	--	--	100.	--
JUN 20, 74	1055	2	.3	19000	29.0	8.0	6.3	86	120.	47
			1.5	20000	29.0	8.0	5.8	81	150.	--
			3.0	20000	28.9	8.0	5.8	81	190.	--
			4.9	20000	28.8	8.0	5.6	78	355.	--
LINE 20										
APR 11, 74	1240	2	.3	41000	21.9	8.1	6.2	108	70.	16
			1.5	41000	21.5	8.1	7.7	101	65.	--
			3.0	41000	22.2	8.1	7.6	100	85.	--
			4.6	41000	22.1	8.1	7.9	104	100.	--
JUN 20, 74	1120	2	.3	17000	29.3	8.2	7.5	103	110.	27
			1.5	20000	29.0	8.1	6.6	92	105.	--
			3.0	21000	28.9	8.1	6.3	88	100.	--
			4.9	21000	28.9	8.1	5.9	82	100.	--
LINE 30										
OCT 04, 73	1105	2	.3	14000	29.4	8.2	7.8	105	--	58
			1.5	14000	28.9	8.1	7.5	100	--	--
			3.0	15000	29.0	8.2	7.2	97	--	--
			4.9	15000	29.1	8.2	7.2	97	--	--
APR 11, 74	1300	2	.3	25000	22.6	8.0	9.1	114	25.	--
			1.5	25000	22.5	8.0	8.7	109	40.	--
			3.0	25000	22.5	8.0	8.6	108	45.	--
			4.6	25000	22.5	8.0	8.6	108	50.	--
JUN 20, 74	1135	2	.3	16000	29.7	8.2	7.1	99	20.	58
			1.5	20000	29.2	8.0	6.0	83	110.	--
			3.0	20000	29.2	8.0	5.8	81	140.	--
			4.6	20000	29.2	8.0	6.0	83	150.	--
LINE 40										
OCT 04, 73	1250	2	.3	9200	29.7	8.1	9.1	121	--	36
			1.5	10000	29.4	8.1	8.6	115	--	--
			3.0	10000	29.4	8.1	8.5	113	--	--
			4.6	11000	29.4	8.1	8.1	108	--	--
			6.1	12000	29.5	8.2	8.2	111	--	--
APR 11, 74	1325	2	.3	29000	22.0	8.0	7.1	89	85.	23
			1.5	28000	22.0	8.0	7.0	88	100.	--
			3.0	34000	22.0	8.0	6.8	87	275.	--
			5.5	--	21.8	8.0	--	--	300.	--
JUN 20, 74	1150	2	.3	24000	29.8	8.0	6.4	90	35.	42
			1.5	24000	29.6	8.0	6.2	87	60.	--
			3.0	25000	29.4	8.0	6.0	86	120.	--
			4.1	25000	29.5	8.0	5.5	78	120.	--
LINE 58										
OCT 04, 73	1030	2	.3	30000	28.6	8.5	7.6	110	--	48

TABLE 3A--QUALITY OF WATER IN THE EAST MATAGORDA ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCT- ANCE (MICRO- MHO/S) (FIELD)	TEMPER- ATURE (DEG. C)	PH	DIS- SOLVED OXYGEN (MG/L)	PERCENT SATUR- ATION	TUR- BIDITY (JTU)	TRANS- PARENCY SECCHI DISK (CM)
--------------------------	------	------	-------------------	--	------------------------------	----	------------------------------------	----------------------------	-------------------------	---

LINE 58 CONTINUED

OCT 04, 73	1030	2	1.2	36000	28.4	8.4	5.9	86	--	--
APR 11, 74	1645	2	.3 1.2	40000 40000	22.2 22.2	8.0 8.0	6.3 6.6	83 87	150. 150.	28 --
JUN 20, 74	1025	2	.3 1.2	40000 40000	28.4 28.3	8.2 8.2	5.6 5.3	82 78	110. 100.	48 --

LINE 74

OCT 04, 73	1150	1	.3 1.2	17000 17000	29.8 28.7	8.5 8.5	9.3 8.0	129 110	-- --	56 --
APR 11, 74	1515	1	.3 1.2	29000 29000	21.9 21.9	7.9 7.9	6.6 7.0	83 88	50. 50.	33 --
JUN 20, 74	1010	1	.3 1.2	23000 24000	28.4 28.4	8.2 8.2	6.4 6.1	84 84	70. 100.	56 --
OCT 04, 73	1130	2	.3 1.2	17000 17000	29.1 28.6	8.4 8.4	8.9 7.7	122 105	-- --	43 --
APR 11, 74	1455	2	.3 1.2	26000 26000	21.7 21.7	7.9 7.9	6.0 6.4	74 79	90. 130.	25 --
JUN 20, 74	1000	2	.3 1.5	23000 23000	28.5 28.4	8.2 8.2	6.6 6.4	92 88	100. 90.	51 --
OCT 04, 73	1120	3	.3 1.2	17000 17000	29.4 28.5	8.4 8.4	9.0 7.7	123 104	-- --	25 --
APR 11, 74	1440	3	.3 .9	20000 20000	21.6 21.6	7.9 7.9	7.1 7.1	86 86	-- --	15 --
JUN 20, 74	0955	3	.3 1.2	19000 19000	28.4 28.3	8.2 8.1	6.6 5.5	89 74	120. 150.	30 --

LINE 94

OCT 04, 73	1205	1	.3 .9	18000 18000	29.3 28.8	8.4 8.3	10.2 9.6	140 132	-- --	41 --
APR 11, 74	1550	1	.3 .9	28000 28000	22.0 22.1	8.1 8.1	6.6 7.2	85 90	40. 30.	30 --
JUN 20, 74	0915	1	.3 1.5	22000 22000	28.1 28.0	8.1 8.1	5.8 5.6	79 79	70. 80.	58 --
OCT 04, 73	1225	2	.3 1.5	17000 17000	29.4 29.0	8.3 8.3	9.3 8.3	127 114	-- --	51 --
APR 11, 74	1600	2	.3 1.5	28000 28000	22.1 22.0	8.1 8.1	7.2 5.9	90 74	100. 110.	30 --
JUN 20, 74	0910	2	.3 1.2	23000 24000	28.0 27.8	8.2 8.2	6.2 6.2	85 84	90. 90.	36 --
OCT 04, 73	1235	3	.3 1.2	15000 17000	29.6 28.7	8.4 8.2	9.1 7.5	123 103	-- --	30 --
APR 11, 74	1605	3	.3 1.5	28000 26000	22.2 22.3	8.1 8.1	5.9 6.2	74 77	100. 150.	29 --
JUN 20, 74	0900	3	.3 1.2	24000 24000	27.9 27.7	8.0 8.0	6.4 6.0	88 81	50. 70.	34 --

TABLE 3a--QUALITY OF WATER IN THE EAST MATAGORDA ESTUARY,

1974 WATER YEAR

NOTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED SILICA		TOTAL AMMONIA NITROGEN		TOTAL NITRITE NITRATE		PHOS- PHORUS		BIO- CHEMICAL DEMAND		PHENOLS (UG/L)	TOTAL ORGANIC CARBON (MG/L)
				(SI02) (MG/L)	(N) (MG/L)	(N) (MG/L)	(N) (MG/L)	(P) (MG/L)	(P) (MG/L)	(BOD) (MG/L)					
LINE 10															
OCT 09, 73	0955	2	.3	11.0	.00	.00	.01	.04	.12	1.8	1	5.0			
				5.2	4.9	.00	.00	.01	.03	.12	1.5	0	12.0		
APR 11, 74	1205	2	.3	1.3	.00	.18	.03	--	.25	2.0	--	.0			
				4.6	1.6	.00	.17	.03	--	.25	1.6	--	.0		
JUN 20, 74	1055	2	.3	--	.02	.09	.01	--	.07	1.3	--	--			
				4.9	--	.00	.13	.01	--	.09	1.6	--	--		
LINE 40															
OCT 09, 73	1250	2	.3	9.1	.06	.00	.01	.04	.09	1.7	--	8.0			
				6.1	7.6	.00	.18	.01	.03	.11	1.8	0	7.0		
APR 11, 74	1325	2	.3	3.0	.00	.09	.01	--	.15	1.4	--	5.0			
				5.5	2.4	.00	.09	.01	--	.15	1.3	--	--		
JUN 20, 74	1150	2	.3	3.5	.07	.04	.03	--	.09	1.1	--	--			
				4.1	--	.07	.05	.03	--	.07	1.2	--	--		
LINE 58															
OCT 09, 73	1030	2	.3	4.0	.00	.00	.00	.02	.05	1.9	1	4.5			
				1.2	2.2	.00	.00	.00	.01	.05	1.7	--	--		
APR 11, 74	1645	2	.3	1.6	.00	.12	.04	--	.24	2.7	--	--			
JUN 20, 74	1025	2	.3	1.1	.01	.04	.01	--	.10	1.6	--	--			
LINE 74															
OCT 09, 73	1130	2	.3	6.5	.00	.00	.01	.02	.07	1.7	0	6.0			
				1.2	7.0	.00	.00	.00	.03	.07	1.8	0	7.0		
APR 11, 74	1455	2	.3	3.8	.00	.05	.02	--	.17	2.7	--	--			
				1.2	3.9	.00	.05	.01	--	.16	2.3	--	--		
JUN 20, 74	1000	2	.3	--	.00	.01	.00	--	.03	.6	--	--			
				1.5	--	.00	.02	.00	--	.09	.8	--	--		
LINE 94															
OCT 09, 73	1205	1	.3	6.1	.00	.00	.01	.02	.06	2.3	0	--			
				.9	6.0	.00	.00	.01	.02	.07	2.1	--	--		
APR 11, 74	1550	1	.9	3.8	.00	.06	.02	--	.16	1.2	--	--			
JUN 20, 74	0915	1	.3	--	.00	.01	.00	--	.02	.6	--	--			
OCT 09, 73	1225	2	.3	--	--	--	--	--	--	--	--	--		4.5	

TABLE 3C--QUALITY OF WATER IN THE EAST MATAGORDA ESTUARY,

1974 WATER YEAR

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CON- DUCTANCE (MICRO- MHOS) (LAB)	DIS- SOLVED CALCIUM (CA) (MG/L)	DIS- SOLVED MAGNE- SIUM (MG)	DIS- SOLVED SODIUM + POTAS- SIUM (NA+K) (MG/L)	DIS- SOLVED BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLORIDE (CL) (MG/L)	DIS- SOLVED (SUM OF CONSTI- TUENTS) (MG/L)
--------------------------	------	------	-------------------	---	---	--	--	--	--	--	---

LINE 10

OCT 04, 73	0955	2	.3 5.2	12500 14100	--	--	--	--	--	--	--
------------	------	---	-----------	----------------	----	----	----	----	----	----	----

LINE 40

OCT 04, 73	1256	2	.3 6.1	9510 12600	96.0 --	200.0 --	1700 --	152 --	430 --	3000 --	5520 --
APR 11, 74	1325	2	.3	28900	270.0	640.0	5600	161	1500	10000	18200
JUN 20, 74	1150	2	.3	24500	190.0	500.0	5600	147	1500	9300	17300

LINE 58

OCT 04, 73	1030	2	.3 1.2	30300 36200	230.0 --	750.0 --	5700 --	139 --	1400 --	10000 --	18400 --
APR 11, 74	1645	2	.3	40000	270.0	940.0	8600	142	2000	15000	27100
JUN 20, 74	1025	2	.3	40500	270.0	880.0	9200	146	2000	15000	27600

LINE 74

OCT 04, 73	1130	2	.3 1.2	16900 17000	--	--	--	--	--	--	--
------------	------	---	-----------	----------------	----	----	----	----	----	----	----

LINE 94

OCT 04, 73	1205	1	.3 .9	16000 17600	--	--	--	--	--	--	--
------------	------	---	----------	----------------	----	----	----	----	----	----	----

TABLE 3D--QUALITY OF WATER IN THE EAST MATAGURDA ESTUARY,

1974 WATER YEAR

SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED ALUMI-NUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	BOTTOM DEPOSIT ARSENIC (AS) (UG/GM)	DIS-SOLVED CADMIUM (CD) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	BOTTOM DEPOSIT CADMIUM (CD) (UG/GM)	DIS-SOLVED FLUORIDE (F) (MG/L)
--------------------	------	------	----------------	----------------------------------	--------------------------------	---------------------------	-------------------------------------	--------------------------------	---------------------------	-------------------------------------	--------------------------------

LINE 40

OCT 04, 73 1250 2 .3 -- 2 -- -- 1 -- -- .4

LINE 56

OCT 04, 73 1030 2 .3 -- 5 -- -- -- 0 -- -- .6
 1.2 -- -- -- 4 -- -- 0 --

LINE 94

OCT 04, 73 1205 1 .3 -- 8 -- -- -- 0 -- -- 0 --
 .9 -- -- -- 1 -- -- 0 --

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED CHROMIUM (CR) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	BOTTOM DEPOSIT COBALT (CO) (UG/GM)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	BOTTOM DEPOSIT COPPER (CU) (UG/GM)
--------------------	------	------	----------------	---------------------------------	----------------------------	-------------------------------	--------------------------	------------------------------------	-------------------------------	--------------------------	------------------------------------

LINE 40

OCT 04, 73 1250 2 .3 -- -- 0 -- -- -- 11 -- --

LINE 58

OCT 04, 73 1030 2 .3 -- -- 0 -- -- -- 10 -- --
 1.2 -- -- -- 8 -- -- 12

LINE 94

OCT 04, 73 1205 1 .3 -- -- 0 -- -- -- 7 -- --
 .9 -- -- -- 2 -- -- 1

TABLE 3D--QUALITY OF WATER IN THE EAST MATAGORDA ESTUARY,

1974 WATER YEAR--CONTINUED

SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-	BOTTOM	DIS-	TOTAL	BOTTOM	DIS-	TOTAL	BOTTOM	DIS-
				SOLVED CYANIDE (CN) (UG/L)	DEPOSIT CYANIDE (CN) (UG/GM)	SOLVED IRON (FE) (UG/L)	IRON (FE) (UG/L)	DEPOSIT IRON (FE) (UG/GM)	SOLVED LEAD (PB) (UG/L)	LEAD (PB) (UG/L)	DEPOSIT LEAD (PB) (UG/GM)	
LINE 40												
OCT 09, 73	1250	2	.3	--	--	80	--	--	2	--	--	--
LINE 58												
OCT 09, 73	1030	2	.3 1.2	-- --	-- --	60 --	-- --	-- 19000	0 --	-- --	-- --	-- 8
LINE 94												
OCT 09, 73	1205	1	.3 .9	-- --	-- --	60 --	-- --	-- 4000	5 --	-- --	-- --	-- 2

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-	DIS-	TOTAL	BOTTOM	DIS-	TOTAL	BOTTOM	DIS-	DIS-
				SOLVED LITH- (L) (UG/L)	SOLVED MAN- GANESE (MN) (UG/L)	MAN- GANESE (MN) (UG/L)	DEPOSIT MAN- GANESE (MN) (UG/GM)	MER- CURY (HG) (UG/L)	MER- CURY (HG) (UG/L)	DEPOSIT MER- CURY (HG) (UG/GM)	SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)
LINE 40												
OCT 09, 73	1250	2	.3	30	0	--	--	.1	--	--	3	1400
LINE 58												
OCT 09, 73	1030	2	.3 1.2	80 --	0 --	-- --	-- 380	.0 --	-- --	-- .0	0 --	3800 --
LINE 94												
OCT 09, 73	1205	1	.3 .9	50 --	25 --	-- --	-- 120	.0 --	-- --	-- .0	0 --	2400 --

TABLE 3D--QUALITY OF WATER IN THE EAST MATAGURDA ESTUARY,

1974 WATER YEAR--CONTINUED

SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED ZINC (7N) (UG/L)	TOTAL ZINC (ZN) (UG/L)	BOTTOM DEPOSIT ZINC (ZN) (UG/GM)
--------------------------	------	------	-------------------	--	---------------------------------	--

LINE 40

OCT 04, 73 1250 2 .3 50 -- --

LINE 58

OCT 04, 73 1030 2 .3 50 -- --
1.2 -- -- 52

LINE 94

OCT 04, 73 1205 1 .3 40 -- --
.9 -- -- 10

TABLE 2E--QUALITY OF WATER IN THE EAST MATAGORDA ESTUARY,

1974 WATER YEAR

INSECTICIDE AND HERBICIDE ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL ALDRIN (UG/L)	BOTTOM DEPOSIT ALDRIN (UG/KG)	TOTAL CHLOR-DANE (UG/L)	BOTTOM DEPOSIT CHLOR-DANE (UG/KG)	TOTAL DDD (UG/L)	BOTTOM DEPOSIT DDD (UG/KG)	TOTAL DDE (UG/L)	BOTTOM DEPOSIT DDE (UG/KG)
--------------------	------	------	----------------	---------------------	-------------------------------	-------------------------	-----------------------------------	------------------	----------------------------	------------------	----------------------------

LINE 58

OCT 04, 73	1030	2	.3 1.2	.00 --	-- .0	.0 --	-- .0	.00 --	-- .0	.00 --	-- .8
------------	------	---	-----------	-----------	----------	----------	----------	-----------	----------	-----------	----------

LINE 74

OCT 04, 73	1130	2	1.2	--	.0	--	.0	--	.0	--	.0
------------	------	---	-----	----	----	----	----	----	----	----	----

LINE 94

OCT 04, 73	1205	1	.9	--	.0	--	.0	--	.0	--	.0
------------	------	---	----	----	----	----	----	----	----	----	----

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL DDT (UG/L)	BOTTOM DEPOSIT DDT (UG/KG)	TOTAL DRIN (UG/L)	BOTTOM DEPOSIT DRIN (UG/KG)	TOTAL ENDRIN (UG/L)	BOTTOM DEPOSIT ENDRIN (UG/KG)	TOTAL HEPTA-CHLOR (UG/L)	BOTTOM DEPOSIT HEPTA-CHLOR (UG/KG)
--------------------	------	------	----------------	------------------	----------------------------	-------------------	-----------------------------	---------------------	-------------------------------	--------------------------	------------------------------------

LINE 58

OCT 04, 73	1030	2	.3 1.2	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0
------------	------	---	-----------	-----------	----------	-----------	----------	-----------	----------	-----------	----------

LINE 74

OCT 04, 73	1130	2	1.2	--	.0	--	.0	--	.0	--	.0
------------	------	---	-----	----	----	----	----	----	----	----	----

LINE 94

OCT 04, 73	1205	1	.9	--	.0	--	.0	--	.0	--	.0
------------	------	---	----	----	----	----	----	----	----	----	----

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	BOTTOM DEPOSIT HEPTA-CHLOR EPOXIDE (UG/KG)	TOTAL LINDANE (UG/L)	BOTTOM DEPOSIT LINDANE (UG/KG)	TOTAL PARA-THION (UG/L)	TOTAL METHYL-THION (UG/L)	TOTAL MALA-THION (UG/L)	TOTAL DIAZ-INON (UG/L)
--------------------	------	------	----------------	----------------------------------	--	----------------------	--------------------------------	-------------------------	---------------------------	-------------------------	------------------------

LINE 58

OCT 04, 73	1030	2	.3 1.2	.00 --	-- .0	.00 --	-- .0	.00 --	.00 --	.00 --	.00 --
------------	------	---	-----------	-----------	----------	-----------	----------	-----------	-----------	-----------	-----------

LINE 74

OCT 04, 73	1130	2	1.2	--	.0	--	.0	--	--	--	--
------------	------	---	-----	----	----	----	----	----	----	----	----

LINE 94

OCT 04, 73	1205	1	.9	--	.0	--	.0	--	--	--	--
------------	------	---	----	----	----	----	----	----	----	----	----

TABLE 3E--QUALITY OF WATER IN THE EAST MATAGORDA ESTUARY,

1974 WATER YEAR--CONTINUED

INSECTICIDE AND HERBICIDE ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL	BOTTOM	TOTAL	BOTTOM	TOTAL	BOTTOM	TOTAL	BOTTOM
				PCB (UG/L)	PCB (UG/KG)	2,4-D (UG/L)	2,4-D (UG/KG)	2,4,5-T (UG/L)	2,4,5-T (UG/KG)	SILVEX (UG/L)	SILVEX (UG/KG)

LINE 58

OCT 04, 73	1030	2	.3 1.2	.0 --	-- .0	.00 --	-- --	.00 --	-- --	.00 --	-- --
------------	------	---	-----------	----------	----------	-----------	----------	-----------	----------	-----------	----------

LINE 74

OCT 04, 73	1130	2	.3 1.2	-- --	-- .0	.00 --	-- --	.00 --	-- --	.00 --	-- --
------------	------	---	-----------	----------	----------	-----------	----------	-----------	----------	-----------	----------

LINE 74

OCT 04, 73	1205	1	.3 .9	-- --	-- .0	.00 --	-- --	.00 --	-- --	.00 --	-- --
------------	------	---	----------	----------	----------	-----------	----------	-----------	----------	-----------	----------

TABLE 3F--QUALITY OF WATER IN THE EAST MATAGORDA ESTUARY,

1974 WATER YEAR

BACTERIOLOGICAL AND CHLOROPHYLL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	CHLORO- PHYLL A (UG/L)				
--------------------------	------	------	-------------------	--	---	---	---------------------------------	--	--	--	--

LINE 10

OCT 04, 73	0955	2	.3	28	26	51	--				
APR 11, 74	1205	2	.3	16	7	*	--				
JUN 20, 74	1055	2	.3	33	15	21	--				

LINE 40

OCT 04, 73	1250	2	.3	24	8	30	--				
APR 11, 74	1325	2	.3	19	6	25	.00				
JUN 20, 74	1150	2	.3	9	4	1	--				

LINE 58

OCT 04, 73	1030	2	.3	10	1	4	--				
APR 11, 74	1645	2	.3	--	--	--	.00				
JUN 20, 74	1025	2	.3	1	1	4	--				

LINE 74

OCT 04, 73	1130	2	.3	12	1	12	--				
APR 11, 74	1455	2	.3	30	16	42	.60				

LINE 94

OCT 04, 73	1205	1	.3	8	1	6	--				
APR 11, 74	1550	1	.3	5	1	8	.10				
JUN 20, 74	0915	1	.3	1	1	1	--				

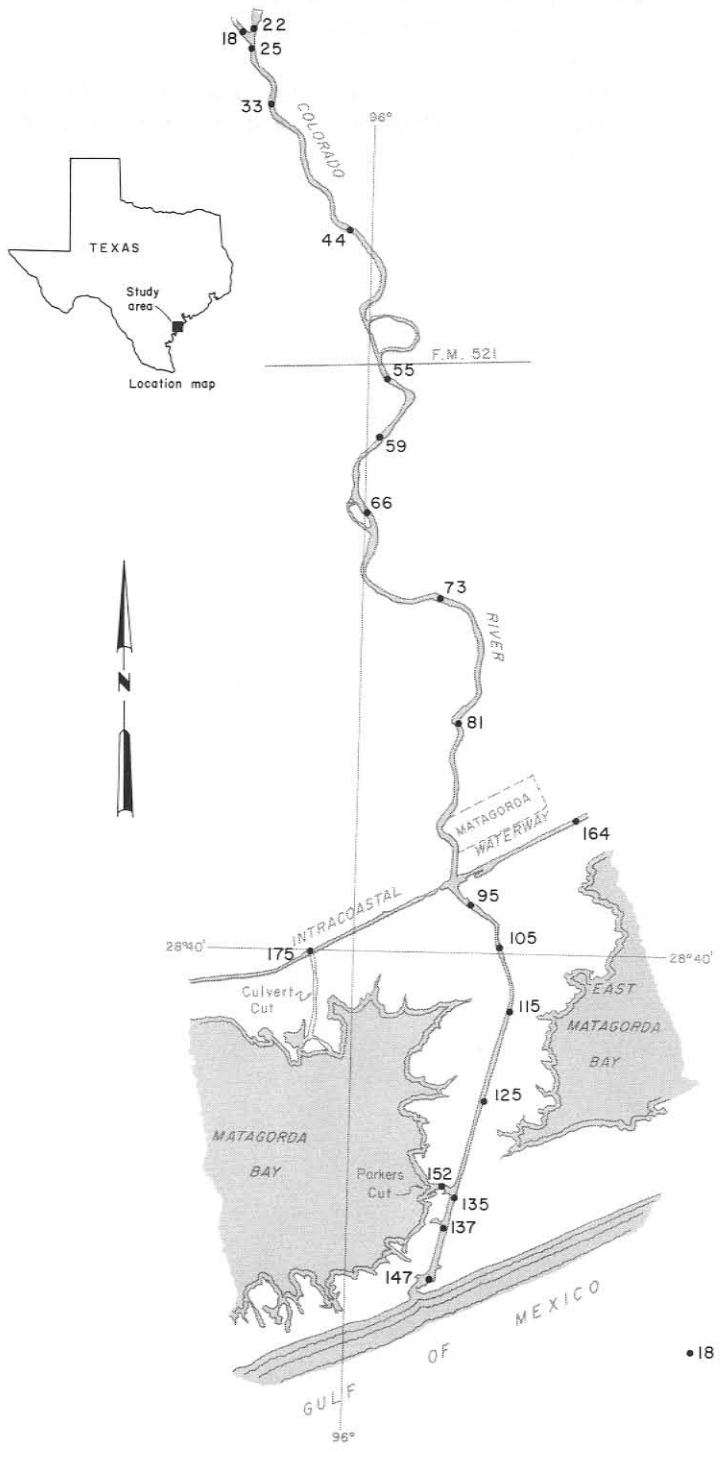
* - TOO NUMEROUS TO COUNT

Colorado Estuary

The Colorado estuary covers an area of about 2 square miles (5 km^2) and consists of the tidal part of the Colorado River and part of the Intracoastal Waterway (Figure 5). The minimum depth at mlw is about 6 feet (1.8 m) in the river

channel and about 15 feet (4.6 m) in the Intracoastal Waterway.

Water-quality data (Table 4) were collected during October 1973 and April and June 1974.



EXPLANATION
 • 18 Data-collection line number

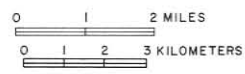


Figure 5
 Data-Collection Sites in the Colorado Estuary

Base by U.S. Geological Survey, 1956

TABLE 9A--QUALITY OF WATER IN THE COLORADO ESTUARY,

1974 WATER YEAR

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICROHMS/CM)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
LINE 18										
OCT 04, 73	0930	2	.3	370	26.3	7.9	8.0	98	--	23
			1.5	350	26.2	7.9	8.1	99	--	--
			3.0	400	26.1	7.9	8.6	105	--	--
APR 11, 74	1525	2	.3	800	23.3	8.3	9.2	107	45.	30
			1.5	800	23.1	8.2	8.4	97	45.	--
			3.0	820	23.1	8.2	8.1	93	50.	--
			4.6	820	23.0	8.2	7.8	90	55.	--
JUN 20, 74	1350	2	.3	580	31.3	8.4	9.0	121	40.	51
			1.5	620	30.8	8.4	7.4	97	45.	--
			3.7	650	30.7	8.4	6.7	88	60.	--
LINE 55										
OCT 04, 73	1010	2	.3	420	27.0	7.8	8.0	99	--	28
			1.5	420	27.0	7.8	8.2	101	--	--
			3.0	400	26.9	7.8	8.0	99	--	--
			4.3	440	26.6	7.8	8.6	106	--	--
APR 11, 74	1555	2	.3	5000	23.6	8.3	9.7	114	30.	46
			1.5	5000	23.2	8.3	9.2	107	25.	--
			2.4	--	23.4	8.0	--	--	--	--
			3.0	14000	23.2	7.9	4.3	51	20.	--
			4.6	22000	23.4	7.5	1.4	18	10.	--
LINE 81										
OCT 04, 73	1030	2	.3	580	28.0	8.0	8.6	109	--	47
			1.5	580	27.8	8.0	8.2	104	--	--
			3.0	590	27.8	8.0	8.1	102	--	--
			7.3	600	27.4	7.9	7.8	98	--	--
APR 11, 74	1620	2	.3	9800	23.3	8.2	7.2	86	10.	74
			1.5	--	23.0	8.1	--	--	10.	--
			3.0	36000	22.0	8.0	5.9	76	10.	--
			7.6	--	21.9	8.0	--	--	10.	--
JUN 20, 74	1435	2	.3	3300	31.1	8.2	10.1	136	40.	38
			.9	4900	30.9	8.0	9.7	131	20.	--
			1.5	17000	29.9	7.8	6.6	91	30.	--
			2.4	29000	29.7	7.8	6.5	92	30.	--
			3.0	35000	29.6	7.8	5.6	83	30.	--
			4.6	37000	29.4	7.8	5.2	77	45.	--
			6.1	37000	29.4	7.7	4.8	71	90.	--
			8.8	40000	29.4	7.7	4.3	65	--	--
LINE 95										
OCT 04, 73	1125	2	.3	910	28.1	7.9	9.6	122	--	51
			1.5	900	27.9	7.9	8.9	113	--	--
			3.0	1500	27.9	8.0	8.6	109	--	--
			5.5	3000	28.2	7.9	8.4	108	--	--
APR 11, 74	1635	2	.3	27000	23.2	8.1	8.0	101	10.	86
			1.5	38000	22.4	8.1	7.8	103	10.	--
			3.0	42000	22.3	8.1	7.6	103	20.	--
			4.6	--	22.3	8.0	--	--	70.	--
JUN 20, 74	1515	2	.3	5100	31.2	8.2	9.3	127	0.	38
			.9	13000	30.8	8.0	8.7	120	10.	--
			1.5	25000	30.2	7.9	7.4	105	20.	--
			3.0	43000	29.6	7.9	7.0	111	35.	--

TABLE 4A--QUALITY OF WATER IN THE COLORADO ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS) (F1FLD)	TEMPER- ATURE (DEG. C)	PH	DIS- SOLVED OXYGEN (MG/L)	PERCENT SATUR- ATION	TUR- BIDITY (JTU)	TRANS- PARENCY SECCHI DISK (CM)
LINE 95 CONTINUED										
JUN 20, 74	1515	2	5.5	43000	29.6	7.9	7.0	111	160.	--
LINE 125										
OCT 04, 73	1140	2	.3	1100	28.2	7.8	10.0	127	--	--
			3.0	1300	28.0	7.7	9.6	122	--	--
			5.8	1600	28.0	7.7	9.4	119	--	--
APR 11, 74	1655	2	.3	39000	22.6	8.1	10.6	139	20.	71
			1.5	42000	22.5	8.1	9.8	132	20.	--
			3.0	42000	22.6	8.1	9.2	124	20.	--
			5.5	42000	22.6	8.0	8.8	119	60.	--
JUN 20, 74	1530	2	.3	40000	31.0	8.0	8.0	125	40.	109
			1.5	43000	29.7	8.0	7.7	120	60.	--
			2.4	43000	29.5	8.0	6.9	107	60.	--
			3.0	43000	29.4	7.9	6.7	104	65.	--
			5.8	43000	29.4	7.8	5.7	89	95.	--
LINE 147										
OCT 04, 73	1210	2	.3	2500	29.8	7.8	8.3	109	--	53
			3.0	3000	29.0	7.7	7.2	94	--	--
			5.2	3300	28.9	7.7	7.0	91	--	--
APR 11, 74	1720	2	.3	42000	22.6	8.1	10.2	136	120.	15
			1.5	40000	22.5	8.1	10.0	133	120.	--
JUN 20, 74	1545	2	.3	43000	30.2	8.0	7.0	109	40.	42
			.9	43000	30.5	8.0	5.8	90	20.	--
LINE 152										
OCT 04, 73	1155	2	.3	1200	28.1	7.8	10.2	129	--	--
			1.5	1400	28.0	7.9	8.9	113	--	--
			2.1	2600	28.0	7.8	9.9	127	--	--
			2.4	20000	27.7	7.7	9.1	123	--	--
			3.4	26000	27.6	7.7	7.7	105	--	--
APR 11, 74	1705	2	.3	42000	22.5	8.1	10.0	135	80.	20
			1.5	42000	22.5	8.1	10.0	135	80.	--
			4.0	42000	22.5	8.1	9.0	122	85.	--
JUN 20, 74	1500	2	.3	19000	30.7	8.0	8.8	122	100.	41
			1.5	20000	30.2	7.9	7.6	108	120.	--
			3.0	20000	30.0	7.8	7.5	105	125.	--
			4.3	20000	30.0	7.8	6.7	94	--	--
LINE 164										
OCT 04, 73	1110	2	.3	2900	28.6	8.1	8.6	112	--	36
			3.0	3300	28.4	8.0	8.5	109	--	--
			5.5	7500	28.6	8.0	8.6	113	--	--
APR 11, 74	1435	2	.3	35000	22.0	8.1	6.9	88	15.	--
			1.5	34000	21.9	8.1	6.5	83	15.	--
			3.0	37000	21.9	8.1	6.6	85	25.	--
			4.6	37000	21.9	8.2	6.8	87	40.	--
JUN 20, 74	1205	2	.3	26000	29.9	8.0	7.1	101	15.	56
			1.5	27000	29.5	8.0	6.3	90	20.	--
			3.0	27000	29.5	8.0	6.2	88	30.	--
			5.5	27000	29.4	8.0	5.9	84	60.	--
LINE 175										
OCT 04, 73	1050	2	.3	7500	28.8	8.1	8.0	105	--	38

TABLE 9A--QUALITY OF WATER IN THE COLORADO ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCT- ANCE (MICRO- MHQS) (FIELD)	TEMPER- ATURE (DEG. C)	PH	DIS- SOLVED OXYGEN (MG/L)	PERCENT SATUR- ATION	TUR- BIDITY (JTU)	TRANS- PARENCY SECCHI DISK (CM)
--------------------------	------	------	-------------------	---	------------------------------	----	------------------------------------	----------------------------	-------------------------	---

LINE 175 CONTINUED

OCT 04, 73	1050	2	3.0	9700	29.0	8.0	8.1	107	--	--
			5.5	11000	28.9	8.0	8.6	113	--	--
APR 11, 74	1020	2	.3	30000	21.4	8.0	6.4	80	30.	53
			4.3	32000	21.5	8.0	6.4	81	30.	--

TABLE 4B--QUALITY OF WATER IN THE COLORADO ESTUARY,

1974 WATER YEAR

NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DISSOLVED SILICA (SiO ₂) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	ORTHOPHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (MG/L)
LINE 18													
OCT 04, 73	0930	2	.3 3.0	11.0 10.0	.70 .70	.00 .00	.01 .01	.07 .06	.16 .16	.6 .6	0 --	0 --	.0 --
APR 11, 74	1525	2	.3	9.6	.01	.07	.00	--	.11	4.6	--	--	7.0
JUN 20, 74	1350	2	.3	8.6	.00	.00	.00	--	.01	2.8	--	--	--
LINE 81													
OCT 04, 73	1030	2	.3 7.3	10.0 10.0	.60 .50	.09 .00	.01 .01	.07 .06	.13 .15	.7 .6	0 0	0 0	-- 4.0
APR 11, 74	1620	2	.3 7.6	6.8 2.6	.01 .00	.18 --	.01 .01	-- --	.08 .11	2.0 2.4	-- --	-- --	-- --
JUN 20, 74	1435	2	.3 8.8	--	.30 .03	.03 .19	.01 .06	-- --	.10 .26	1.5 2.4	-- --	-- --	-- --
LINE 95													
OCT 04, 73	1125	2	.3 5.5	10.0 10.0	.50 .30	.04 .02	.02 .02	.07 .05	.15 .28	.8 .6	0 0	0 0	3.0 8.5
APR 11, 74	1635	2	.3 4.6	4.4 1.5	.01 .01	.11 .07	.01 .01	-- --	.11 .16	2.5 2.1	-- --	-- --	-- --
JUN 20, 74	1515	2	.3 5.5	9.4 --	.22 .01	.02 .05	.01 .01	-- --	.09 .04	1.2 1.0	-- --	-- --	-- --

TABLE 4C--QUALITY OF WATER IN THE COLORADO ESTUARY,

1974 WATER YEAR

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECFIC CON- DUCTANCE (MICRO- MHO/S)	DIS- SOLVED CALCIUM (CA) (MG/L)	DIS- SOLVED MAGNE- SIUM (MG)	DIS- SOLVED SODIUM + POTAS- SIUM (NA+K) (MG/L)	DIS- SOLVED BICAR- BONATE (HCU3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLORIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF SUNSTI- TUENTS) (MG/L)

LINE 18

OCT 04, 73	0930	2	.3	445	44.0	13.0	29	149	34	46	254
			3.0	458	--	--	--	--	--	--	--
APR 11, 74	1525	2	.3	780	70.0	23.0	66	258	48	100	448
JUN 20, 74	1350	2	.3	572	49.0	25.0	29	191	33	68	308

LINE 81

OCT 04, 73	1030	2	.3	570	--	--	--	--	--	--	--
			7.3	575	--	--	--	--	--	--	--

LINE 95

OCT 04, 73	1125	2	.3	1040	55.0	28.0	120	194	59	200	567
			5.5	3480	--	--	--	--	--	--	--
APR 11, 74	1635	2	.3	26900	270.0	590.0	5600	176	1300	9400	17300
JUN 20, 74	1515	2	.3	5380	76.0	110.0	970	165	250	1600	3120

TABLE 4D--QUALITY OF WATER IN THE COLORADO ESTUARY,

1974 WATER YEAR

SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED ALUMI-NUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	BOTTOM DEPOSIT ARSENIC (AS) (UG/GM)	DIS-SOLVED CADMIUM (CD) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	BOTTOM DEPOSIT CADMIUM (CD) (UG/GM)	DIS-SOLVED CADMIUM FLUORIDE (F) (MG/L)
--------------------	------	------	----------------	----------------------------------	--------------------------------	---------------------------	-------------------------------------	--------------------------------	---------------------------	-------------------------------------	--

LINE 18

OCT 04, 73 0930 2 .3 -- 2 -- -- 0 -- -- .4

LINE 95

OCT 04, 73 1125 2 .3 -- 1 -- -- 0 -- -- .3

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED CHROMIUM (CR) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	BOTTOM DEPOSIT COBALT (CO) (UG/GM)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	BOTTOM DEPOSIT COPPER (CU) (UG/GM)
--------------------	------	------	----------------	---------------------------------	----------------------------	-------------------------------	--------------------------	------------------------------------	-------------------------------	--------------------------	------------------------------------

LINE 18

OCT 04, 73 0930 2 .3 -- -- 1 -- -- 6 -- --

LINE 95

OCT 04, 73 1125 2 .3 -- -- 0 -- -- 4 -- --

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED CYANIDE (CN) (MG/L)	BOTTOM DEPOSIT CYANIDE (CN) (UG/GM)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL IRON (FE) (UG/L)	BOTTOM DEPOSIT IRON (FE) (UG/GM)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	BOTTOM DEPOSIT LEAD (PB) (UG/GM)
--------------------	------	------	----------------	--------------------------------	-------------------------------------	-----------------------------	------------------------	----------------------------------	-----------------------------	------------------------	----------------------------------

LINE 18

OCT 04, 73 0930 2 .3 -- -- 60 -- -- 0 -- --

LINE 95

OCT 04, 73 1125 2 .3 -- -- 50 -- -- 1 -- --

TABLE 4D--QUALITY OF WATER IN THE COLORADO ESTUARY,

1974 WATER YEAR--CONTINUED

SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	BOTTOM DEPOSIT MANGANESE (MN) (UG/GM)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY (HG) (UG/L)	BOTTOM DEPOSIT MERCURY (HG) (UG/GM)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)
LINE 18												
OCT 04, 73	0930	2	.3	0	25	--	--	.0	--	--	5	390
LINE 95												
OCT 04, 73	1125	2	.3	0	13	--	--	.1	--	--	2	480

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	BOTTOM DEPOSIT ZINC (ZN) (UG/GM)
LINE 16						
OCT 04, 73	0930	2	.3	30	--	--
LINE 95						
OCT 04, 73	1125	2	.3	30	--	--

TABLE 4E--QUALITY OF WATER IN THE COLORADO ESTUARY,

1974 WATER YEAR

INSECTICIDE AND HERBICIDE ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL ALDRIN (UG/L)	BOTTOM DEPOSIT ALDRIN (UG/KG)	TOTAL CHLOR-DANE (UG/L)	BOTTOM DEPOSIT CHLOR-DANE (UG/KG)	TOTAL DDD (UG/L)	BOTTOM DEPOSIT DDD (UG/KG)	TOTAL DDE (UG/L)	BOTTOM DEPOSIT DDE (UG/KG)
--------------------	------	------	----------------	---------------------	-------------------------------	-------------------------	-----------------------------------	------------------	----------------------------	------------------	----------------------------

LINE 18

OCT 04, 73 0930 2 .3 .00 -- .0 -- .00 -- .00 --

LINE 95

OCT 04, 73 1125 2 .3 .00 -- .0 -- .00 -- .00 --

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	BOTTOM DEPOSIT HEPTA-CHLOR EPOXIDE (UG/KG)	TOTAL LINDANE (UG/L)	BOTTOM DEPOSIT LINDANE (UG/KG)	TOTAL PARA-THION (UG/L)	BOTTOM DEPOSIT PARA-THION (UG/L)	TOTAL METHYL-THION (UG/L)	TOTAL MALA-THION (UG/L)	TOTAL DIAZ-INON (UG/L)
--------------------	------	------	----------------	----------------------------------	--	----------------------	--------------------------------	-------------------------	----------------------------------	---------------------------	-------------------------	------------------------

LINE 18

OCT 04, 73 0930 2 .3 .00 -- .00 -- .00 .00 .00 .02

LINE 95

OCT 04, 73 1125 2 .3 .00 -- .00 -- .00 .00 .00 .00

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL DDT (UG/L)	BOTTOM DEPOSIT DDT (UG/KG)	TOTAL DRIN (UG/L)	BOTTOM DEPOSIT DRIN (UG/KG)	TOTAL ENDRIN (UG/L)	BOTTOM DEPOSIT ENDRIN (UG/KG)	TOTAL HEPTA-CHLOR (UG/L)	BOTTOM DEPOSIT HEPTA-CHLOR (UG/KG)
--------------------	------	------	----------------	------------------	----------------------------	-------------------	-----------------------------	---------------------	-------------------------------	--------------------------	------------------------------------

LINE 18

OCT 04, 73 0930 2 .3 .00 -- .00 -- .00 -- .00 --

LINE 95

OCT 04, 73 1125 2 .3 .00 -- .00 -- .00 -- .00 --

TABLE 4E--QUALITY OF WATER IN THE COLORADO ESTUARY,

1974 WATER YEAR--CONTINUED

INSECTICIDE AND HERBICIDE ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL		BOTTOM DEPOSIT		TOTAL		BOTTOM DEPOSIT		TOTAL		BOTTOM DEPOSIT	
				PCB (UG/L)	PCB (UG/KG)	2,4-D (UG/L)	2,4-D (UG/KG)	2,4,5-T (UG/L)	2,4,5-T (UG/KG)	SILVEX (UG/L)	SILVEX (UG/KG)				

LINE 18

OCT 04, 73 0930 2 .3 .0 -- .00 -- .02 -- .00 --

LINE 95

OCT 04, 73 1125 2 .3 .0 -- .00 -- .00 -- .00 --

TABLE 4F--QUALITY OF WATER IN THE COLORADO ESTUARY,

1974 WATER YEAR

BACTERIOLOGICAL AND CHLOROPHYLL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	IMME- DIATE COLI- FORM (COL. PER	FECAL COLI- FORM (COL. PER	STREP- TOCOCCI (COL- ONIES PER	CHLORO- PHYLL A (UG/L)
--------------------------	------	------	-------------------	---	--	--	---------------------------------

LINE 18

OCT 04, 73	0930	2	.3	190	170	190	--
APR 11, 74	1525	2	.3	*	*	46	6.70
JUN 20, 74	1350	2	.3	8	5	10	--

LINE 95

OCT 04, 73	1125	2	.3	500	41	74	--
APR 11, 74	1635	2	.3	35	17	30	1.90
JUN 20, 74	1515	2	.3	21	1	44	--

* - TOO NUMEROUS TO COUNT

Lavaca-Tres Palacios Estuary

The Lavaca-Tres Palacios estuary covers about 350 square miles (910 km²) and consists of the tidal parts of the Lavaca and Navidad Rivers, Tres Palacios Creek and other tributaries, Lavaca Bay, Cox Bay, Keller Bay, Carancahua Bay, Tres Palacios Bay, Matagorda Bay, Matagorda Bay Entrance Channel, Pass Cavallo, and part of the Intracoastal Waterway (Figure 6). Water depth at mlw is 13 feet

(4.0 m) or less in Matagorda Bay, except in the Matagorda Ship Channel, which is more than 40 feet (12.2 m) deep. The rivers generally are less than 15 feet (4.6 m) deep.

Water-quality data (Table 5) were collected during October 1973 and April and June 1974.

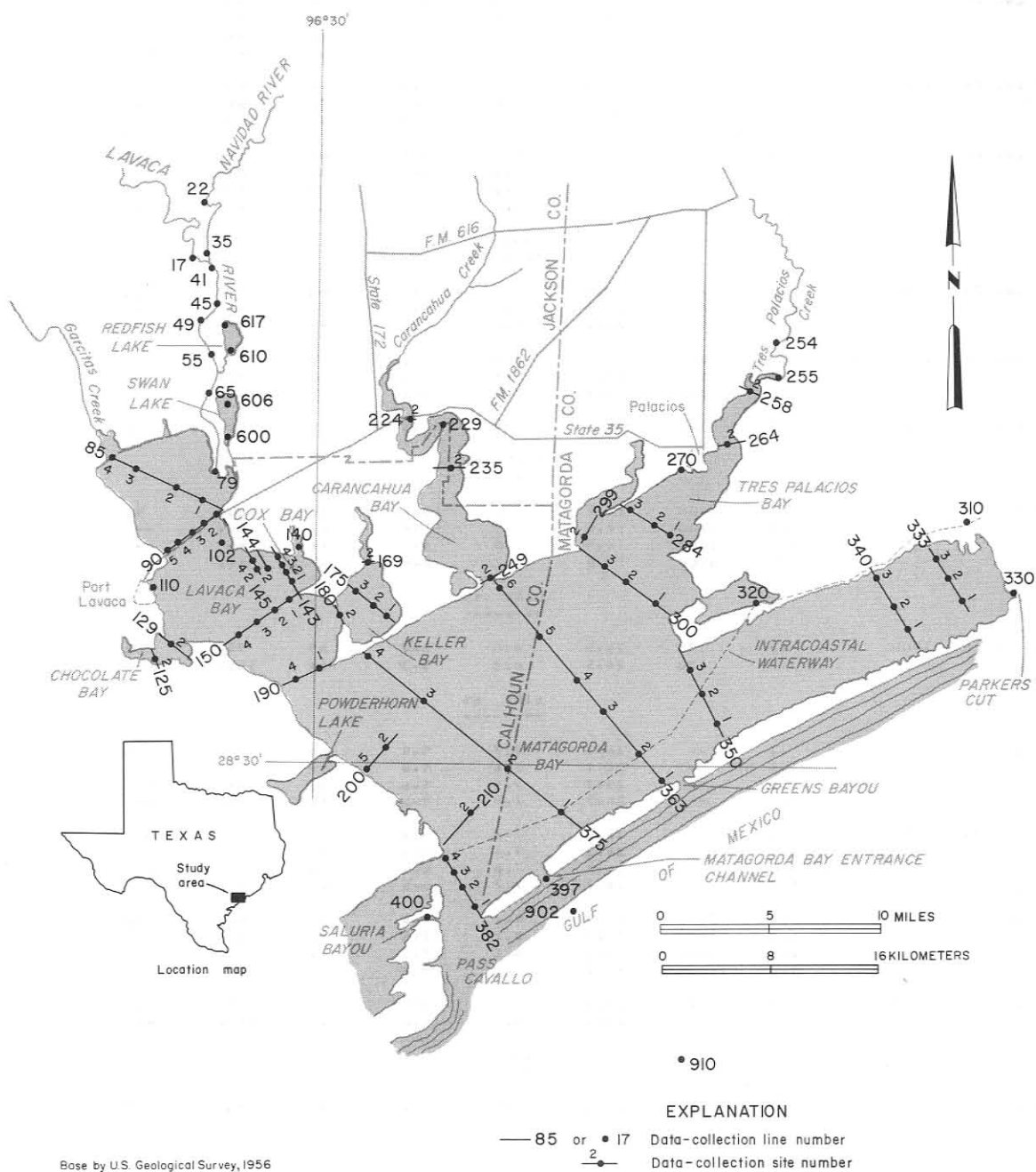


Figure 6.—Data-Collection Sites in the Lavaca-Tres Palacios Estuary

TABLE 5A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1974 WATER YEAR

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
LINE 17										
OCT 08, 73	1855	2	.3	--	25.8	7.6	4.6	56	--	15
			1.5	--	25.2	7.4	4.6	55	--	--
			3.0	--	25.0	7.4	4.4	52	--	--
			4.0	--	25.0	7.5	4.6	55	--	--
APR 15, 74	1525	2	.3	850	17.7	7.9	6.8	71	40.	46
			1.5	850	17.6	7.9	7.0	73	55.	--
			3.4	800	17.1	8.0	6.9	71	70.	--
JUN 13, 74	1845	2	.3	200	27.0	6.3	5.6	69	60.	20
			1.5	200	26.5	6.3	5.6	68	60.	--
			3.0	200	26.5	6.3	5.6	68	70.	--
			3.7	200	26.5	6.4	5.6	68	80.	--
LINE 22										
OCT 08, 73	1820	2	.3	--	26.1	7.5	7.2	88	--	18
			1.5	--	26.1	7.4	7.1	87	--	--
			3.0	--	26.2	7.5	8.0	98	--	--
APR 15, 74	1545	2	.3	800	17.8	7.9	6.2	65	70.	32
			1.5	850	18.3	7.9	6.2	65	70.	--
			2.7	850	18.4	8.0	6.4	67	100.	--
JUN 13, 74	1825	2	.3	190	26.0	6.4	5.6	68	80.	18
LINE 41										
APR 15, 74	1615	2	.3	1400	17.7	8.0	6.8	71	60.	41
			1.5	1600	18.0	8.0	6.4	67	50.	--
			2.7	1700	18.4	7.8	6.7	71	--	--
			4.3	6500	17.0	7.7	6.4	67	65.	--
LINE 45										
JUN 13, 74	1900	2	.3	175	26.5	6.0	5.2	64	95.	16
			3.8	170	26.5	6.2	5.3	64	105.	--
LINE 65										
OCT 08, 73	1925	2	.3	--	26.1	7.7	4.9	60	--	15
			1.5	--	26.1	7.6	4.8	59	--	--
			3.0	--	25.7	7.5	4.6	55	--	--
			4.6	--	25.7	7.5	4.0	48	--	--
OCT 09, 73	1150	2	.3	--	26.8	7.6	5.8	72	--	--
			1.5	--	26.6	7.6	5.8	72	--	--
			3.0	--	26.7	7.6	5.9	73	--	--
			4.9	--	26.7	7.7	5.6	69	--	--
APR 15, 74	1635	2	.3	7000	18.4	8.2	7.6	82	65.	56
			1.2	7500	18.4	8.2	7.4	80	60.	--
			2.4	8000	18.3	8.2	7.0	75	50.	--
			4.0	16000	18.2	7.9	5.8	64	80.	--
JUN 13, 74	1915	2	.3	170	26.5	6.0	5.0	60	110.	14
			3.7	170	26.5	6.0	5.0	60	120.	--
LINE 79										
JUN 13, 74	1935	2	.3	210	26.0	5.8	5.2	63	140.	13

TABLE 5A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCT- ANCE (MICRO- MHO/S)	TEMPER- ATURE (DEG. C)	PH	DIS- SOLVED OXYGEN (MG/L)	PERCENT SATUR- ATION	TUR- BIDITY (JTU)	TRANS- PARENCY SECCHI DISK (CM)
LINE 79 CONTINUED										
JUN 13, 74	1935	2	2.4	230	26.0	6.1	5.2	63	180.	--
LINE 85										
OCT 09, 73	1050	1	.3	--	27.0	8.4	--	--	--	38
			1.5	--	27.0	8.4	--	--	--	--
			2.7	--	27.1	8.3	--	--	--	--
APR 15, 74	1700	1	.3	20000	17.3	8.1	8.4	92	75.	29
			2.1	21000	17.2	8.0	8.8	97	155.	--
JUN 13, 74	1950	1	.3	220	26.0	6.3	5.3	63	140.	13
			2.1	240	26.0	6.5	5.8	70	130.	--
OCT 09, 73	1100	2	.3	--	27.0	8.4	--	--	--	25
			1.5	--	27.1	8.4	--	--	--	--
APR 15, 74	1710	2	.3	26000	17.4	8.1	7.0	80	195.	10
			1.5	26000	17.2	8.0	7.6	85	240.	--
JUN 13, 74	1955	2	.3	950	26.5	6.9	6.0	73	140.	13
			1.7	900	26.0	6.9	6.0	73	150.	--
OCT 09, 73	1110	3	.3	--	27.1	8.3	7.6	95	--	20
			1.8	--	27.0	8.4	7.5	94	--	--
APR 15, 74	1720	3	.3	26000	17.5	8.1	7.2	82	175.	10
			1.5	26000	17.4	8.1	7.4	84	180.	--
JUN 13, 74	2000	3	.3	3300	28.0	7.3	7.3	93	80.	20
			1.8	3300	28.0	7.2	7.3	93	250.	--
OCT 09, 73	1120	4	.3	--	27.2	8.3	--	--	--	15
			1.2	--	27.2	8.3	--	--	--	--
JUN 13, 74	2015	4	.3	380	28.0	6.2	6.4	81	75.	18
			.9	320	27.0	6.3	5.0	61	80.	--
LINE 90										
APR 15, 74	1740	1	.3	30000	17.4	8.1	7.4	86	60.	24
			1.5	29000	17.3	8.0	7.7	86	80.	--
OCT 09, 73	1035	2	.3	--	27.1	8.3	--	--	--	36
			1.5	--	27.0	8.3	--	--	--	--
			2.4	--	27.0	8.2	--	--	--	--
JUN 13, 74	2100	2	.3	3800	27.5	7.9	7.9	100	50.	--
			1.4	3800	27.5	7.9	8.1	102	60.	--
APR 15, 74	1745	3	.3	31000	17.6	8.0	7.6	88	95.	15
			1.5	31000	17.5	8.1	7.5	87	110.	--
			2.7	31000	17.0	8.1	7.4	85	100.	--
JUN 13, 74	2040	3	.3	1600	27.0	7.6	6.4	79	125.	--
			1.5	1900	27.0	7.7	6.5	81	120.	--
			2.7	2800	27.0	7.7	6.9	86	190.	--
APR 15, 74	1755	5	.3	26000	17.3	8.0	8.0	90	150.	15
			1.5	26000	17.3	8.0	7.8	88	150.	--
LINE 143										
OCT 09, 73	1025	1	.3	16000	27.3	8.4	5.8	76	19.	65
			2.1	17000	27.3	8.4	6.2	83	35.	--
APR 16, 74	0940	1	.3	34000	17.4	8.2	10.8	127	20.	62

TABLE 5A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCT- ANCE (MICRO- MHUS) (FIELD)	TEMPER- ATURE (DEG. C)	PH	DIS- SOLVED OXYGEN (MG/L)	PERCENT SATUR- ATION	TUR- BIDITY (JTU)	TRANS- PARENCY SECCHI DISK (CM)
LINE 143 CONTINUED										
APR 16, 74	0940	1	1.8	34000	16.9	8.0	10.7	124	40.	--
JUN 13, 74	1855	1	.3 1.8	13000 15000	27.6 27.5	8.2 8.1	8.5 8.2	112 109	35. 70.	96 --
OCT 09, 73	1020	2	.3 2.1	16000 16000	27.4 27.4	8.4 8.4	6.8 6.4	89 84	26. 31.	48 --
APR 16, 74	0955	2	.3 2.0	35000 35000	17.2 17.1	8.0 8.0	11.0 10.4	129 122	20. 30.	72 --
JUN 13, 74	1900	2	.3 1.8	-- --	27.6 27.5	8.2 8.3	-- --	-- --	225. 300.	52 --
OCT 09, 73	1015	3	.3 1.8	15000 15000	27.5 27.7	8.4 8.4	6.9 6.8	90 89	54. 62.	30 --
APR 16, 74	1000	3	.3 1.8	35000 35000	17.3 17.2	8.0 8.0	10.0 10.4	119 122	20. 50.	71 --
JUN 13, 74	1905	3	.3 1.8	12000 12000	27.6 27.5	8.3 8.3	9.1 9.1	120 120	35. 55.	46 --
OCT 09, 73	1010	4	.3 1.5	14000 14000	30.3 28.4	8.4 8.3	7.4 6.9	101 91	-- --	28 --
APR 16, 74	1015	4	.3 1.5	34000 40000	17.8 17.9	8.0 8.1	11.0 9.9	131 121	25. 50.	64 --
JUN 13, 74	1910	4	.3 1.5	-- --	28.4 27.5	8.2 8.3	-- --	-- --	75. 160.	37 --
LINE 150										
OCT 09, 73	1040	1	.5 2.3	17000 17000	27.3 27.5	8.5 8.4	6.5 6.5	87 87	22. 22.	61 --
NOV 04, 73	0837	1	.3 1.5	22000 22500	16.3 16.3	7.7 7.6	8.7 8.2	95 89	-- --	69 --
APR 16, 74	0925	1	.3 1.2	34000 34000	17.1 16.9	8.0 7.9	9.9 10.5	115 122	20. 20.	61 --
JUN 13, 74	1850	1	.3 1.2	-- --	27.6 27.4	8.2 8.2	-- --	-- --	45. 50.	53 --
OCT 09, 73	1045	2	.5 1.5 2.7	17000 17000 17000	27.6 27.6 27.5	8.4 8.4 8.4	6.6 6.7 6.1	88 89 81	21. 25. 30.	57 -- --
APR 16, 74	0915	2	.3 1.5 2.3	35000 35000 35000	17.0 17.0 16.9	8.1 8.1 8.1	9.0 9.4 9.4	106 111 111	30. 30. 30.	55 -- --
JUN 13, 74	1840	2	.3 1.8	12000 12000	27.4 27.2	8.2 8.1	9.1 8.9	117 114	60. 90.	41 --
OCT 09, 73	1050	3	.5 1.5 2.7	15000 15000 15000	27.6 27.5 27.6	8.4 8.4 8.3	6.9 6.8 5.4	91 89 71	24. 32. --	53 -- --
APR 16, 74	0905	3	.3 1.7	37000 37000	17.1 17.0	8.1 8.1	9.0 8.9	106 105	45. 60.	-- --
JUN 13, 74	1830	3	.3 1.8	-- --	27.3 27.3	8.1 8.1	-- --	-- --	70. 75.	38 --
OCT 09, 73	1100	4	.5	12000	27.7	8.4	7.3	95	30.	51

TABLE 5A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
--------------------	------	------	----------------	---	----------------------	----	-------------------------	--------------------	-----------------	-------------------------------

LINE 150 CONTINUED

OCT 09, 73	1100	4	1.5	12000	27.4	8.4	6.9	90	22.	--
			3.0	15000	27.3	8.4	6.5	86	27.	--
			4.6	19000	28.2	8.2	5.0	68	30.	--
			6.1	26000	28.3	8.2	3.1	43	11.	--
			9.1	36000	28.5	8.2	1.9	28	9.	--
			11.6	36000	28.6	8.1	1.6	24	18.	--
APR 16, 74	0845	4	.3	34000	17.4	8.1	8.3	98	30.	66
			1.5	35000	17.6	8.1	8.1	96	30.	--
			3.0	37000	18.2	8.1	7.9	95	35.	--
			6.1	41000	18.9	8.1	7.6	95	25.	--
			9.1	44000	19.0	8.1	7.3	92	30.	--
			11.0	44000	18.1	8.0	7.5	94	40.	--
JUN 13, 74	1825	4	.3	6500	27.4	8.1	8.6	109	80.	--
			1.5	--	27.4	8.1	--	--	50.	--
			3.0	--	27.3	8.1	--	--	50.	--
			6.1	--	27.4	7.8	--	--	30.	--
			11.0	28000	27.5	8.0	2.8	39	140.	--

LINE 190

JUN 13, 74	1810	1	.3	--	27.2	8.2	--	--	45.	41
			1.5	--	27.1	8.2	--	--	80.	--
JUN 13, 74	1800	3	.3	--	27.3	8.2	--	--	30.	41
			1.5	--	27.3	8.1	--	--	40.	--
			3.0	--	27.3	7.8	--	--	40.	--
			6.1	--	27.3	7.8	--	--	90.	--
			11.0	--	27.0	7.8	--	--	300.	--
OCT 08, 73	1735	4	.3	18000	28.1	--	7.3	99	10.	79
			1.5	18000	28.1	--	7.3	99	10.	--
			3.0	19000	28.2	--	6.7	91	11.	--
			6.1	38000	28.6	--	3.5	52	60.	--
			9.1	38000	28.6	--	3.5	52	60.	--
			11.9	38000	28.6	--	3.9	58	47.	--
OCT 09, 73	1125	4	.5	16000	27.9	8.4	7.5	100	18.	74
			1.5	16000	27.8	8.4	7.4	99	14.	--
			3.0	17000	27.6	8.4	6.8	91	15.	--
			4.6	18000	27.5	8.4	6.9	92	18.	--
			6.1	25000	28.0	8.4	5.1	71	10.	--
			9.1	36000	28.6	8.2	2.8	41	17.	--
			12.3	36000	28.7	8.1	3.5	51	--	--
			APR 15, 74	1655	4	.5	36000	18.4	8.0	9.1
3.0	38000	18.8	8.0	9.1	112	40.	--			
6.1	39000	19.0	8.0	8.6	106	50.	--			
9.1	42000	19.0	8.0	8.4	105	50.	--			
11.3	40000	19.2	8.0	8.1	101	--	--			
APR 16, 74	1045	4	.3	37000	18.0	8.1	10.9	131	40.	46
			1.5	38000	18.0	8.1	10.8	132	40.	--
			3.0	39000	18.2	8.1	9.9	121	30.	--
			6.1	44000	19.0	8.1	10.1	128	30.	--
			9.1	44000	19.0	8.1	10.0	127	40.	--
			11.9	44000	18.8	8.0	9.7	123	90.	--

LINE 200

OCT 09, 73	1310	2	.5	22000	28.1	8.5	9.3	127	9.	84
			1.5	22000	28.2	8.6	9.0	123	10.	--
			3.0	25000	28.1	8.5	7.5	104	12.	--
			4.6	33000	28.5	8.3	4.2	62	15.	--
			6.1	38000	28.6	8.3	4.7	70	16.	--
			9.1	38000	28.6	8.4	5.7	85	41.	--

TABLE SA--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
--------------------	------	------	----------------	---	----------------------	----	-------------------------	--------------------	-----------------	-------------------------------

LINE 200 CONTINUED

OCT 09, 73	131U	2	11.7	38000	28.6	8.3	5.8	87	18.	--
APR 16, 74	121U	2	.3	40000	19.0	8.2	11.4	142	10.	86
			1.5	41000	18.9	8.2	9.8	122	15.	--
			3.0	41000	18.9	8.2	8.3	104	30.	--
			6.1	44000	19.0	8.2	7.0	89	30.	--
			9.1	44000	19.0	8.1	6.3	80	50.	--
			11.0	44000	19.2	8.1	6.3	80	70.	--
JUN 13, 74	1735	2	.3	--	27.2	8.1	--	--	20.	74
			1.5	--	27.1	8.1	--	--	30.	--
			3.0	--	27.2	7.9	--	--	40.	--
			6.1	--	27.2	7.8	--	--	50.	--
			10.7	--	27.1	7.5	--	--	90.	--
APR 16, 74	1225	5	.3	37000	18.3	8.2	11.0	133	15.	71
			1.2	35000	19.2	8.2	11.0	134	20.	--
JUN 13, 74	1745	5	.3	--	26.9	8.1	--	--	65.	71
			1.2	--	26.9	8.0	--	--	70.	--
			2.4	--	26.9	8.2	--	--	70.	--

LINE 210

OCT 09, 73	134U	2	.5	33000	28.4	8.6	10.4	151	8.	119
			1.5	33000	28.4	8.6	10.6	154	9.	--
			3.0	33000	28.4	8.6	10.1	146	9.	--
			4.6	34000	28.2	8.5	9.1	132	12.	--
			6.1	36000	28.1	8.5	8.6	125	11.	--
			9.1	39000	28.5	8.5	6.8	100	30.	--
			11.7	38000	28.6	8.4	6.7	100	97.	--
APR 16, 74	125U	2	.5	44000	19.3	8.2	9.7	124	30.	64
			1.5	44000	19.3	8.2	9.7	124	30.	--
			3.0	44000	19.2	8.2	9.9	125	30.	--
			6.1	44000	19.3	8.2	9.9	127	30.	--
			9.1	44000	19.4	8.2	9.1	117	40.	--
			11.0	44000	19.4	8.0	8.5	109	180.	--
JUN 13, 74	160U	2	.3	25700	26.8	8.1	9.3	126	10.	69
			1.5	--	26.8	8.1	--	--	10.	--
			3.0	--	26.9	8.0	--	--	10.	--
			6.1	--	27.1	7.9	--	--	10.	--
			9.1	--	26.9	7.9	--	--	10.	--
			12.2	34400	26.3	7.9	5.8	71	25.	--

LINE 224

OCT 08, 73	1705	2	.3	760	28.0	8.4	--	--	--	--
			1.2	760	28.0	8.3	7.6	96	--	--
APR 15, 74	140U	2	.3	10000	17.1	8.3	8.5	90	80.	19
			.9	10000	17.0	8.3	8.1	86	100.	--
JUN 14, 74	090U	2	.3	220	27.0	6.9	5.0	62	90.	15
			1.1	220	26.5	7.2	5.2	63	85.	--

LINE 235

JUN 14, 74	092U	2	.3	1900	26.5	8.1	7.6	95	70.	18
			1.7	7000	26.5	7.9	6.4	80	85.	--

LINE 249

OCT 08, 73	1655	2	.3	22000	29.3	--	7.3	103	41.	34
------------	------	---	----	-------	------	----	-----	-----	-----	----

TABLE 5A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,
1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS											
DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)	
LINE 249 CONTINUED											
OCT 08, 73	1655	2	2.1	22000	29.4	--	7.2	101	110.	--	
APR 15, 74	1550	2	.5 1.5	36000 39000	18.5 18.0	8.0	9.2 8.5	111 104	100. 90.	29 --	
JUN 14, 74	0925	2	.3 1.8	17000 18000	25.6 24.7	8.2 8.1	7.5 6.9	96 87	50. 50.	62 --	
LINE 254											
OCT 08, 73	1545	2	.3 1.5 2.4 3.7	600 600 600 600	28.3 27.8 27.3 27.5	7.9 7.8 7.7 7.8	6.6 6.2 5.6 6.3	84 78 70 79	-- -- -- --	46 -- -- --	
APR 15, 74	1215	2	.3 1.5 3.0	3200 3200 3200	18.2 18.2 18.0	7.7 7.7 7.8	6.3 6.1 6.3	67 65 67	80. 90. 80.	24 -- --	
JUN 14, 74	1300	2	.3 1.5 3.0 3.7	255 260 260 320	29.0 28.0 28.0 28.0	7.3 7.3 7.3 7.3	4.8 4.2 3.9 4.1	62 53 49 52	70. 75. 90. 90.	18 -- -- --	
LINE 258											
JUN 14, 74	1245	2	.3 1.1	700 750	28.0 28.0	8.0 8.0	8.0 7.1	101 90	100. 105.	15 --	
LINE 264											
OCT 08, 73	1450	2	.3 1.5	14000 14000	28.0 28.0	8.3 8.3	7.0 7.2	92 95	-- --	51 --	
APR 15, 74	1145	2	.3 1.2	29000 28000	17.6 17.3	8.0 8.0	8.2 8.1	94 92	125. 160.	13 --	
JUN 14, 74	1225	2	.3 .9 1.2 1.5	3100 3600 3900 14000	28.0 28.0 28.0 27.5	8.6 8.6 8.4 8.0	11.5 12.3 9.7 4.8	147 158 124 62	50. 50. 45. 90.	25 -- -- --	
LINE 270											
JUN 14, 74	1210	2	.3 1.5 3.0 3.5	18000 18000 21000 21000	27.5 27.5 28.0 27.5	8.0 7.9 7.9 7.8	7.9 4.5 3.6 2.8	105 60 49 38	15. 15. 10. 10.	61 -- -- --	
LINE 284											
APR 15, 74	1110	1	.3 1.4	31000 31000	19.6 19.5	8.0 8.1	7.4 7.2	89 87	245. 270.	20 --	
JUN 14, 74	1145	1	.3 .9 1.4	20000 20000 21000	27.0 27.0 27.0	8.2 8.2 8.0	7.9 8.0 5.4	105 107 72	15. 15. 60.	68 -- --	
APR 15, 74	1125	2	.5 1.5 3.0 5.0	34000 34000 33000 33000	19.8 19.8 19.8 19.6	8.1 8.1 8.1 8.1	7.7 7.5 7.5 7.1	95 93 93 87	100. 110. 120. 290.	24 -- -- --	
JUN 14, 74	1130	2	.3	20000	27.0	8.2	7.6	101	15.	69	

TABLE 5A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS) (FIELD)	TEMPER- ATURE (DEG. C)	PH	DIS- SOLVED OXYGEN (MG/L)	PERCENT SATUR- ATION	TUR- BIDITY (JTU)	TRANS- PARENCY SECCHI DISK (CM)
LINE 284 CONTINUED										
JUN 14, 74	1130	2	1.5	20000	26.5	8.2	7.4	97	20.	--
			3.0	23000	26.5	8.1	6.4	85	25.	--
			4.6	23000	27.0	8.1	7.0	93	35.	--
APR 15, 74	1140	3	.5	34000	20.1	8.1	8.3	102	60.	41
			1.8	34000	19.8	8.1	7.5	93	60.	--
JUN 14, 74	1120	3	.3	23000	27.0	8.1	7.4	99	--	61
			1.5	23000	27.0	8.1	7.3	97	15.	--
			2.3	23000	26.5	8.1	7.2	94	30.	--
LINE 300										
OCT 08, 73	1140	1	.3	23000	28.1	--	6.2	85	20.	56
			1.8	24000	28.1	--	6.4	88	20.	--
APR 15, 74	1220	1	.5	34000	20.0	8.1	8.6	106	80.	30
			1.5	34000	20.0	8.1	8.7	107	80.	--
			2.1	34000	20.0	8.1	8.5	105	110.	--
JUN 14, 74	1045	1	.3	24000	26.5	8.1	7.6	97	5.	62
			1.5	24000	26.5	8.0	7.6	97	10.	--
			2.7	24000	26.5	7.9	7.6	97	--	--
OCT 08, 73	1125	2	.3	24000	28.4	--	6.7	92	10.	97
			1.5	24000	28.4	--	6.6	90	11.	--
			3.0	24000	28.3	--	6.5	89	12.	--
			3.8	24000	28.5	--	7.0	96	20.	--
APR 15, 74	1205	2	.5	34000	20.4	8.1	8.7	109	30.	56
			1.5	34000	20.3	8.1	8.6	106	30.	--
			3.0	34000	20.3	8.1	8.5	105	30.	--
			4.9	34000	20.2	8.1	8.1	100	40.	--
JUN 14, 74	1100	2	.3	24000	27.0	8.2	7.8	103	10.	78
			1.5	24000	27.0	8.2	7.2	96	10.	--
			3.0	24000	27.0	8.1	6.9	92	15.	--
			4.1	24000	27.0	8.1	6.7	89	80.	--
JUN 14, 74	1110	2	.3	23000	27.0	8.2	7.2	96	50.	50
			1.5	24000	27.0	7.8	7.2	96	--	--
			2.1	23000	27.0	8.2	7.1	95	25.	--
OCT 08, 73	1110	3	.3	22000	28.5	--	6.4	88	20.	--
			2.1	22000	28.9	--	7.2	97	50.	--
APR 15, 74	1155	3	.5	34000	19.5	8.1	8.7	106	50.	42
			1.8	34000	19.6	8.1	8.0	98	75.	--
LINE 330										
OCT 08, 73	1040	2	.3	16000	28.0	8.2	8.0	107	--	51
			1.5	18000	27.5	8.3	7.4	99	--	--
			2.4	26000	27.2	8.2	6.7	91	--	--
			3.7	35000	27.8	8.2	6.6	96	--	--
LINE 333										
OCT 08, 73	1130	1	.3	29000	27.3	8.3	8.3	115	--	48
			1.5	28000	27.3	8.3	9.2	128	--	--
APR 11, 74	1300	1	.3	35000	21.5	8.0	6.2	79	60.	48
			1.5	35000	21.5	8.0	5.9	76	30.	--
JUN 14, 74	1150	1	.3	28500	26.1	8.4	5.8	78	50.	48
			1.5	28500	26.2	8.4	6.0	81	80.	--

TABLE 5A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICROHMS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)	
LINE 333 CONTINUED											
OCT 08, 73	1317	2	.3 1.8	29000 29000	28.0 28.0	8.3 8.3	7.9 8.4	111 118	-- --	51 --	
APR 11, 74	1315	2	.3 3.4	34000 29000	21.3 21.5	7.9 8.0	5.8 6.1	73 76	30. 30.	48 --	
JUN 14, 74	1200	2	.3 1.5	-- --	26.3 26.2	8.4 8.4	-- --	-- --	0. 0.	55 --	
OCT 08, 73	1322	3	.3 1.5	24000 27000	27.8 27.8	8.3 8.2	7.5 7.1	103 100	-- --	48 --	
APR 11, 74	1245	3	.3 1.2	32000 28000	21.3 21.3	7.9 7.9	6.3 6.7	79 63	60. 80.	33 --	
JUN 14, 74	1205	3	.3 1.5	17000 16000	26.3 26.4	8.3 8.3	7.9 7.6	103 97	50. 5.	43 --	
LINE 350											
OCT 08, 73	1455	1	.3 1.8	31000 31000	28.4 28.7	-- --	6.4 5.9	91 86	12. 14.	90 --	
APR 11, 74	1225	1	.3 2.4	38000 38000	21.2 21.2	8.0 8.0	6.8 5.4	88 70	110. 100.	51 --	
JUN 14, 74	1110	1	.3 1.8	-- --	26.2 26.0	8.3 8.4	-- --	-- --	10. 50.	86 --	
OCT 08, 73	1435	2	.3 1.5 3.0 5.2	27000 28000 28000 26000	29.1 28.8 28.7 28.7	-- -- -- --	7.4 7.0 5.0 2.7	106 100 71 38	8. 6. 30. 30.	145 -- -- --	
APR 11, 74	1205	2	.3 5.2	35000 35000	21.1 21.1	8.0 8.0	7.6 7.6	97 97	50. 200.	43 --	
JUN 14, 74	1115	2	.3 1.5 3.0 4.6	-- -- -- --	26.6 26.4 26.4 26.0	8.4 8.3 8.3 8.4	-- -- -- --	-- -- -- --	0. 15. 20. 150.	69 -- -- --	
OCT 08, 73	1430	3	.3 1.5 2.4	26000 26000 25000	28.8 28.6 29.4	-- -- --	7.6 7.5 7.8	107 106 110	5. 8. 7.	137 -- --	
APR 11, 74	1155	3	.3 3.0	34000 31000	21.3 21.6	7.9 7.6	6.9 6.6	87 84	100. 200.	28 --	
APR 15, 74	1335	3	.5 1.5 2.6	34000 34000 34000	20.1 20.0 20.0	8.1 8.1 8.1	8.5 8.7 8.5	105 107 105	70. 80. 130.	43 -- --	
JUN 14, 74	1125	3	.3 1.2 2.4	-- -- --	26.5 26.4 26.4	8.4 8.4 8.3	-- -- --	-- -- --	60. 90. 80.	55 -- --	
LINE 363											
OCT 08, 73	1520	1	.3 1.5 2.7	33000 34000 36000	28.6 28.6 28.7	-- -- --	5.5 4.5 2.9	81 66 43	10. 10. 22.	94 -- --	
APR 15, 74	1405	1	.5 1.5 2.7	38000 39000 38000	20.1 20.1 20.2	8.0 8.0 8.0	8.5 8.7 8.5	108 110 108	60. 60. 80.	36 -- --	
JUN 14, 74	1050	1	.3	28600	26.2	8.4	7.0	96	55.	114	

TABLE 5A--QUALITY OF WATER IN THE LAVACA-TRÉS PALACIOS ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	TUR-BIDITY (JTU)	TRAN-SPARENCY SECCHI DISK (CM)
LINE 363 CONTINUED										
JUN 14, 74	1050	1	1.5	--	26.2	8.3	--	--	5.	--
			3.0	29000	26.3	8.4	6.2	85	50.	--
OCT 08, 73	1530	2	.3	28000	28.8	--	7.6	109	--	122
			1.5	34000	28.7	--	6.6	97	3.	--
			3.0	36000	28.7	--	1.4	21	4.	--
			4.3	36000	28.8	--	1.0	15	10.	--
APR 15, 74	1420	2	.6	38000	20.3	8.0	8.5	108	150.	29
			1.5	38000	20.1	8.0	8.0	101	210.	--
			3.0	38000	20.2	8.0	8.5	108	80.	--
			4.0	38000	20.0	8.0	8.3	105	120.	--
JUN 14, 74	1040	2	.3	--	26.5	8.4	--	--	50.	122
			1.8	--	26.2	8.3	--	--	20.	--
			3.7	--	26.0	8.4	--	--	60.	--
OCT 08, 73	1545	3	.3	26000	28.7	--	6.7	94	10.	91
			1.5	26000	28.6	--	5.8	82	10.	--
			3.7	26000	28.9	--	6.4	90	20.	--
APR 15, 74	1435	3	.5	36000	20.0	8.0	8.6	108	85.	--
			1.5	36000	20.0	8.0	8.8	110	80.	--
			3.7	36000	20.0	8.0	8.4	105	70.	--
JUN 14, 74	1025	3	.3	27000	24.9	8.4	7.6	100	10.	112
			1.5	--	24.9	8.4	--	--	10.	--
			3.0	29000	24.9	8.4	6.3	84	60.	--
OCT 08, 73	1605	4	.3	26000	28.8	--	6.9	97	6.	102
			1.5	26000	28.7	--	6.9	97	6.	--
			4.0	26000	28.8	--	6.5	92	10.	--
APR 15, 74	1500	4	.6	36000	18.9	8.0	8.9	109	70.	--
			1.5	36000	18.8	8.0	9.0	110	--	--
			3.7	36000	18.3	8.0	9.0	108	80.	--
JUN 14, 74	1015	4	.3	--	26.4	8.4	--	--	50.	89
			1.5	--	26.1	8.4	--	--	10.	--
			3.4	--	25.8	8.3	--	--	40.	--
OCT 08, 73	1615	5	.3	26000	28.9	--	7.2	101	8.	94
			1.5	26000	28.9	--	7.1	100	8.	--
			3.7	26000	28.9	--	6.8	96	8.	--
APR 15, 74	1515	5	.6	38000	19.0	7.9	8.7	107	80.	30
			1.5	38000	18.9	7.9	8.7	107	80.	--
			3.4	39000	18.7	8.0	8.8	109	80.	--
JUN 14, 74	0950	5	.3	25000	26.1	8.3	7.1	94	40.	81
			1.5	--	26.1	8.3	--	--	40.	--
			3.4	26000	25.9	8.3	5.9	78	55.	--
OCT 08, 73	1640	6	.3	24000	28.9	--	7.3	101	11.	89
			1.5	25000	28.9	--	7.2	101	10.	--
			3.0	24000	29.1	--	7.3	101	15.	--
APR 15, 74	1530	6	.6	39000	19.0	8.0	8.7	107	95.	28
			1.5	39000	18.9	8.0	8.7	107	110.	--
			3.4	39000	18.2	8.0	8.7	106	110.	--
JUN 14, 74	0940	6	.3	--	26.3	8.3	--	--	50.	71
			1.5	--	25.8	8.3	--	--	15.	--
			3.0	--	25.5	8.3	--	--	40.	--
LINE 375										
OCT 09, 73	1425	1	.5	34000	28.6	8.5	10.6	156	8.	109

TABLE 5A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
--------------------	------	------	----------------	---	----------------------	----	-------------------------	--------------------	-----------------	-------------------------------

LINE 375 CONTINUED

OCT 09, 73	1425	1	1.5	34000	28.6	8.5	10.0	147	10.	--
			3.0	38000	28.5	8.5	8.0	118	11.	--
			4.4	38000	28.5	8.4	8.1	119	35.	--
APR 16, 74	1415	1	.5	41000	20.1	8.2	5.2	66	20.	97
			1.5	41000	20.1	8.2	5.2	66	20.	--
			3.0	41000	20.4	8.2	4.7	60	30.	--
			4.0	40000	21.0	8.1	4.7	61	35.	--
JUN 13, 74	1630	1	.3	28000	27.3	8.1	9.0	125	0.	102
			1.8	--	27.3	8.1	--	--	0.	--
			3.7	39000	26.9	7.5	3.1	44	50.	--
OCT 09, 73	1405	2	.5	28000	28.2	8.6	10.8	152	12.	89
			1.5	28000	28.2	8.6	9.2	130	15.	--
			3.0	28000	28.2	8.6	9.9	139	19.	--
			4.3	28000	28.3	8.6	9.9	139	28.	--
APR 16, 74	1355	2	.5	40000	20.3	8.1	5.2	67	20.	70
			1.5	40000	20.4	8.1	5.1	65	20.	--
			3.7	40000	20.8	8.1	4.7	59	60.	--
JUN 13, 74	1650	2	.3	--	27.0	8.1	--	--	30.	67
			1.5	--	26.6	8.1	--	--	30.	--
			3.4	--	26.5	8.1	--	--	130.	--
OCT 09, 73	1245	3	.5	26000	28.2	8.6	7.6	106	6.	86
			1.5	26000	28.2	8.5	7.6	106	8.	--
			3.0	26000	28.2	8.5	7.3	101	19.	--
			4.1	28000	28.1	8.5	6.5	92	120.	--
APR 16, 74	1135	3	.5	44000	18.9	8.2	12.5	158	20.	67
			1.5	44000	18.8	8.2	12.9	163	20.	--
			3.0	44000	18.8	8.2	12.7	161	20.	--
			3.7	44000	18.8	8.1	12.1	153	35.	--
JUN 13, 74	1705	3	.3	24000	27.3	8.2	8.5	115	60.	72
			1.5	--	27.2	8.2	--	--	30.	--
			3.0	--	27.3	8.1	--	--	40.	--
			4.9	27000	26.7	8.1	6.8	93	80.	--
OCT 09, 73	1220	4	.5	20000	28.3	8.5	7.2	99	30.	53
			1.5	20000	28.2	8.5	7.1	97	30.	--
			3.2	19000	28.1	8.5	7.8	105	31.	--
APR 16, 74	1115	4	.5	41000	18.5	8.2	13.1	162	20.	71
			1.5	41000	18.7	8.2	12.3	152	20.	--
			2.7	41000	18.9	8.1	12.8	160	40.	--
JUN 13, 74	1720	4	.3	--	27.4	8.2	--	--	30.	47
			1.5	--	27.0	8.2	--	--	30.	--
			2.7	--	26.9	8.1	--	--	80.	--

LINE 382

OCT 09, 73	1525	1	.3	37000	28.9	8.6	12.8	188	11.	86
			1.5	37000	28.9	8.6	10.8	159	10.	--
APR 16, 74	1545	1	.3	44000	21.9	8.2	7.9	107	40.	41
			1.4	44000	22.0	8.2	7.7	104	40.	--
JUN 13, 74	1500	1	.3	--	25.0	8.1	--	--	20.	61
			.9	--	24.6	8.1	--	--	40.	--
OCT 09, 73	1540	3	.3	38000	28.6	8.6	11.6	173	2.	164
			1.5	38000	28.7	8.6	10.2	152	5.	--
			3.0	38000	28.8	8.6	10.3	154	5.	--
			4.1	38000	28.8	8.6	8.9	133	20.	--

TABLE 5A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS) (FIELD)	TEMPER- ATURE (DEG. C)	PH	DIS- SOLVED OXYGEN (MG/L)	PERCENT SATUR- ATION	TUR- BIDITY (JTU)	TRANS- PARENCY SECCHI DISK (CM)
--------------------------	------	------	-------------------	---	------------------------------	----	------------------------------------	----------------------------	-------------------------	---

LINE 382 CONTINUED

APR 16, 74	1555	3	.3	44000	21.4	8.2	7.5	100	20.	79
			1.5	44000	21.5	8.2	7.4	100	20.	--
			2.4	44000	21.9	8.1	7.2	97	15.	--
JUN 13, 74	1455	3	.3	--	26.0	8.1	--	--	35.	66
			1.5	--	25.3	8.1	--	--	50.	--
			3.4	--	25.1	8.1	--	--	50.	--
OCT 09, 73	1550	4	.3	25000	28.8	8.7	11.3	159	9.	71
			1.5	36000	28.6	8.6	10.0	147	10.	--
			3.0	36000	28.7	8.6	9.7	143	17.	--
			4.1	36000	28.8	8.6	10.2	150	24.	--
APR 16, 74	1605	4	.3	44000	20.8	8.3	7.9	105	15.	90
			1.5	44000	20.8	8.3	8.0	107	20.	--
			3.0	44000	20.9	8.2	7.8	104	20.	--
			5.5	44000	21.2	8.2	7.5	100	45.	--
JUN 13, 74	1445	4	.3	--	25.6	8.1	--	--	30.	53
			1.5	--	25.5	8.1	--	--	35.	--
			3.0	--	24.9	8.1	--	--	40.	--
			4.6	--	23.0	8.1	--	--	50.	--

LINE 397

OCT 09, 73	1500	2	.3	38000	28.4	8.6	8.9	131	8.	124
			1.5	38000	28.4	8.6	10.1	149	8.	--
			3.0	38000	28.5	8.6	10.2	150	4.	--
			4.6	38000	28.5	8.5	8.2	121	4.	--
			6.1	38000	28.5	8.5	8.3	122	9.	--
			9.1	39000	28.6	8.5	8.9	133	10.	--
			12.2	39000	28.8	8.5	8.8	131	10.	--
APR 16, 74	1520	2	.3	44000	20.8	8.2	7.4	97	20.	56
			1.5	44000	20.8	8.2	7.3	96	30.	--
			3.0	44000	20.8	8.3	7.3	96	30.	--
			6.1	44000	20.8	8.2	7.2	95	30.	--
			9.1	44000	20.9	8.2	7.2	95	35.	--
			12.5	41000	21.0	8.3	7.1	92	50.	--
JUN 13, 74	1520	2	.3	--	26.3	8.1	--	--	10.	81
			1.5	--	26.2	8.1	--	--	30.	--
			3.0	--	26.3	8.0	--	--	40.	--
			6.1	--	26.1	8.0	--	--	50.	--
			10.4	--	25.3	8.1	--	--	50.	--

LINE 902

APR 16, 74	1455	49	.6	44000	20.9	8.2	7.1	95	10.	107
			1.5	44000	20.8	8.2	7.2	96	20.	--
			3.0	44000	20.8	8.2	6.9	92	10.	--
			6.1	44000	20.6	8.3	6.5	86	30.	--
			9.1	44000	20.7	8.2	6.5	86	50.	--
			11.6	41000	21.1	8.2	6.6	86	140.	--
JUN 13, 74	1530	49	1.5	35000	26.6	8.1	7.8	110	60.	94
			3.0	--	26.6	8.0	--	--	45.	--
			6.1	--	26.5	8.0	--	--	40.	--
			9.1	--	26.5	8.0	--	--	45.	--
			12.2	41000	26.0	7.9	6.5	94	130.	--

TABLE 5B--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1974 WATER YEAR

NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED SILICA (SiO2) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS-SOLVED PHOS- PHOS- ORTHO (P) (MG/L)	TOTAL PHOS- PHOSUS (P) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	PHENOLS (UG/L)	TOTAL INORGANIC CARBON (MG/L)
LINE 17												
OCT 08, 73	1855	2	.3 4.0	13.0 14.0	.20 .20	.05 .09	.01 .00	.08 .09	.12 .14	1.6 1.5	0 --	4.0 --
APR 15, 74	1525	2	.3	31.0	.31	.05	.01	--	.08	3.6	--	1.0
JUN 13, 74	1845	2	.3	12.0	.18	.09	.01	--	.19	1.9	--	--
LINE 22												
OCT 08, 73	1820	2	.3 3.0	16.0 16.0	.00 .01	.06 .08	.00 .00	.07 .06	.10 .11	1.4 1.4	0 --	14.0 --
APR 15, 74	1545	2	.3	31.0	.89	.17	.06	--	.16	3.9	--	--
JUN 13, 74	1825	2	.3	11.0	.14	.09	.01	--	.09	1.3	--	--
LINE 65												
OCT 08, 73	1925	2	.3 4.6	14.0 14.0	.08 .20	.04 .05	.01 .01	.08 .10	.09 .13	1.8 1.3	0 0	-- --
APR 15, 74	1635	2	.3 4.0	20.0 9.1	.15 .06	.07 .12	.01 .02	-- --	.05 .09	4.0 3.6	-- --	-- 6.0
JUN 13, 74	1915	2	.3 3.7	-- --	.15 .15	.09 .09	.01 .01	-- --	.09 .08	3.9 2.0	-- --	-- --
LINE 85												
OCT 09, 73	1110	3	.3 1.8	17.0 17.0	.00 .00	.00 .03	.00 .00	.07 .07	.13 .16	1.9 2.0	-- --	-- --
APR 15, 74	1720	3	.3	4.1	.00	.07	.04	--	.13	3.4	--	--
JUN 13, 74	2000	3	.3	--	.09	.03	.00	--	.06	2.2	--	--
LINE 143												
OCT 09, 73	1025	1	.3	7.0	.00	.00	.00	.02	.04	.8	--	--
APR 16, 74	0940	1	.3 1.8	1.7 --	.01 .00	.03 .02	.01 .02	-- --	.09 .11	2.0 --	-- --	-- --
JUN 13, 74	1855	1	.3 1.8	-- --	.00 .00	.01 .04	.00 .01	-- --	.06 .02	1.7 1.8	-- --	7.5 7.3
OCT 09, 73	1015	3	.3	8.0	.00	.00	.00	.04	.06	1.3	--	--
APR 16, 74	1000	3	.3 1.8	1.4 1.8	.00 .00	.04 .06	.00 .01	-- --	.17 .20	1.8 2.4	-- --	-- --
JUN 13, 74	1905	3	.3 1.8	-- --	.00 .00	.04 .02	.00 .00	-- --	.02 .04	2.0 2.2	-- --	-- --
LINE 150												
APR 16, 74	0915	2	.3 2.3	1.9 2.0	.00 .00	.05 .04	.01 .01	-- --	.18 .18	3.0 1.9	-- --	-- --
JUN 13, 74	1840	2	.3 1.8	-- --	.00 .00	.04 .09	.00 .00	-- --	.08 .04	1.8 1.6	-- --	5.3 6.9

TABLE SB--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1974 WATER YEAR--CONTINUED

NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED SILICA (SI02) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS ORTHO (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (MG/L)
LINE 150 CONTINUED												
OCT 09, 73	1100	4	.5 11.6	10.0 .6	.00 .00	.02 .14	.00 .08	.05 .02	.06 .04	.8 1.2	0 0	9.0 21.0
APR 16, 74	0845	4	.3 11.0	1.9 .0	.01 .00	.06 .06	.00 .04	-- --	.19 .15	2.4 2.2	-- --	-- --
JUN 13, 74	1825	4	.3 11.0	-- --	.12 .03	.07 .25	.01 .05	-- --	.06 .05	1.5 .7	-- --	6.7 19.0
LINE 210												
OCT 09, 73	1340	2	.5 11.7	.5 .0	.00 .00	.01 .03	.00 .01	.02 .02	.02 .10	.5 .9	-- --	-- --
APR 16, 74	1250	2	.5 11.0	.0 .0	.01 .01	.02 .05	.00 .02	-- --	.20 .12	2.3 2.2	-- --	-- --
JUN 13, 74	1600	2	.3 12.2	-- --	.00 .03	.01 .05	.00 .04	-- --	.04 .06	1.5 2.2	-- --	7.4 11.0
LINE 224												
OCT 08, 73	1705	2	.3	18.0	.00	.02	.00	.07	.13	1.4	0	8.5
APR 15, 74	1400	2	.3	6.0	.00	.15	.01	--	.13	6.4	--	7.0
JUN 14, 74	0900	2	.3	9.4	.18	.12	.02	--	.14	2.4	--	--
LINE 249												
OCT 08, 73	1655	2	.3 2.1	5.0 4.5	.00 .00	.00 .00	.00 .00	.03 .03	.05 .06	1.1 .7	-- --	-- --
APR 15, 74	1550	2	.5 1.5	.0 .0	.01 .01	.03 .02	.01 .01	-- --	.10 .11	2.4 1.7	-- --	-- --
JUN 14, 74	0925	2	.3 1.8	-- --	.00 .00	.01 .00	.00 .00	-- --	.04 .03	1.5 1.1	-- --	9.3 --
LINE 254												
OCT 08, 73	1545	2	.3 3.7	22.0 21.0	.00 .00	.05 .05	.00 .00	.03 .03	.07 .07	1.1 .8	0 --	1.5 10.0
APR 15, 74	1215	2	.3 3.0	9.0 5.3	1.60 2.20	.40 .36	.08 .10	-- --	.15 .17	3.6 3.5	-- --	9.0 30.0
JUN 14, 74	1300	2	.3 3.7	-- --	.04 .39	.11 .11	.05 .05	-- --	.11 .15	2.2 1.7	-- --	-- --
LINE 264												
OCT 08, 73	1450	2	.3 1.5	11.0 11.0	.00 .00	.00 .02	.00 .00	.03 .04	.07 .09	1.0 .9	0 --	11.0 --
APR 15, 74	1145	2	.3 1.2	.4 .5	.00 .01	.00 .11	.01 .01	-- --	.18 .22	3.4 1.8	-- --	-- --
JUN 14, 74	1225	2	.3 1.5	-- --	.08 .01	.08 .13	.02 .01	-- --	.07 .06	3.8 1.9	-- --	-- --
LINE 284												
APR 15, 74	1110	1	.3	.4	.00	.07	.01	--	.23	2.0	--	--

TABLE 5B--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1974 WATER YEAR--CONTINUED

NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS-SOLVED PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (MG/L)
--------------------	------	------	----------------	--	--------------------------	-----------------------------	--------------------------	----------------------------------	-----------------------------	---	----------------	-----------------------------

LINE 284 CONTINUED

APR 15, 74	1110	1	1.4	.5	.00	.11	.01	--	.24	1.7	--	--
JUN 14, 74	1145	1	.3 1.4	--	.00 .00	.02 .09	.01 .01	--	.05 .10	3.2 4.0	--	--
APR 15, 74	1140	3	.5 1.8	.0	.00 .01	.01 .02	.01 .00	--	.20 .19	1.9 2.9	--	2.0 --
JUN 14, 74	1120	3	.3 2.3	--	.00 .00	.02 .01	.00 .00	--	.03 .06	1.6 2.2	--	--

LINE 333

OCT 08, 73	1130	1	.3 1.5	2.3 2.7	.00 .00	.03 .01	.00 .00	.02 .03	.05 .06	.6 .3	0 0	1.5 3.5
APR 11, 74	1300	1	.3 1.5	2.6 1.5	.00 .00	.09 .09	.01 .00	--	.18 .17	2.1 2.3	--	--
JUN 14, 74	1150	1	.3 1.5	--	.01 .01	.05 .44	.00 .00	--	.02 .09	2.7 2.3	--	9.2 11.0

LINE 363

OCT 08, 73	1520	1	.3 2.7	.2 .6	.00 .00	.00 .00	.00 .00	.02 .02	.05 .05	1.3 7.8	--	--
APR 15, 74	1405	1	.5 2.7	.0 .0	.00 .00	.04 .07	.01 .01	--	.19 .11	1.7 2.4	--	--
JUN 14, 74	1050	1	.3 3.0	--	.00 .00	.02 .02	.00 .00	--	.01 .05	1.2 1.2	--	7.0 --
OCT 08, 73	1545	3	.3 3.7	2.3 3.3	.00 .00	.00 .00	.00 .00	.02 .02	.04 .04	1.0 .6	--	--
APR 15, 74	1435	3	.5 3.7	.0 .1	.01 .00	.08 .07	.00 .00	--	.16 .17	2.2 6.4	--	--
JUN 14, 74	1025	3	.3 3.0	--	.00 .00	.00 .03	.00 .00	--	.01 .02	1.3 1.1	--	7.8 --
OCT 08, 73	1615	5	.3 3.7	2.0 2.2	.00 .00	.00 .00	.00 .00	.02 .02	.03 .03	.6 .4	0 0	-- --
APR 15, 74	1515	5	.6 3.4	.0 .0	.01 .00	.01 .05	.00 .01	--	.16 .14	2.5 2.1	--	--
JUN 14, 74	0950	5	.3 3.4	--	.01 .00	.01 .02	.00 .01	--	.01 .02	1.0 1.0	--	4.2 6.3

LINE 375

OCT 09, 73	1425	1	.5 4.4	1.0 .2	.00 .00	.03 .03	.00 .01	.02 .02	.02 .04	.7 .5	0 0	8.0 10.0
APR 16, 74	1415	1	.5 4.0	.0 .0	.01 .01	.01 .02	.01 .01	--	.08 .09	2.5 1.4	--	--
JUN 13, 74	1630	1	.3 3.7	--	.00 .02	.02 .14	.00 .04	--	.02 .06	2.7 1.2	--	7.3 --
OCT 09, 73	1245	3	.5 4.1	2.7 2.9	.00 .00	.02 .08	.00 .00	.02 .04	.03 .19	.4 .5	--	--
APR 16, 74	1135	3	.5	.0	.00	.03	.01	--	.20	1.7	--	--

TABLE 5B--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1974 WATER YEAR--CONTINUED

NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (MG/L)
--------------------------	------	------	-------------------	---	-----------------------------------	--------------------------------------	-----------------------------------	--	---	---	-------------------	--------------------------------------

LINE 375 CONTINUED

APR 16, 74	1135	3	3.7	.0	.00	.03	.02	--	.10	2.1	--	--
JUN 13, 74	1705	3	.3 4.9	-- --	.00 .00	.04 .07	.00 .01	-- --	.02 .02	1.5 1.2	-- --	6.4 6.0

LINE 902

APR 16, 74	1455	49	.6 11.6	.0 .0	.02 .01	.04 .04	.01 .00	-- --	.07 .25	1.6 2.6	-- --	-- --
JUN 13, 74	1530	49	1.5 12.2	-- --	.01 .02	.01 .03	.01 .03	-- --	.04 .06	1.7 1.2	-- --	7.6 11.0

TABLE 5C--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1974 WATER YEAR

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICROMHOS) (LAB)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG)	DISSOLVED SODIUM + POTASSIUM (NA+K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	
LINE 17												
UCT 08, 73	1855	2	.3 4.0	361 370	42.0	4.2	23	137	12	33	196	
APR 15, 74	1525	2	.3	846	120.0	7.1	64	364	27	84	504	
JUN 13, 74	1845	2	.3	252	31.0	2.1	19	104	7	20	145	
LINE 22												
UCT 08, 73	1820	2	.3 3.0	276 278	--	--	--	--	--	--	--	
APR 15, 74	1545	2	.3	855	100.0	8.6	68	278	32	110	480	
JUN 13, 74	1825	2	.3	214	24.0	3.1	18	88	7	22	130	
LINE 65												
UCT 08, 73	1925	2	.3 4.6	419 616	--	--	--	--	--	--	--	
LINE 85												
UCT 09, 73	1110	3	.3 1.8	2580 2560	--	--	--	--	--	--	--	
LINE 143												
UCT 09, 73	1025	1	.3	16600	--	--	--	--	--	--	--	
JUN 13, 74	1855	1	.3 1.8	13100 14900	--	--	--	--	--	--	--	
JUN 13, 74	1905	3	.3 1.8	12400 12400	--	--	--	--	--	--	--	
LINE 150												
JUN 13, 74	1840	2	.3 1.8	11900 12000	--	--	--	--	--	--	--	
UCT 09, 73	1100	4	.5 11.6	11900 41000	--	--	--	--	--	--	--	
JUN 13, 74	1825	4	.3 11.0	6470 28000	--	--	--	--	--	--	--	
LINE 210												
UCT 09, 73	1340	2	.5 11.7	39500 40900	--	--	--	--	--	--	--	
JUN 13, 74	1600	2	.3 12.2	25700 34000	--	--	--	--	--	--	--	
LINE 224												
UCT 08, 73	1705	2	.3	786	27.0	12.0	110	122	24	160	416	
APR 15, 74	1400	2	.3	10200	110.0	230.0	1800	161	450	3200	5960	

TABLE 5C--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1974 WATER YEAR--CONTINUED

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC	DIS-	DIS-	DIS-	BICAR-	SULFATE	CHLORIDE	DIS-
				CONDUCTANCE (MICRO- MHOS) (LAB)	SOLVED CALCIUM (CA) (MG/L)	SOLVED MAGNE- SIUM (MG) (MG/L)	SOLVED SODIUM + POTAS- SIUM (NA+K) (MG/L)				SOLVED SOLIDS (SUM OF CONSTI- TUENTS)

LINE 224 CONTINUED

JUN 14, 74 0900 2 .3 260 20.0 5.3 27 78 8 36 147

LINE 249

OCT 08, 73 1655 2 .3 20900 2.1 21200 -- -- -- -- -- -- --
 JUN 14, 74 0925 2 .3 17000 1.8 18300 -- -- -- -- -- -- --

LINE 254

OCT 08, 73 1545 2 .3 584 3.7 565 48.0 -- 17.0 -- 43 196 18 74 318
 APR 15, 74 1215 2 .3 3180 71.0 67.0 500 187 150 880 1780

LINE 264

OCT 08, 73 1450 2 .3 12300 1.5 12300 -- -- -- -- -- -- --

LINE 333

OCT 08, 73 1130 1 .3 26300 1.5 26300 -- -- -- -- -- -- --
 JUN 14, 74 1150 1 .3 28500 1.5 28500 -- -- -- -- -- -- --

LINE 363

OCT 08, 73 1520 1 .3 34500 2.7 36100 260.0 -- 880.0 -- 6900 137 2000 12000 22200
 JUN 14, 74 1050 1 .3 28600 3.0 29400 -- -- -- -- -- -- --
 OCT 08, 73 1545 3 .3 25500 3.7 26000 -- -- -- -- -- -- --
 APR 15, 74 1435 3 .5 34900 270.0 830.0 7500 155 2000 13000 23800
 JUN 14, 74 1025 3 .3 26600 3.0 29200 -- -- -- -- -- -- --
 OCT 08, 73 1615 5 .3 25200 3.7 25200 -- -- -- -- -- -- --
 JUN 14, 74 0950 5 .3 25200 3.4 25600 -- -- -- -- -- -- --

LINE 375

OCT 09, 73 1425 1 .5 35600 4.4 39500 -- -- -- -- -- -- --
 JUN 13, 74 1630 1 .3 27900 3.7 39000 -- -- -- -- -- -- --
 OCT 09, 73 1245 3 .5 25500 4.1 27200 -- -- -- -- -- -- --
 JUN 13, 74 1705 3 .3 24300 -- -- -- -- -- -- --

TABLE 5C--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1974 WATER YEAR--CONTINUED

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CON- DUCTANCE (MICRO- MHOS) (LAB)	DIS- SOLVED CALCIUM (CA) (MG/L)	DIS- SOLVED MAGNE- SIUM (MG)	DIS- SOLVED SODIUM + POTAS- SIUM (NA+K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLORIDE (CL) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
--------------------------	------	------	-------------------	---	---	--	--	--------------------------------------	--	--	---

LINE 375 CONTINUED

JUN 13, 74	1705	3	4.9	27500	--	--	--	--	--	--	--
LINE 902											
APR 16, 74	1455	49	.6	39400	300.0	960.0	8900	135	2000	15000	27400
JUN 13, 74	1530	49	1.5	35200	--	--	--	--	--	--	--
			12.2	41200	--	--	--	--	--	--	--

TABLE 5D--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1974 WATER YEAR

SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED ALUMI-NUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	BOTTOM DEPOSITI ARSENIC (AS) (UG/GM)	DIS-SOLVED CADMIUM (CD) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	BOTTOM DEPOSITI CADMIUM (CD) (UG/GM)	DIS-SOLVED FLUORIDE (F) (MG/L)
--------------------	------	------	----------------	----------------------------------	--------------------------------	---------------------------	--------------------------------------	--------------------------------	---------------------------	--------------------------------------	--------------------------------

LINE 17

OCT 08, 73	1855	2	.3 4.0	-- --	1 --	-- --	-- 1	0 --	-- --	-- 0	.3 --
------------	------	---	-----------	----------	---------	----------	---------	---------	----------	---------	----------

LINE 22

OCT 08, 73	1820	2	.3 3.0	-- --	2 --	-- --	-- 2	0 --	-- --	-- 0	-- --
------------	------	---	-----------	----------	---------	----------	---------	---------	----------	---------	----------

LINE 224

OCT 08, 73	1705	2	.3 1.2	-- --	6 --	-- --	-- 3	0 --	-- --	-- 0	.2 --
------------	------	---	-----------	----------	---------	----------	---------	---------	----------	---------	----------

LINE 254

OCT 08, 73	1545	2	.3	--	--	--	--	--	--	--	.3
------------	------	---	----	----	----	----	----	----	----	----	----

LINE 264

OCT 08, 73	1450	2	.3 1.5	-- --	0 --	-- --	-- 4	0 --	-- --	-- 0	-- --
------------	------	---	-----------	----------	---------	----------	---------	---------	----------	---------	----------

LINE 363

OCT 08, 73	1520	1	.3	--	--	--	--	--	--	--	.6
------------	------	---	----	----	----	----	----	----	----	----	----

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	BOTTOM DEPOSITI COBALT (CO) (UG/GM)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	BOTTOM DEPOSITI COPPER (CU) (UG/GM)
--------------------	------	------	----------------	----------------------------------	-----------------------------	-------------------------------	--------------------------	-------------------------------------	-------------------------------	--------------------------	-------------------------------------

LINE 17

OCT 08, 73	1855	2	.3 4.0	-- --	-- --	0 --	-- --	-- 4	3 --	-- --	-- 3
------------	------	---	-----------	----------	----------	---------	----------	---------	---------	----------	---------

LINE 22

OCT 08, 73	1820	2	.3 3.0	-- --	-- --	-- --	-- --	-- 4	4 --	-- --	-- 4
------------	------	---	-----------	----------	----------	----------	----------	---------	---------	----------	---------

LINE 224

OCT 08, 73	1705	2	.3 1.2	-- --	-- --	0 --	-- --	-- 14	4 --	-- --	-- 10
------------	------	---	-----------	----------	----------	---------	----------	----------	---------	----------	----------

LINE 264

OCT 08, 73	1450	2	.3 1.5	-- --	-- --	0 --	-- --	-- 6	11 --	-- --	-- 10
------------	------	---	-----------	----------	----------	---------	----------	---------	----------	----------	----------

TABLE 5D--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1974 WATER YEAR--CONTINUED

SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-	BOTTOM	DIS-	TOTAL	BOTTOM	DIS-	TOTAL	BOTTOM	
				SOLVED CYANIDE (CN) (MG/L)	DEPOSIT CYANIDE (CN) (UG/GM)	SOLVED IRON (FE) (UG/L)	IRON (FE) (UG/L)	DEPOSIT IRON (FE) (UG/GM)	SOLVED LEAD (PB) (UG/L)	LEAD (PB) (UG/L)	DEPOSIT LEAD (PB) (UG/GM)	
LINE 17												
UCT 08, 73	1855	2	.3 4.0	-- --	-- --	80 --	-- --	-- 6100	0 --	-- --	-- 5	
LINE 22												
UCT 08, 73	1820	2	.3 3.0	-- --	-- --	190 --	-- --	-- 7100	0 --	-- --	-- 7	
LINE 224												
UCT 08, 73	1705	2	.3 1.2	-- --	-- --	80 --	-- --	-- 15000	1 --	-- --	-- 21	
LINE 264												
UCT 08, 73	1450	2	.3 1.5	-- --	-- --	20 --	-- --	-- 17000	1 --	-- --	-- 8	

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-	DIS-	TOTAL	BOTTOM	DIS-	TOTAL	BOTTOM	DIS-	DIS-
				SOLVED LITH- IUM (LI) (UG/L)	SOLVED MAN- GANESE (MN) (UG/L)	MAN- GANESE (MN) (UG/L)	MAN- GANESE (MN) (UG/GM)	SOLVED MER- CURY (HG) (UG/L)	MER- CURY (HG) (UG/GM)	SOLVED MER- CURY (HG) (UG/L)	SOLVED NICKEL (NI) (UG/L)	SOLVED STRON- TIUM (SR) (UG/L)
LINE 17												
UCT 08, 73	1855	2	.3 4.0	10 --	0 --	-- --	-- 140	.1 --	-- --	-- .0	2 --	170 --
LINE 22												
UCT 08, 73	1820	2	.3 3.0	0 --	0 --	-- --	-- 150	.0 --	-- --	-- .0	1 --	150 --
LINE 224												
UCT 08, 73	1705	2	.3 1.2	0 --	0 --	-- --	-- 160	.0 --	-- --	-- .0	4 --	140 --
LINE 264												
UCT 08, 73	1450	2	.3 1.5	30 --	0 --	-- --	-- 180	.0 --	-- --	-- .0	4 --	1700 --

TABLE 5D--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1974 WATER YEAR--CONTINUED

SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	BOTTOM DEPOSIT ZINC (ZN) (UG/GM)
--------------------------	------	------	-------------------	--	---------------------------------	--

LINE 17

OCT 08, 73	1855	2	.3 4.0	10 --	-- --	-- 13
------------	------	---	-----------	----------	----------	----------

LINE 22

OCT 08, 73	1820	2	.3 3.0	30 --	-- --	-- 17
------------	------	---	-----------	----------	----------	----------

LINE 224

OCT 08, 73	1705	2	.3 1.2	20 --	-- --	-- 38
------------	------	---	-----------	----------	----------	----------

LINE 264

OCT 08, 73	1450	2	.3 1.5	60 --	-- --	-- 41
------------	------	---	-----------	----------	----------	----------

TABLE 5E--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,
1974 WATER YEAR-

INSECTICIDE AND HERBICIDE ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL ALDRIN (UG/L)	BOTTOM DEPOSIT ALDRIN (UG/KG)	TOTAL CHLOR-DANE (UG/L)	BOTTOM DEPOSIT CHLOR-DANE (UG/KG)	TOTAL DDD (UG/L)	BOTTOM DEPOSIT DDD (UG/KG)	TOTAL DDE (UG/L)	BOTTOM DEPOSIT DDE (UG/KG)
LINE 17											
OCT 08, 73	1855	2	.3 4.0	.00 --	-- .0	.0 --	-- .0	.00 --	-- .0	.00 --	-- 1.5
LINE 22											
OCT 08, 73	1820	2	.3 3.0	.00 --	-- .0	.0 --	-- .0	.00 --	-- .0	.00 --	-- 1.6
LINE 224											
OCT 08, 73	1705	2	1.2	--	.0	--	.0	--	1.2	--	6.4
LINE 264											
OCT 08, 73	1450	2	.3 1.5	.00 --	-- .0	.0 --	-- .0	.00 --	-- .0	.00 --	-- 2.9
LINE 333											
OCT 08, 73	1130	1	1.5	--	.0	--	.0	--	.8	--	2.6
LINE 363											
OCT 08, 73	1545	3	.3	.00	--	.0	--	.00	--	.00	--
OCT 11, 73	1300	3	.3	.00	--	.0	--	.00	--	.00	--
OCT 08, 73	1615	5	.3	.00	--	.0	--	.00	--	.00	--

TABLE SE--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,
1974 WATER YEAR--CONTINUED

INSECTICIDE AND HERBICIDE ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL DDT (UG/L)	BOTTOM DEPOSIT DDT (UG/KG)	TOTAL DIEL- DRIN (UG/L)	BOTTOM DEPOSIT DIEL- DRIN (UG/KG)	TOTAL ENDRIN (UG/L)	BOTTOM DEPOSIT ENDRIN (UG/KG)	TOTAL HEPTA- CHLOR (UG/L)	BOTTOM DEPOSIT HEPTA- CHLOR (UG/KG)
LINE 17											
OCT 08, 73	1855	2	.3 4.0	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0
LINE 22											
OCT 08, 73	1820	2	.3 3.0	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0
LINE 224											
OCT 08, 73	1705	2	1.2	--	.0	--	.0	--	.0	--	.0
LINE 264											
OCT 08, 73	1450	2	.3 1.5	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0
LINE 333											
OCT 08, 73	1130	1	1.5	--	.0	--	.0	--	.0	--	.0
LINE 363											
OCT 08, 73	1545	3	.3	.00	--	.00	--	.00	--	.00	--
OCT 11, 73	1300	3	.3	.00	--	.00	--	.00	--	.00	--
OCT 08, 73	1615	5	.3	.00	--	.00	--	.00	--	.00	--

TABLE SE--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,
1974 WATER YEAR--CONTINUED

INSECTICIDE AND HERBICIDE ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL	BOTTOM	TOTAL	BOTTOM	TOTAL	TOTAL	TOTAL	TOTAL	
				HEPTA- CHLOR EPOXIDE (UG/L)	DEPOSIT HEPTA- CHLOR EPOXIDE (UG/KG)			PARA- THION (UG/L)	METHYL PARA- THION (UG/L)	MALA- THION (UG/L)	DIAZ- INON (UG/L)	
LINE 17												
OCT 08, 73	1855	2	.3 4.0	.00 --	-- .0	.00 --	-- .0	.00 --	.00 --	.00 --	.01 --	
LINE 22												
OCT 08, 73	1820	2	.3 3.0	.00 --	-- .0	.00 --	-- .0	.00 --	.00 --	.00 --	.00 --	
LINE 224												
OCT 08, 73	1705	2	1.2	--	.0	--	.0	--	--	--	--	
LINE 264												
OCT 08, 73	1450	2	.3 1.5	.00 --	-- .0	.00 --	-- .0	.00 --	.00 --	.00 --	.00 --	
LINE 333												
OCT 08, 73	1130	1	1.5	--	.0	--	.0	--	--	--	--	
LINE 363												
OCT 08, 73	1545	3	.3	.00	--	.00	--	.00	.00	.00	.00	
OCT 11, 73	1300	3	.3	.00	--	--	--	.00	.00	.00	.00	
OCT 08, 73	1615	5	.3	.00	--	.00	--	.00	.00	.00	.00	

TABLE SE--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,
1974 WATER YEAR--CONTINUED

INSECTICIDE AND HERBICIDE ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL PCB (UG/L)	BOTTOM DEPOSIT PCB (UG/KG)	TOTAL 2,4-D (UG/L)	BOTTOM DEPOSIT 2,4-D (UG/KG)	TOTAL 2,4,5-T (UG/L)	BOTTOM DEPOSIT 2,4,5-T (UG/KG)	TOTAL SILVEX (UG/L)	BOTTOM DEPOSIT SILVEX (UG/KG)
LINE 17 -----											
OCT 08, 73	1855	2	.3 4.0	.0 --	-- .0	.00 --	-- --	.00 --	-- --	.00 --	-- --
LINE 22 -----											
OCT 08, 73	1820	2	.3 3.0	.0 --	-- .0	.00 --	-- --	.00 --	-- --	.00 --	-- --
LINE 224 -----											
OCT 08, 73	1705	2	.3 < 1.2	.1 --	-- .0	.15 --	-- --	.00 --	-- --	.00 --	-- --
LINE 264 -----											
OCT 08, 73	1450	2	.3 1.5	.0 --	-- .0	.07 --	-- --	.00 --	-- --	.00 --	-- --
LINE 333 -----											
OCT 08, 73	1130	1	.3 1.5	-- --	-- .0	.00 --	-- --	.00 --	-- --	.00 --	-- --
LINE 363 -----											
OCT 08, 73	1545	3	.3	--	--	.00	--	.00	--	.00	--
OCT 11, 73	1300	3	.3	--	--	.00	--	.00	--	.00	--
OCT 08, 73	1615	5	.3	.0	--	.00	--	.00	--	.00	--

TABLE 5F--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1974 WATER YEAR

BACTERIOLOGICAL AND CHLOROPHYLL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	CHLORU- PHYLL (UG/L)				
LINE 17 -----											
OCT 08, 73	1855		2	.3	430	390	370	--			
APR 15, 74	1525		2	.3	--	--	--	.00			
JUN 13, 74	1845		2	.3	*	*	*	--			
LINE 22 -----											
OCT 08, 73	1820		2	.3	270	220	630	--			
APR 15, 74	1545		2	.3	--	--	--	3.10			
JUN 13, 74	1825		2	.3	*	*	*	--			
LINE 65 -----											
OCT 08, 73	1925		2	.3	270	190	650	--			
APR 15, 74	1635		2	.3	--	--	--	1.20			
JUN 13, 74	1915		2	.3	*	*	*	--			
LINE 65 -----											
APR 15, 74	1720		3	.3	--	--	--	.50			
JUN 13, 74	2000		3	.3	42	35	2	--			
LINE 143 -----											
APR 16, 74	0940		1	.3	--	--	--	1.20			
JUN 13, 74	1855		1	.3	1	1	4	--			
APR 16, 74	1000		3	.3	--	--	--	.00			
JUN 13, 74	1905		3	.3	3	1	2	--			
LINE 150 -----											
OCT 09, 73	1100		4	.5	18	12	34	--			
JUN 13, 74	1825		4	.3	77	55	35	--			
LINE 224 -----											
OCT 08, 73	1705		2	.3	72	58	130	--			
APR 15, 74	1400		2	.3	--	--	--	.00			
JUN 14, 74	0900		2	.3	1	1	92	--			
LINE 254 -----											
OCT 08, 73	1545		2	.3	190	150	390	--			
APR 15, 74	1215		2	.3	--	--	--	1.10			

* - 100 NUMEROUS TO COUNT

TABLE SF--QUALITY OF WATER IN THE LAVACA-RES PALACIOS ESTUARY,

1974 WATER YEAR--CONTINUED

BACTERIOLOGICAL AND CHLOROPHYLL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)	CHLOROPHYLL A (UG/L)
--------------------	------	------	----------------	--------------------------------------	----------------------------------	------------------------------------	----------------------

LINE 254 CONTINUED

JUN 14, 74	1300	2	.3	2	1	0	--
LINE 264							
OCT 08, 73	1450	2	.3	16	12	64	--
JUN 14, 74	1225	2	.3	11	1	0	--
LINE 284							
APR 15, 74	1110	1	.3	--	--	--	3.80
APR 15, 74	1140	3	.5	--	--	--	.90
LINE 333							
OCT 08, 73	1130	1	.3	65	32	84	--
APR 11, 74	1300	1	.3	--	--	--	.20
LINE 363							
OCT 08, 73	1545	3	.3	12	2	16	--
OCT 08, 73	1615	5	.3	38	22	56	--
JUN 14, 74	0950	5	.3	8	1	0	--
LINE 375							
OCT 09, 73	1425	1	.5	10	6	38	--
APR 16, 74	1415	1	.5	--	--	--	.30
JUN 13, 74	1630	1	.3	3	1	1	--
APR 16, 74	1135	3	.5	--	--	--	.20
JUN 13, 74	1705	3	.3	3	1	2	--
LINE 902							
APR 16, 74	1455	49	.6	--	--	--	.30
JUN 13, 74	1530	49	1.5	6	3	1	--

Guadalupe Estuary

The Guadalupe estuary covers an area of almost 210 square miles (540 km²) and consists of the tidal parts of the Guadalupe River, Mission Lake, Guadalupe Bay, Hynes Bay, San Antonio Bay, Espiritu Santo Bay, Mesquite Bay, Victoria Channel, and parts of the Intracoastal Waterway (Figure 7). At mlw the Guadalupe River is about 10 feet (3.0 m) deep; Mission Lake, Guadalupe Bay, and Hynes Bay are less than 3 feet (1.0 m) deep; San

Antonio Bay is less than 6 feet (1.8 m) deep; Espiritu Santo Bay is about 8 feet (2.4 m) deep; Mesquite Bay is about 4 feet (1.2 m) deep; Victoria Channel is more than 8 feet (2.4 m) deep; and the Intracoastal Waterway is about 15 feet (4.6 m) deep.

Water-quality data (Table 6) were collected during October 1973 and April and June 1974.

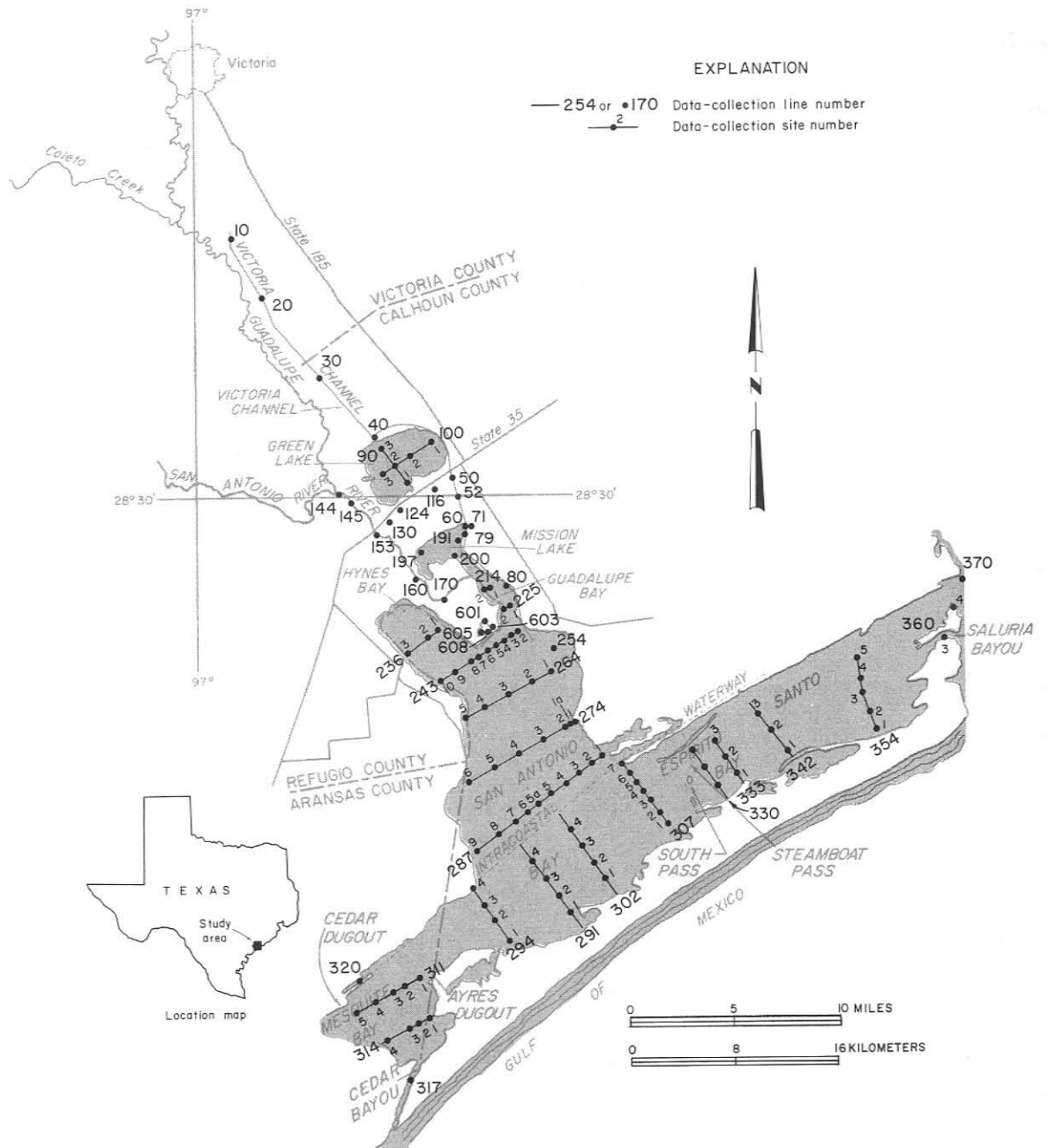


TABLE 6A--QUALITY OF WATER IN THE GUADALUPE ESTUARY,
1974 WATER YEAR

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS (CMFLD))	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
LINE 80										
OCT 09, 73	1440	2	.3	510	28.8	7.9	6.5	83	--	15
			1.5	1400	28.8	7.8	6.5	83	--	--
			3.7	1400	28.8	7.8	7.0	96	--	--
APR 16, 74	1400	2	.3	9200	20.1	8.2	9.1	102	75.	23
			1.5	10000	19.7	8.1	8.1	90	75.	--
			3.7	10000	19.5	8.1	7.7	86	90.	--
JUN 13, 74	1450	2	.3	1300	28.5	7.5	6.6	84	120.	15
			1.8	1300	28.5	7.3	6.3	80	130.	--
			3.4	1300	28.0	7.4	6.0	75	140.	--
			3.8	1300	28.0	6.9	6.2	78	130.	--
LINE 145										
OCT 09, 73	1635	2	.3	570	27.2	7.7	6.5	80	--	9
			1.5	570	27.2	7.7	6.6	81	--	--
			3.4	550	27.5	7.7	6.6	82	--	--
APR 16, 74	1150	2	.3	870	20.9	8.0	8.3	92	80.	20
			1.5	870	20.7	8.0	8.3	91	90.	--
			3.0	870	20.6	8.0	8.3	91	90.	--
LINE 170										
OCT 09, 73	1735	2	.3	570	27.0	7.7	5.8	100	--	10
			1.5	570	27.0	7.7	6.0	74	--	--
			3.4	570	27.0	7.6	6.5	80	--	--
APR 16, 74	1240	2	.3	870	20.8	7.9	7.8	87	80.	13
			1.5	870	20.8	7.8	7.6	84	175.	--
			2.4	870	20.7	7.8	7.4	81	160.	--
JUN 13, 74	1330	2	.3	480	28.0	7.4	6.4	81	170.	11
			1.8	480	28.0	7.7	6.4	81	200.	--
			3.5	480	28.0	7.9	6.2	78	240.	--
LINE 200										
OCT 09, 73	1520	2	.3	400	29.2	7.6	6.2	85	--	18
			1.2	--	29.2	7.5	--	--	--	--
APR 16, 74	1315	2	.3	870	19.4	8.1	9.3	100	10.	51
			.9	800	19.4	8.1	9.3	100	30.	--
JUN 13, 74	1410	2	.3	550	27.5	7.9	7.9	98	50.	23
			1.5	550	27.5	8.4	7.8	97	60.	--
LINE 225										
OCT 09, 73	1510	1	.3	300	29.2	7.8	--	--	--	23
			1.2	300	29.2	7.8	7.4	95	--	--
APR 16, 74	1330	1	.3	2200	19.4	8.3	9.8	107	10.	43
			.9	7800	19.4	8.2	9.9	109	40.	--
JUN 13, 74	1317	1	.3	570	30.0	8.1	9.4	123	20.	41
			1.4	570	29.5	8.1	9.0	116	30.	--
OCT 09, 73	1505	2	.3	350	29.0	7.8	7.6	97	--	22
			1.2	--	29.2	7.8	--	--	--	--
APR 16, 74	1340	2	.3	890	18.7	8.3	9.7	103	35.	28

TABLE 6A--QUALITY OF WATER IN THE GUADALUPE ESTUARY,
1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
LINE 225 CONTINUED										
APR 16, 74	1340	2	1.2	1300	18.9	8.3	9.6	102	40.	--
JUN 13, 74	1315	2	.3 1.5	680 620	30.0 29.0	8.2 8.1	10.0 9.0	131 115	20. 25.	34 --
LINE 236										
OCT 09, 73	1825	1	.3 1.2	1200 1200	29.0 29.0	8.4 8.4	9.0 8.6	115 110	-- --	5 --
APR 16, 74	1535	1	.3 .9	5800 5900	19.7 19.6	8.4 8.4	11.2 11.2	123 123	35. 40.	43 --
JUN 13, 74	1140	1	.3 1.2	3200 3000	28.5 28.0	8.4 8.4	8.3 7.6	106 97	60. 100.	23 --
OCT 09, 73	1835	2	.3 1.2	900 900	29.0 29.0	8.6 8.6	8.3 9.0	106 115	-- --	5 --
OCT 10, 73	1405	2	.3 1.2	1100 1200	28.8 28.8	8.4 8.4	8.5 8.3	109 106	-- --	8 --
APR 16, 74	1530	2	.3 .9	7000 7000	19.3 19.7	8.5 8.5	11.9 11.3	129 124	50. 50.	36 --
JUN 13, 74	1145	2	.3 1.2	6700 6700	28.0 28.0	8.5 8.5	9.2 8.6	119 111	60. 60.	25 --
OCT 09, 73	1840	3	.3 1.2	1100 1100	28.8 28.8	8.4 8.4	9.6 10.6	123 136	-- --	5 --
APR 16, 74	1520	3	.3 .9	7000 7000	19.6 19.6	8.5 8.4	10.8 10.7	119 118	25. 30.	43 --
JUN 13, 74	1150	3	.3 1.2	2900 3300	28.5 28.0	8.6 8.5	10.7 9.5	137 123	50. 60.	23 --
LINE 243										
OCT 10, 73	1600	1	.3 .9	780 800	31.2 31.2	8.3 8.3	8.0 7.5	107 100	-- --	8 --
OCT 10, 73	1550	2	.3 1.5 3.4	770 750 600	31.4 31.3 31.4	8.2 8.2 8.2	7.6 8.0 8.0	101 107 107	-- -- --	8 -- --
APR 16, 74	1415	2	.3 1.5 3.7	13000 14000 14000	19.2 19.1 19.2	8.3 8.3 8.2	9.8 9.0 8.8	109 100 98	30. 40. 60.	36 -- --
JUN 13, 74	1515	2	.3 1.8 3.4 4.1	2400 2700 4600 4400	28.5 28.5 28.0 28.0	7.7 7.8 7.9 7.7	8.5 8.4 7.6 7.7	107 107 97 98	75. 75. 80. 100.	16 -- -- --
OCT 10, 73	1545	3	.3 1.2	820 370	30.9 30.9	8.2 8.2	7.4 7.7	99 103	-- --	8 --
JUN 13, 74	1240	3	.3 1.2 1.5	600 670 1000	30.0 29.0 28.5	8.3 8.4 8.4	9.6 8.6 7.6	126 110 97	40. 40. 50.	28 -- --
OCT 10, 73	1540	4	.3 1.2	400 370	29.7 30.6	8.1 8.0	8.0 8.4	104 112	-- --	8 --
APR 16, 74	1425	4	.3 1.2	5000 11000	19.3 19.0	8.4 8.3	9.8 9.3	105 102	30. 50.	41 --

TABLE 6A--QUALITY OF WATER IN THE GUADALUPE ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS (CM/D))	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
--------------------	------	------	----------------	--	----------------------	----	-------------------------	--------------------	-----------------	-------------------------------

LINE 243 CONTINUED

OCT 10, 73	1520	5	.3 1.5	440 420	29.6 29.5	7.9 8.0	7.6 7.9	99 103	-- --	8 --
APR 16, 74	1430	5	.3 1.2	4500 9200	18.9 19.1	8.4 8.3	10.7 9.7	115 107	40. 50.	33 --
JUN 13, 74	1230	5	.3 1.5	560 560	30.0 29.0	8.2 8.1	9.3 8.0	122 102	40. 55.	25 --
OCT 10, 73	1515	6	.3 1.2	550 550	30.0 30.2	8.0 8.0	8.3 8.9	109 117	-- --	8 --
APR 16, 74	1445	6	.3 1.2	5600 7000	19.4 19.1	8.4 8.4	10.1 9.8	111 107	35. 30.	41 --
OCT 10, 73	1510	7	.3 1.5	600 600	30.1 29.8	8.0 8.0	8.6 8.4	113 111	-- --	8 --
APR 16, 74	1450	7	.3 1.2	6400 7500	19.4 19.2	8.4 8.4	10.5 9.8	115 107	30. 65.	46 --
JUN 13, 74	1222	7	.3 1.5	700 720	30.0 29.0	8.3 8.2	9.6 8.2	126 105	40. 50.	29 --
OCT 10, 73	1505	8	.3 1.2	610 620	29.7 30.1	8.1 8.1	8.4 8.2	109 108	-- --	8 --
APR 16, 74	1455	8	.3 1.2	7500 7600	19.3 19.0	8.4 8.3	10.2 9.5	111 103	40. 50.	41 --
JUN 13, 74	1213	8	.3 1.5	650 680	29.5 29.0	8.4 8.4	9.5 8.5	123 108	45. 60.	29 --
OCT 10, 73	1450	9	.3 1.5	1200 1300	30.2 30.3	8.3 8.3	8.5 8.7	112 114	-- --	8 --
APR 16, 74	1505	9	.3 1.2	7500 7600	19.5 19.3	8.3 8.3	9.6 9.5	105 103	25. 50.	58 --
OCT 10, 73	1440	10	.3 1.2	910 860	29.6 29.7	8.2 8.2	8.0 9.1	104 118	-- --	8 --
APR 16, 74	1515	10	.3 .9	6100 6100	19.7 19.7	8.4 8.4	10.3 9.8	113 107	45. 55.	33 --
JUN 13, 74	1200	10	.3 1.4	4000 4000	29.0 28.0	8.6 8.5	9.7 9.1	125 116	30. 45.	30 --

LINE 254

OCT 10, 73	1610	2	.3 1.5	1400 1400	29.6 29.6	8.4 8.4	6.7 7.0	87 91	-- --	8 --
APR 16, 74	1930	2	.3 1.5 3.0	15000 15000 15000	19.6 19.4 19.0	8.4 8.4 8.3	7.3 7.1 6.9	83 81 78	40. 30. 90.	32 -- --
JUN 13, 74	1545	2	.3 1.8 3.0	8200 8500 9700	28.5 28.5 28.0	8.2 8.2 8.1	9.6 9.8 8.0	126 128 103	60. 55. 80.	27 -- --

LINE 264

OCT 10, 73	1255	1	.3 1.5 2.7	750 610 700	28.5 28.5 28.5	8.2 8.2 8.2	8.7 8.8 8.8	112 113 113	-- -- --	6 -- --
APR 16, 74	1650	1	.3	14000	19.7	8.4	8.7	98	10.	64