TEXAS WATER DEVELOPMENT BOARD

REPORT 191

CHEMICAL AND PHYSICAL CHARACTERISTICS OF WATER IN ESTUARIES OF TEXAS OCTOBER 1970-SEPTEMBER 1971

By

D. C. Hahl and Karl W. Ratzlaff
United States Geological Survey

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CHEMICAL AND PHYSICAL CHARACTERISTICS OF WATER IN ESTUARIES OF TEXAS OCTOBER 1970-SEPTEMBER 1971

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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 began a cooperative water-resources investigation of the principal estuaries along the Texas coast (Figure 1) except Galveston Bay, which is being studied by other agencies, and the Rio Grande, 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 George H. 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 following tabulation shows the progress made through September 1971:

	PHASE		
	(1)	(2)	(3)
Sabine-Neches	Completed	Completed	No surveys
Brazos	Underway	No surveys	Do.
East Matagorda	Completed	do	Do.
Colorado	do	Completed	Underway
Lavaca-Tres Palacios	do	do	No surveys
Guadalupe	do	do	Underway
Mission-Aransas	do	do	No surveys
Nueces	do	do	Do.
Laguna Madre	do	No surveys	Do.

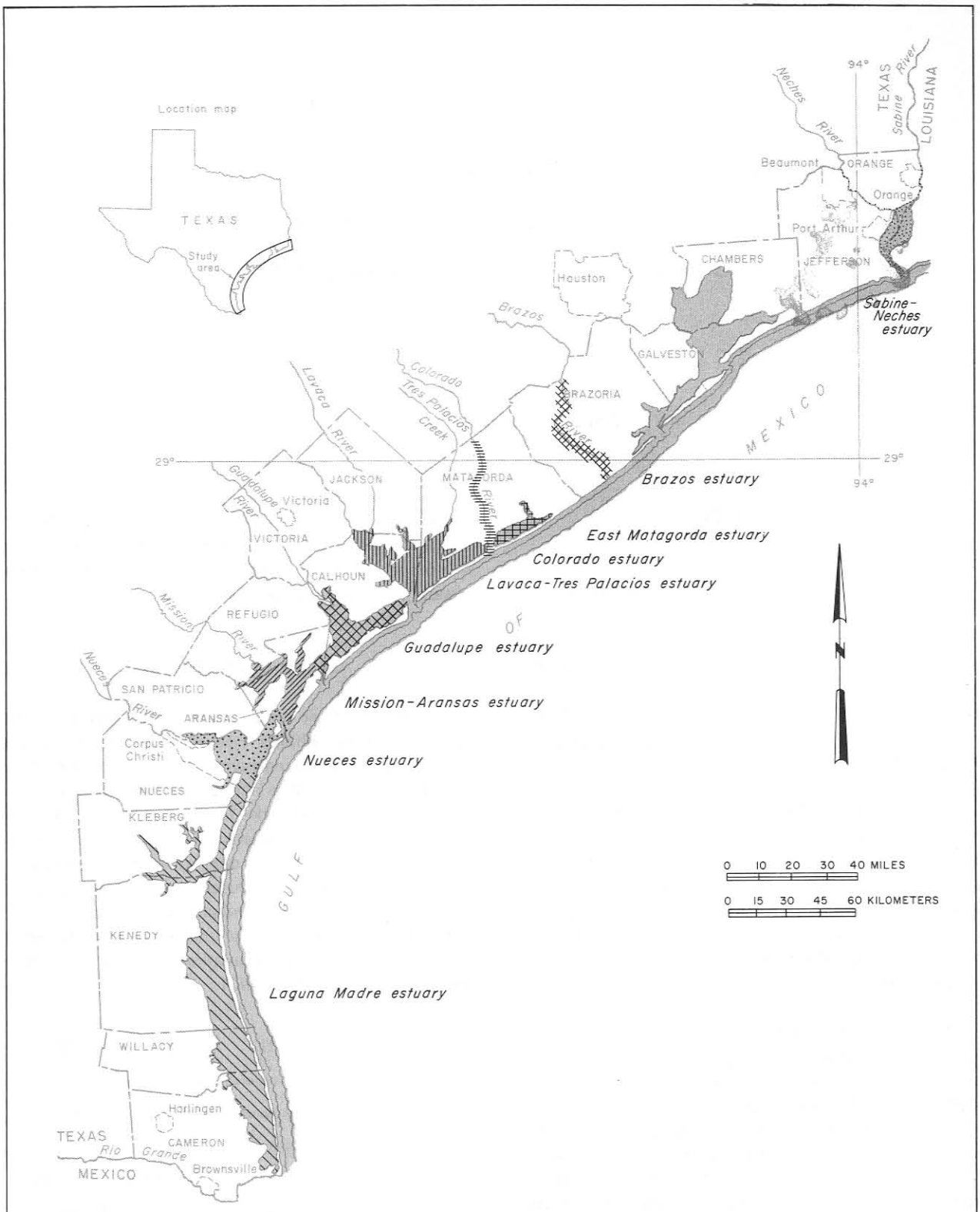


Figure 1
Locations of the Estuaries

Base from Official State Highway Map of Texas, 1971

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. Changes in locations and numbers of these stations will be based upon the results of a current study of coastal rainfall-runoff relationships. 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. One study was completed on the Guadalupe estuary in November 1970; another study was completed on the Lavaca-Tres Palacios estuary in March 1971. These studies are providing data on inflow and exchange of water through the passes.

Previous and Related Reports

This report presents data collected during the 1971 water year and is the fourth in an annual series of basic-data reports (Hahl and Ratzlaff, 1970, 1972, 1973). A report by Grozier and others (1968, p. 47-61) includes data collected during flooding caused by Hurricane Beulah. Plans include preparation of interpretive reports after sufficient data become available to establish the characteristics of an estuary.

Change in the Numbering System

Chemical and physical data for estuarine waters of Texas collected by the U.S. Geological Survey and by other agencies are being stored in the Texas Water Oriented Data Bank[1] by estuarine name, sample line and site number, and depths at which data were collected. To make the Geological Survey data compatible to storage in the data bank, the original data-collection line numbering system needed adjustment. Lists of old and new line numbers appear under the appropriate estuary in the section "Quality of Water in the Estuaries." Most site numbers were not changed; the few that were are listed distinctly on the list of new numbers.

The original data-collection line numbering system was not suitable for use in marsh lands and offshore. Therefore, under the new system data-collection lines numbered 600 to 699 are reserved for marsh lands and lines numbered 900 to 999 are reserved for offshore lines.

Each opening along the coast was assigned a "site" number. These site numbers are listed below.

LOCATION	SITE NO.	LOCATION	SITE NO.
Sabine Pass	1	Cedar Bayou	65
Freeport harbor entrance	30	North Pass	69
Brazos River	31	Aransas Pass	70
Brown Cedar Cut	40	Fish Pass	74
Colorado River	45	Corpus Christi Pass	80
Greens Bayou	47	Yarborough Pass	85
Matagorda Bay entrance channel	49	Port Mansfield entrance channel	90
Pass Cavallo	50	Brazos Santiago Pass	95

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	ABBREVIATION		UNIT	ABBREVIATION
inch	in	2.54	centimeter	cm
foot	ft	0.3048	meter	m
mile	mi	1.609	kilometer	km
square mile	mi^2	2.590	square kilometer	km^2
cubic foot per second	ft^3/s	28.32	cubic decimeter per second	dm^3/s
		0.02831	cubic meter per second	m^3/s

[1] Recognizing a need for interagency coordination and cooperation in water data activities, the 60th Texas Legislature in May of 1967 charged the Texas Water Development Board with creating a "centralized data bank incorporating all hydrologic data collected by the several agencies of the State of Texas." In response, representatives of eight State agencies, working as the Water Oriented Data Programs Section of the Texas Interagency Council on Natural Resources and the Environment, have established the Texas Water Oriented Data Bank (TWODB). The TWODB, with central staff attached to the Texas Water Development Board, has as one of its major components the Coastal Data System (CDS) encompassing chemical, physical, biological, and meteorological data on the Texas Bays and estuaries.

Acknowledgments

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 370 data-collection sites were visited during the 1971 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 landmarks and can be reoccupied exactly. About 17 percent of the sites are close to shore features or reefs and are located by compass heading and distance from that feature and water depth at the site; these sites can be reoccupied within 100 feet (30 meters). 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 sets of distant landmarks. These sites can be reoccupied within a quarter mile (0.4 kilometer).

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, and transparency by Secchi disk. Laboratory analyses include the principal inorganic ions, biochemical oxygen demand (BOD), chemical oxygen demand (COD), insecticides and herbicides, ammonium, nitrite, nitrate, ortho and total phosphate, and several other selected ions such as bromide, iodide, strontium, lithium, boron, and iron.

Before October 1968, results of analyses for nitrogen species were reported as ammonium, nitrite, or nitrate; those for phosphorus were reported as phosphate. In this report, each of the nitrogen species are reported as equivalent nitrogen; and phosphorus species are reported as equivalent phosphorus. Data reported before October 1968 may be converted to the nitrogen or phosphorus equivalent by multiplying the concentrations by the following factors:

TO CONVERT	TO	MULTIPLY BY
Ammonium (NH_4)	Nitrogen (N)	0.777
Nitrite (NO_2)	Nitrogen (N)	.305
Nitrate (NO_3)	Nitrogen (N)	.226
Phosphate (PO_4)	Phosphorus (P)	.326

Field Instruments

The field instruments used in this investigation are as follows, but mention herein of the manufacturers and their instruments does not constitute an endorsement.

PARAMETER MEASURED	INSTRUMENT	MODEL	MANUFACTURER
pH	Specific ion meter	401	Orion Research
pH	pH meter	175	Instrumentation Laboratory
Dissolved oxygen	Oxygen meter	54	Yellow Springs Instruments
Specific conductance	Solubridge	RB-3	Industrial Instruments
Temperature	Research thermometer	ET-100 Marine	Allied Research

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 daily by using the oxygen-saturation data compiled by the American Public Health Association and others (1966, p. 409). The Winkler method was used to verify the oxygen saturation during some of the calibrations. 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.

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 insecticide and herbicide analyses were collected in plastic throwaway

bottles. The BOD, COD, and nutrient samples were chilled to about 1°C, stored in a refrigerator or ice chest, and shipped to the laboratory as soon as possible, usually within 24 hours. All other samples were stored at ambient temperature.

Since October 1969, each sample collected for nutrient analysis was preserved by adding mercuric chloride (40 milligrams of mercury per liter of sample). 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 and shipped 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-centimeter) inside diameter lucite tube and selectively removing 100 grams of material from the center of the core.

Sabine-Neches Estuary

The Sabine-Neches estuary covers an area of about 100 square miles (260 square kilometers) 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 meters) in dredged parts of the rivers, canals, and pass; about 15 feet (5 meters) in the Intracoastal Waterway; and generally 10 feet (3 meters) in Sabine Lake.

Water-quality data (Table 1) were collected during May at most sites shown on Figure 2.

The changes in line numbers to facilitate storage in the Texas Water Oriented Data Bank and to provide opportunity to coordinate data-collection sites among all agencies are shown below. New line numbers are used in Table 1 and on Figure 2.

All data collected prior to the changes in line numbers are stored in the data bank under the new line numbers.

Sabine-Neches Estuary Change in Line Numbers

OLD	NEW	OLD	NEW
1	15	19	190
1a	17	19a	201
2	24	19b	203
3	33	20	205
3a	35	21	214
4	40	22	221
5	55	23	234
6	65	24	244
6a	69	25	254
7	70	26	264
7a	75	27	274
8a	82	28	284
8b	83	29	293
8c	84	30	300
8	87	31	308
9	97	Johnson Bayou	313
10	107	32	323
11	115	33	331
12	125	34	339
13	134	35	353
14	147	35a	361
15	155	36	369
16	161	37	377
17	170	38	382
18	180		
		Gulf of Mexico	
		39-site 2	903-site 1

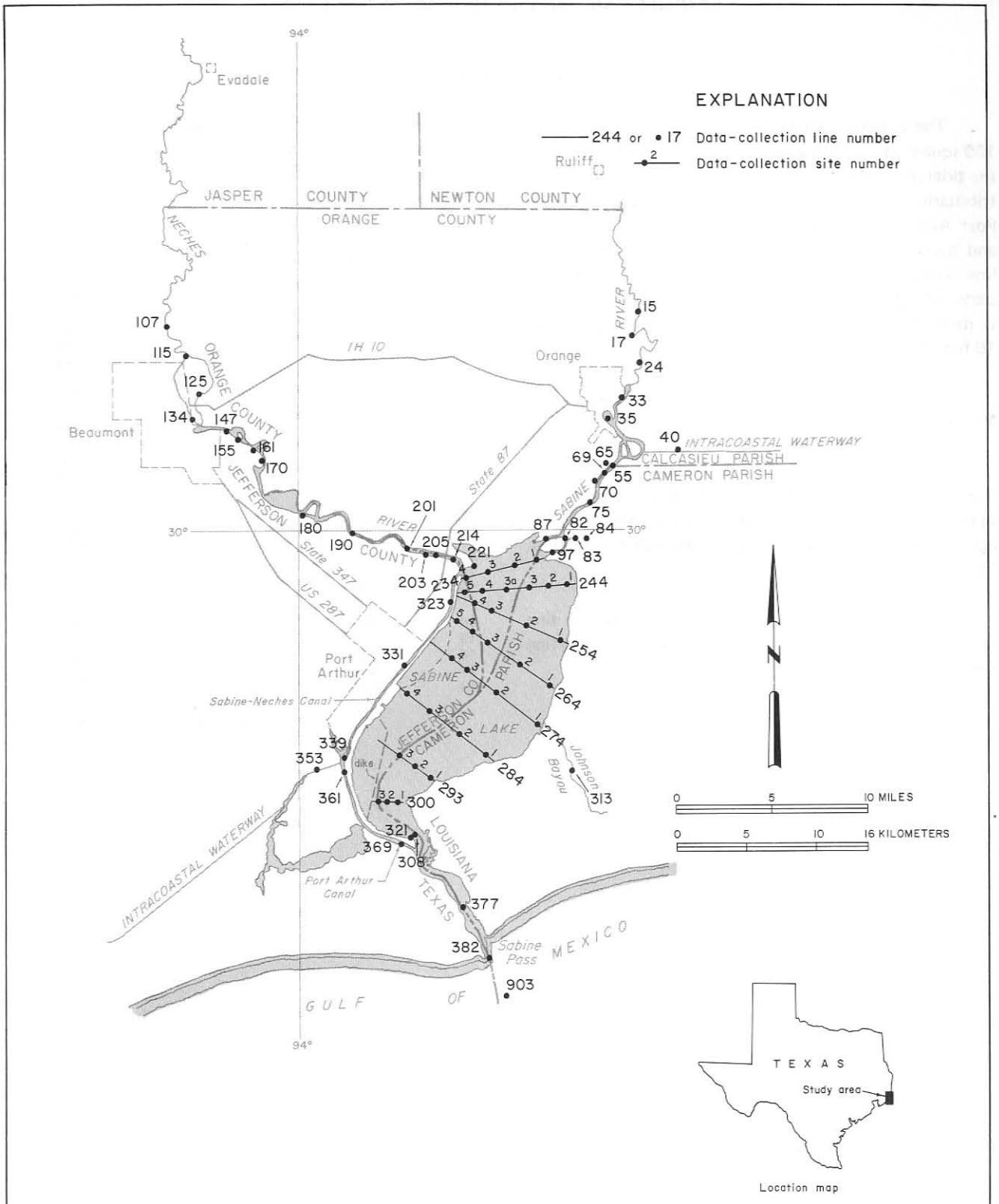


Figure 2

Data-Collection Sites in the Sabine-Neches Estuary

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

1971 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 15				
MAY 20, 71	1030	2	.3	200	25.0	6.8	5.8	69	--	50
			1.5	215	24.9	6.8	5.8	69	--	--
			3.0	215	24.7	6.8	5.7	68	--	--
			4.6	215	24.8	6.8	5.6	67	--	--
			6.1	210	24.8	6.8	5.7	68	--	--
			8.5	260	24.4	6.8	5.7	67	--	--
						LINE 17				
MAY 20, 71	1050	2	.3	205	24.8	6.8	5.5	65	--	51
			3.0	205	24.7	6.8	5.8	69	--	--
			6.1	210	24.7	6.8	5.4	64	--	--
			9.1	215	24.6	6.8	5.7	68	--	--
			14.3	230	24.6	6.7	5.6	67	--	--
						LINE 24				
MAY 20, 71	1120	2	.3	550	25.0	6.9	5.6	67	--	61
			1.5	650	24.8	6.8	5.4	64	--	--
			3.0	640	24.7	6.8	5.3	63	--	--
			4.6	1300	24.4	6.8	4.9	58	--	--
			5.2	3200	24.2	6.7	4.1	49	--	--
			5.5	3300	24.2	6.7	4.0	48	--	--
			5.8	10000	24.1	6.6	1.9	23	--	--
			6.1	8400	24.1	6.7	2.5	30	--	--
			7.0	11000	24.1	6.6	1.4	17	--	--
			7.9	11000	24.1	6.6	1.4	17	--	--
						LINE 33				
MAY 20, 71	1140	2	.3	1500	24.4	6.9	5.9	69	--	61
			1.5	1500	24.4	6.9	5.7	67	--	--
			3.0	1600	24.3	6.9	5.5	65	--	--
			4.6	6300	24.1	6.8	4.7	57	--	--
			6.1	7500	24.2	7.0	4.4	53	--	--
			7.6	13000	23.8	6.8	.7	8	--	--
			9.1	13000	24.1	6.8	.7	8	--	--
			14.3	14000	24.2	6.8	1.2	15	--	--
						LINE 40				
MAY 20, 71	1215	2	.3	10000	25.3	7.0	6.4	79	--	41
			1.5	10000	25.2	7.0	6.4	78	--	--
			3.0	10000	25.3	7.0	6.4	79	--	--
			4.6	11000	25.3	7.0	6.2	76	--	--
			7.0	11000	25.3	7.0	6.2	76	--	--
						LINE 55				
MAY 20, 71	1235	2	.3	6100	24.7	7.0	5.9	72	--	53
			1.5	7500	24.7	7.0	5.8	71	--	--
			3.0	8500	24.9	7.0	5.8	71	--	--
			4.6	10000	24.9	7.0	5.4	66	--	--
			6.1	11000	24.7	7.0	5.1	62	--	--
			8.5	15000	24.5	7.1	4.9	61	--	--
						LINE 69				
MAY 20, 71	1245	2	.3	6500	25.1	7.0	6.3	77	--	44
			1.5	7000	24.8	7.0	6.0	73	--	--

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

1971 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 69 CONTINUED					
MAY 20, 71	1245	2	4.0	7000	24.6	7.0	6.0	73	--	--
					LINE 70					
MAY 20, 71	1305	2	.3	6900	26.0	7.1	5.8	72	--	46
			1.5	7000	25.5	7.0	5.7	70	--	--
			3.0	7300	25.3	7.0	5.6	69	--	--
			4.6	8500	25.2	7.1	5.4	66	--	--
			6.1	11000	25.2	7.1	4.9	60	--	--
			10.7	16000	25.2	7.1	5.4	68	--	--
					LINE 87					
MAY 20, 71	1335	2	.3	8500	25.5	7.0	5.8	72	--	46
			1.5	9300	25.4	7.0	5.6	69	--	--
			3.0	12000	25.4	7.0	5.2	65	--	--
			4.6	14000	25.6	7.0	4.9	61	--	--
			6.1	17000	25.5	7.0	4.5	58	--	--
			7.6	21000	25.5	7.0	4.1	53	--	--
			10.4	24000	25.3	7.0	4.2	54	--	--
MAY 21, 71	0940	2	.3	12000	25.6	7.3	6.3	79	--	56
			1.5	14000	25.6	7.2	6.2	78	--	--
			3.0	15000	25.6	7.3	5.3	67	--	--
			4.6	18000	25.8	7.3	5.2	68	--	--
			6.1	22000	25.8	7.5	4.2	55	--	--
			10.1	27000	25.5	7.5	3.8	51	--	--
					LINE 97					
MAY 20, 71	1320	2	.3	9000	25.3	7.1	5.9	73	--	41
			1.5	9000	25.3	7.1	5.9	73	--	--
			3.0	9100	25.3	7.1	5.9	73	--	--
			4.6	10000	25.3	7.1	6.0	74	--	--
			7.6	10000	25.3	7.0	6.1	75	--	--
					LINE 107					
MAY 19, 71	1135	2	.3	220	25.5	6.8	6.8	82	--	38
			1.5	220	24.8	6.7	6.4	76	--	--
			3.0	200	24.7	6.7	6.6	78	--	--
			4.6	220	24.7	6.7	6.8	81	--	--
			7.6	230	24.8	6.7	6.8	81	--	--
					LINE 115					
MAY 19, 71	1155	2	.3	220	26.0	6.7	7.2	88	--	36
			1.5	230	25.0	6.7	6.2	74	--	--
			3.0	285	24.7	6.7	6.1	73	--	--
			4.6	720	24.6	6.7	5.2	62	--	--
			6.1	3500	24.7	6.6	1.0	12	--	--
					LINE 125					
MAY 19, 71	1210	2	.3	900	26.4	6.8	5.9	72	--	36
			1.5	1100	25.1	6.8	5.4	64	--	--
			3.0	1500	24.9	6.7	4.5	54	--	--
			4.6	3100	24.9	6.7	3.0	36	--	--
			6.1	6600	25.2	6.8	1.6	20	--	--
			9.1	11000	25.4	6.8	.6	7	--	--
			14.3	14000	25.3	6.9	.6	8	--	--
					LINE 134					
MAY 19, 71	1230	2	.3	4000	27.5	6.7	3.7	47	--	43

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

1971 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 134 CONTINUED					
MAY 19, 71	1230	2	1.5	4300	25.8	6.7	3.0	37	--	--
			3.0	5100	25.7	6.8	2.5	31	--	--
			4.6	7500	25.7	6.8	1.7	21	--	--
			7.6	12000	25.7	6.8	.4	5	--	--
			11.0	12000	25.6	6.8	.6	8	--	--
					LINE 147					
MAY 19, 71	1245	2	.3	5500	26.5	6.8	3.3	41	--	41
			1.5	6500	25.7	6.8	2.8	34	--	--
			3.0	7000	25.6	6.8	2.7	33	--	--
			4.6	8000	25.7	6.8	2.4	30	--	--
			6.1	10000	25.7	6.8	1.5	18	--	--
			11.3	13000	25.6	6.8	.4	5	--	--
					LINE 155					
MAY 19, 71	1255	2	.3	6900	26.4	6.9	4.5	56	--	43
			1.5	7500	25.3	6.8	3.1	38	--	--
			3.0	8000	25.2	6.8	2.7	33	--	--
			4.6	9100	25.2	6.8	1.9	23	--	--
			6.1	12000	25.2	6.8	.5	6	--	--
			7.6	12000	25.2	6.8	.3	4	--	--
			12.2	14000	25.0	6.8	.4	5	--	--
					LINE 161					
MAY 19, 71	1305	2	.3	8200	27.0	6.9	3.7	47	--	41
			1.5	8200	25.7	6.9	3.1	38	--	--
			3.0	8500	25.1	6.8	2.6	32	--	--
			4.6	9600	25.1	6.8	1.8	22	--	--
			6.1	11000	25.3	6.8	.7	9	--	--
			7.6	13000	25.2	6.8	.4	5	--	--
			12.5	14000	25.1	6.8	.8	10	--	--
					LINE 170					
MAY 19, 71	1320	2	.3	8500	27.4	6.9	4.0	51	--	46
			.9	8500	26.2	6.8	3.1	39	--	--
			1.5	8900	25.7	6.8	1.8	22	--	--
			3.0	9100	25.3	6.8	1.4	17	--	--
			4.6	11000	25.1	6.8	1.3	16	--	--
			6.1	12000	24.9	6.8	.6	7	--	--
			13.1	14000	24.8	6.8	.2	2	--	--
					LINE 180					
MAY 19, 71	1340	2	.3	12000	25.9	6.9	4.0	51	--	53
			1.5	12000	25.2	6.9	3.0	37	--	--
			3.0	12000	25.2	6.9	3.1	38	--	--
			4.6	13000	25.0	6.9	2.2	27	--	--
			6.1	14000	24.9	6.9	1.7	21	--	--
			7.6	14000	24.8	6.9	1.3	16	--	--
			13.1	15000	24.7	6.8	.2	2	--	--
					LINE 190					
MAY 19, 71	1400	2	.3	14000	26.1	7.0	3.5	44	--	41
			1.5	14000	26.0	7.0	3.3	42	--	--
			3.0	13000	26.0	7.0	3.3	42	--	--
			4.6	14000	25.8	7.0	2.9	37	--	--
			6.1	14000	25.9	7.1	3.0	38	--	--
			9.1	16000	26.0	7.2	2.0	26	--	--

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

1971 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 190 CONTINUED					
MAY 19, 71	1400	2	12.5	17000	26.0	7.2	1.4	18	--	--
					LINE 205					
MAY 19, 71	1415	2	.3	15000	32.4	8.4	4.3	60	--	58
			1.5	16000	29.7	7.8	3.8	52	--	--
			3.0	16000	28.2	7.4	3.4	45	--	--
			4.6	16000	27.0	7.3	2.6	34	--	--
			6.1	16000	26.6	7.3	2.1	27	--	--
			9.1	18000	26.3	7.4	3.1	40	--	--
			14.0	23500	25.8	7.4	3.7	49	--	--
					LINE 214					
MAY 19, 71	1430	2	.3	16000	29.0	7.5	4.8	65	--	69
			1.5	15000	29.0	7.5	5.4	73	--	--
			3.0	16000	28.0	7.3	4.1	55	--	--
			6.1	17000	27.0	7.3	3.7	49	--	--
			9.1	19000	26.5	7.4	5.0	66	--	--
			13.1	27000	26.2	7.5	3.2	43	--	--
MAY 19, 71	1440	2	.3	16000	28.7	7.5	4.8	65	--	69
			6.1	17000	27.2	7.3	3.2	42	--	--
			13.1	27000	26.3	7.5	3.4	46	--	--
MAY 21, 71	0840	2	.3	15000	25.9	7.3	4.2	54	--	61
			1.5	16000	25.8	7.3	3.9	50	--	--
			3.0	18000	25.7	7.3	3.7	47	--	--
			6.1	22000	25.4	7.5	4.0	52	--	--
			9.1	30000	24.8	7.6	4.2	56	--	--
			13.1	31000	24.7	7.6	3.9	52	--	--
					LINE 221					
MAY 21, 71	0855	2	.3	18000	25.9	7.4	4.3	56	--	--
			1.5	18000	25.8	7.4	4.3	56	--	--
			3.0	20000	25.6	7.5	4.3	56	--	--
			6.1	22000	25.5	7.6	4.6	60	--	--
			10.4	29000	25.0	7.6	4.9	64	--	--
					LINE 234					
MAY 21, 71	0930	1	.3	12000	25.4	7.2	6.7	84	--	56
			1.4	14000	25.4	7.2	6.7	84	--	--
MAY 21, 71	0915	2	.3	11000	24.8	7.1	6.6	80	--	91
			.9	14000	25.1	7.3	6.0	74	--	--
			1.5	16000	25.5	7.3	5.5	70	--	--
MAY 21, 71	0905	3	.3	14000	25.1	7.4	6.8	84	--	51
			1.2	14000	25.1	7.3	7.1	88	--	--
MAY 21, 71	0835	4	.3	16000	25.7	7.4	4.5	57	--	61
			1.1	18000	25.6	7.4	4.8	62	--	--
					LINE 244					
MAY 21, 71	1000	1	.3	17000	25.7	8.1	7.7	99	--	99
			.9	17000	25.6	8.1	7.1	91	--	--
			1.5	18000	25.4	8.0	6.3	81	--	--
MAY 21, 71	1005	2	.3	17000	25.8	7.4	6.8	88	--	124
			.9	17000	25.8	7.4	6.8	88	--	--
			1.8	17000	25.7	7.4	7.0	90	--	--

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

1971 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 244 CONTINUED						
MAY 21, 71	1015	3	.3	18000	26.1	7.5	8.3	108	--	173
			.9	18000	26.1	7.5	8.0	104	--	--
			2.1	18000	26.0	7.4	8.1	105	--	--
MAY 21, 71	1025	4	.3	13000	25.8	7.2	6.6	84	--	97
			1.5	14000	25.7	7.1	6.3	79	--	--
			2.3	17000	26.1	6.7	1.7	22	--	--
MAY 21, 71	1040	5	.3	12000	26.0	7.3	7.1	90	--	104
			1.7	12000	25.9	7.3	7.5	95	--	--
				LINE 254						
MAY 21, 71	1135	1	.3	18000	26.8	7.4	8.1	106	--	104
			.9	18000	26.8	7.4	8.3	109	--	--
			1.5	18000	26.7	7.3	8.4	110	--	--
			2.1	19000	26.6	7.2	8.1	106	--	--
MAY 21, 71	1120	2	.3	19000	26.8	7.6	9.1	120	--	163
			1.5	19000	26.7	7.6	9.2	121	--	--
			2.4	20000	26.6	7.3	8.6	115	--	--
MAY 21, 71	1100	3	.3	12000	26.0	7.5	8.7	110	--	76
			1.8	13000	26.0	7.4	8.4	106	--	--
MAY 21, 71	1110	3	.3	17000	26.4	7.6	9.7	126	--	130
			.9	17000	26.4	7.6	9.0	117	--	--
			1.5	17000	26.3	7.6	8.8	114	--	--
			2.1	18000	26.2	7.4	8.4	109	--	--
MAY 21, 71	1050	4	.3	15000	26.1	7.8	8.9	114	--	64
			1.1	14000	26.0	7.7	8.9	113	--	--
				LINE 274						
MAY 21, 71	1150	1	.3	17000	25.9	7.4	9.1	118	--	81
			1.7	17000	26.1	7.3	9.1	118	--	--
MAY 21, 71	1200	2	.3	19000	25.8	7.6	8.5	110	--	127
			1.5	19000	25.9	7.6	9.0	117	--	--
			2.4	19000	25.8	7.2	8.3	108	--	--
MAY 21, 71	1210	4	.3	18000	25.9	7.9	9.3	121	--	99
			.9	18000	25.9	7.9	9.0	117	--	--
			1.5	19000	25.8	7.9	8.3	108	--	--
			2.0	22000	25.4	7.7	7.8	104	--	--
				LINE 293						
MAY 20, 71	1715	1	.3	22000	26.2	7.7	7.8	103	--	46
			1.7	22000	26.3	7.7	8.2	108	--	--
MAY 20, 71	1710	2	.3	24000	26.6	7.9	8.3	111	--	48
			1.7	24000	26.7	7.9	8.9	119	--	--
MAY 20, 71	1700	3	.3	26000	26.9	8.0	8.2	111	--	46
			1.7	26000	26.8	7.9	8.5	115	--	--
				LINE 300						
MAY 20, 71	1720	1	.3	22000	26.2	7.6	7.3	96	--	33
			1.7	22000	26.2	7.6	7.8	103	--	--
MAY 20, 71	1730	2	.3	24000	26.0	7.8	7.9	104	--	69
			2.4	24000	25.8	7.7	7.7	101	--	--

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

1971 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 300 CONTINUED					
MAY 20, 71	1745	3	.3	27000	26.5	7.9	7.9	107	--	48
			1.7	27000	26.4	7.9	8.0	108	--	--
					LINE 308					
MAY 20, 71	1750	2	.3	23000	25.8	7.6	7.6	100	--	69
			3.0	24000	25.7	7.7	7.9	102	--	--
			6.7	26000	25.8	7.7	8.3	111	--	--
					LINE 323					
MAY 20, 71	1450	2	.3	17000	27.4	7.6	4.6	61	--	61
			1.5	17000	27.2	7.6	4.6	60	--	--
			3.0	18000	27.0	7.6	4.5	59	--	--
			4.6	23000	26.4	7.6	4.4	58	--	--
			6.1	24000	26.2	7.7	4.4	58	--	--
			7.6	31000	25.5	7.8	4.0	54	--	--
			10.4	32000	25.6	7.8	3.8	51	--	--
					LINE 331					
MAY 20, 71	1520	2	.3	20000	26.6	7.8	6.2	83	--	74
			3.0	21000	26.3	7.7	5.7	75	--	--
			6.1	31000	25.6	7.8	5.1	69	--	--
			10.7	33000	25.5	7.8	4.9	67	--	--
					LINE 339					
MAY 20, 71	1535	2	.3	23000	26.2	7.9	6.6	87	--	81
			3.0	27000	26.0	7.8	5.6	76	--	--
			6.1	28000	26.0	7.8	5.3	72	--	--
			10.7	36000	26.0	7.9	5.4	75	--	--
					LINE 353					
MAY 20, 71	1545	2	.3	19000	27.5	7.2	.0	0	--	48
			1.5	21000	26.6	7.3	2.5	33	--	--
			3.0	23000	26.4	7.7	5.6	74	--	--
			4.9	24000	26.1	7.7	6.6	87	--	--
					LINE 369					
MAY 20, 71	1615	2	.3	27000	26.7	8.2	9.7	133	--	79
			1.5	27000	26.4	8.0	8.4	114	--	--
			3.0	28000	26.3	7.9	7.9	107	--	--
			6.1	30000	25.8	7.8	6.8	93	--	--
			12.5	36000	25.6	7.9	5.5	75	--	--
					LINE 377					
MAY 20, 71	1810	2	.3	29000	25.7	7.9	7.9	105	--	99
			1.5	29000	25.7	7.9	7.8	104	--	--
			3.0	29000	25.7	7.9	7.8	104	--	--
			6.1	31000	25.4	7.8	6.8	92	--	--
			14.3	36000	25.2	7.9	5.6	76	--	--

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

1971 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-PHORUS ORTHO (P) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	TOTAL ORGANIC CARBON (MG/L)
						LINE 15						
MAY 20, 71	1030	2	.3	9.8	.1	.63	.02	.05	.05	.4	--	--
			8.5	8.2	.1	.15	.02	.05	.05	.6	--	--
						LINE 87						
MAY 20, 71	1335	2	.3	5.0	.3	.43	.10	.05	.05	1.1	--	--
			10.4	2.7	.2	.77	.09	.04	.04	1.5	--	--
						LINE 107						
MAY 19, 71	1135	2	.3	8.0	.1	.67	.01	.03	.03	1.0	--	--
			7.6	8.0	.1	.18	.01	.05	.05	1.0	--	--
						LINE 214						
MAY 19, 71	1430	2	.3	3.8	.5	1.30	.17	.03	.03	2.0	--	--
			13.1	3.2	.5	.85	.10	.05	.10	7.6	--	--
						LINE 244						
MAY 21, 71	1005	2	.3	5.1	.5	.25	.13	.02	.02	.9	--	--
			1.8	5.2	.4	.24	.14	.02	.02	1.2	--	--
MAY 21, 71	1025	4	.3	5.5	.4	.55	.13	.04	.04	.9	--	--
			2.3	5.7	.3	.72	.11	.04	.04	2.1	--	--
						LINE 254						
MAY 21, 71	1050	4	1.1	4.6	.3	.56	.14	.05	.05	2.5	--	--
						LINE 300						
MAY 20, 71	1730	2	.3	3.8	.0	.12	.04	.02	.02	.6	--	--
			2.4	3.7	.1	.04	.04	.05	.05	.3	--	--
						LINE 323						
MAY 20, 71	1450	2	.3	4.2	.3	1.10	.18	.06	.06	.6	--	--
			10.4	2.3	.2	.40	.06	.08	.08	.4	--	--
						LINE 339						
MAY 20, 71	1535	2	.3	3.8	.4	.62	.12	.06	.06	1.1	--	--
			10.7	2.8	.2	.36	.04	.04	.04	.1	--	--
						LINE 369						
MAY 20, 71	1615	2	.3	3.5	.2	.49	.12	.01	.01	3.1	--	--
			12.5	2.6	.1	.47	.04	.07	.07	.2	--	--
						LINE 377						
MAY 20, 71	1810	2	.3	3.0	.2	.13	.04	.01	.01	.6	--	--
			14.3	2.7	.1	.34	.05	.06	.06	.6	--	--

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

1971 WATER YEAR

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICROMHOS) (LAB)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (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					
MAY 20, 71	1030	2	.3	202	--	--	--	--	--	--	--
			8.5	239	8.0	7.3	20	35	20	31	112
						LINE 87					
MAY 20, 71	1335	2	.3	7150	--	--	--	--	--	--	--
			10.4	23000	190.0	600.0	4000	80	1100	7400	13400
						LINE 107					
MAY 19, 71	1135	2	.3	216	--	--	--	--	--	--	--
			7.6	180	6.0	4.4	18	21	12	30	89
						LINE 214					
MAY 19, 71	1430	2	.3	14600	140.0	360.0	2500	62	660	4700	8440
			13.1	25300	220.0	650.0	5200	94	1400	9200	16700
						LINE 244					
MAY 21, 71	1005	2	.3	15500	--	--	--	--	--	--	--
			1.8	15700	--	--	--	--	--	--	--
MAY 21, 71	1025	4	.3	11300	--	--	--	--	--	--	--
			2.3	15600	--	--	--	--	--	--	--
						LINE 254					
MAY 21, 71	1050	4	1.1	12800	--	--	--	--	--	--	--
						LINE 300					
MAY 20, 71	1730	2	.3	23200	290.0	460.0	4900	116	1800	8000	15400
			2.4	23900	180.0	570.0	4500	68	1200	8100	14600
						LINE 323					
MAY 20, 71	1450	2	.3	16300	--	--	--	--	--	--	--
			10.4	34800	--	--	--	--	--	--	--
						LINE 339					
MAY 20, 71	1535	2	.3	22400	--	--	--	--	--	--	--
			10.7	35100	--	--	--	--	--	--	--
						LINE 369					
MAY 20, 71	1615	2	.3	25200	--	--	--	--	--	--	--
			12.5	36600	280.0	970.0	6900	110	1700	13000	22500
						LINE 377					
MAY 20, 71	1810	2	.3	27600	--	--	--	--	--	--	--
			14.3	37300	--	--	--	--	--	--	--

Brazos Estuary

The Brazos estuary covers an area of about 3 square miles (8 square kilometers) 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 were not collected during the 1971 water year.

The changes in line numbers to facilitate storage in the Texas Water Oriented Data Bank and to provide opportunity to coordinate data-collection sites among all agencies are shown below. New line numbers are used on Figure 3.

All data collected prior to the changes in line numbers are stored in the data bank under the new line numbers.

Brazos Estuary Change in Line Numbers

OLD	NEW	OLD	NEW
1	10	11	110
2	20	12	120
3	30	13	138
4	40	14	145
5	50	15	155
6	60	16	165
7	70		
8	80		
9	90		
10	100		

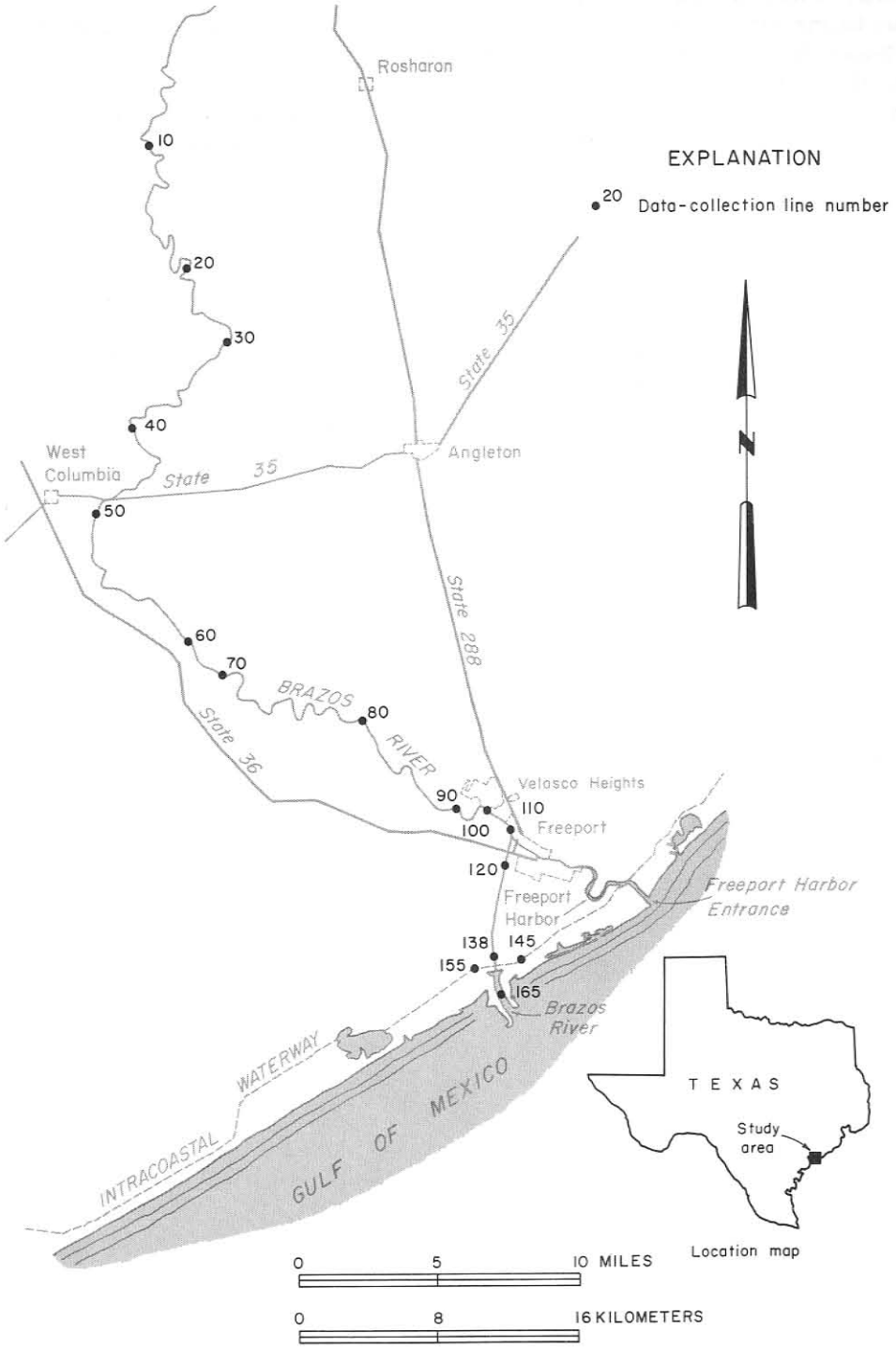


Figure 3

Data-Collection Sites in the Brazos Estuary

East Matagorda Estuary

The East Matagorda estuary covers an area of about 56 square miles (145 square kilometers) 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 meters) in East Matagorda Bay and about 15 feet (5 meters) in the Intracoastal Waterway.

Water-quality data were not collected during the 1971 water year.

The changes in line numbers to facilitate storage in the Texas Water Oriented Data Bank and to provide opportunity to coordinate data-collection sites among all agencies are shown below. New line numbers are used on Figure 4.

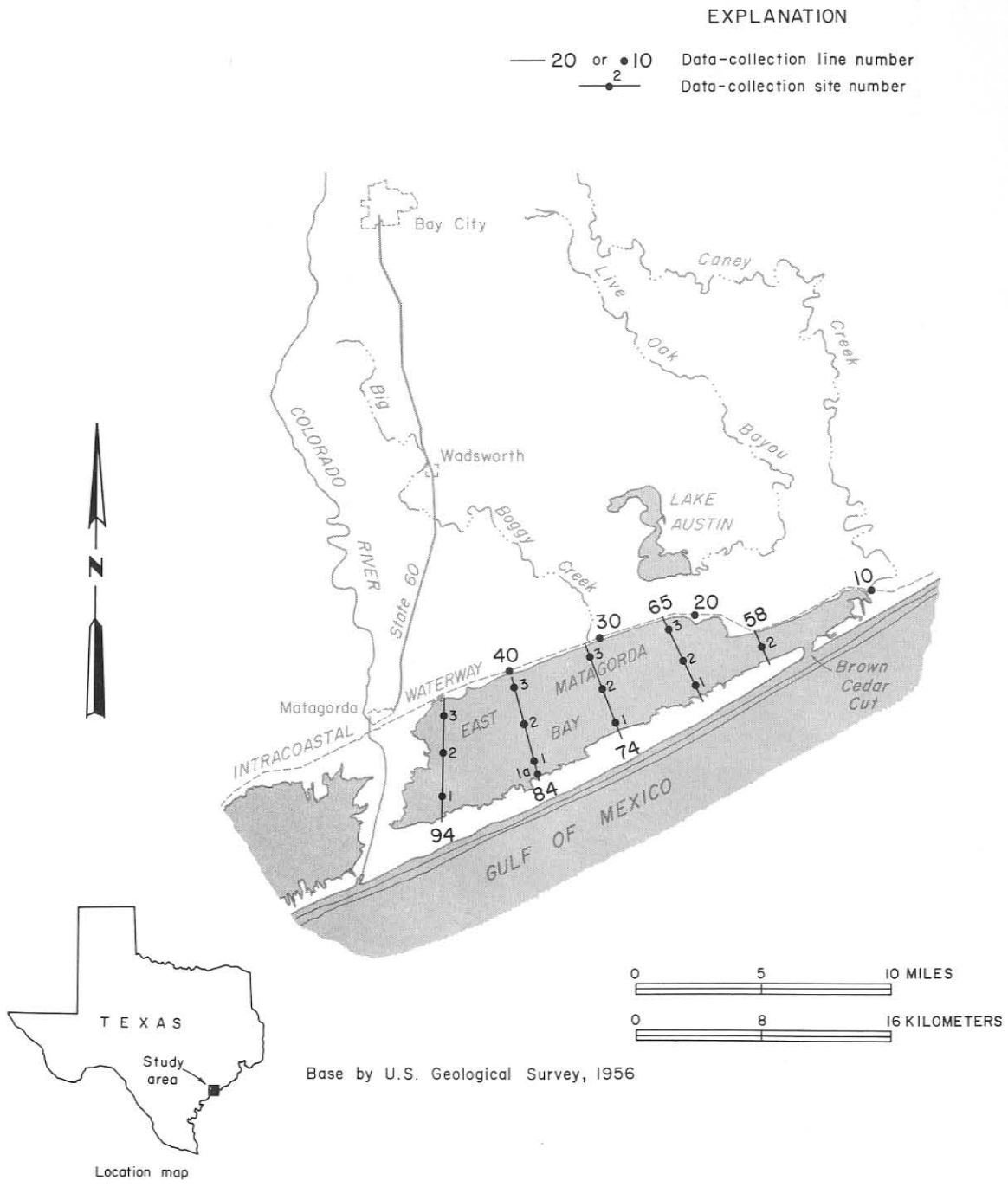


Figure 4.—Data-Collection Sites in the East Matagorda Estuary

All data collected prior to the changes in line numbers are stored in the data bank under the new line numbers.

East Matagorda Estuary
Change in Line Numbers

OLD	NEW
1	10
2	20
3	30
4	40
5	58
6	65
7	74
8	84
9	94

Colorado Estuary

The Colorado estuary covers an area of about 2 square miles (5 square kilometers) 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 (2 meters) in the river channel and about 15 feet (5 meters) in the Intracoastal Waterway.

Water-quality data (Table 2) were collected in November, December, and April at most sites shown on Figure 5.

The changes in line numbers to facilitate storage in the Texas Water Oriented Data Bank and to provide opportunity to coordinate data-collection sites among all agencies are shown below. New line numbers are used in Table 2 and on Figure 5.

All data collected prior to the changes in line numbers are stored in the data bank under the new line numbers.

Colorado Estuary Change in Line Numbers

OLD	NEW	OLD	NEW
1	18	9	95
2	22	10	105
2b	25	11	115
3	33	12	125
4	44	13	135
5	55	13a	137
New line	59	14	147
6	66	Parkers Cut	152
7	73	8a	164
8	81	Lavaca-Tres Palacios 31	175

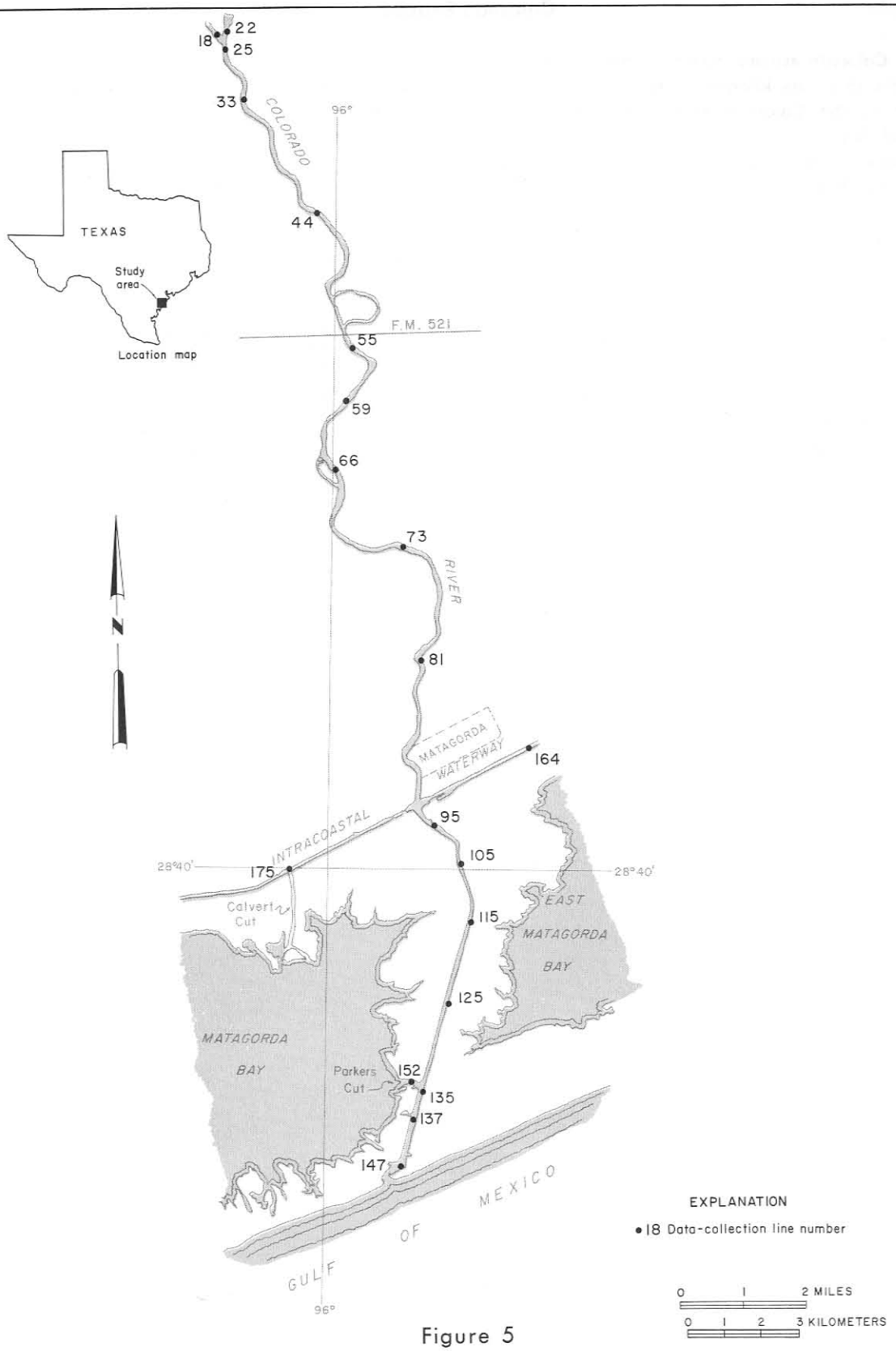


Figure 5

Data-Collection Sites in the Colorado Estuary

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

1971 WATER YEAR

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 18					
NOV 06, 70	1525	2	.3	570	18.8	7.9	14.2	151	--	33
			2.1	570	18.5	7.9	14.2	151	--	--
DEC 04, 70	1540	2	.3	700	22.8	--	11.6	133	--	--
			2.4	730	22.8	--	12.0	138	--	--
APR 08, 71	0905	2	.3	740	18.0	8.6	8.8	93	--	28
			1.5	760	18.4	8.6	8.4	88	--	--
					LINE 22					
NOV 06, 70	1510	2	.3	540	18.4	7.8	13.0	137	--	38
			1.5	540	18.1	7.7	12.6	133	--	--
			4.0	550	18.6	7.8	12.0	128	--	--
DEC 04, 70	1530	2	.3	730	22.8	--	10.0	115	--	76
			1.5	730	22.6	--	8.8	101	--	--
			4.0	770	22.3	--	5.6	64	--	--
APR 08, 71	0915	2	.3	1200	19.0	8.4	8.7	93	--	30
			1.5	3100	19.0	8.3	8.7	94	--	--
			2.4	26000	19.6	7.6	5.0	59	--	--
					LINE 33					
NOV 06, 70	1500	2	.3	570	17.3	7.9	13.6	142	--	43
			1.5	570	17.2	7.8	13.4	138	--	--
			4.7	550	16.9	7.9	13.4	138	--	--
DEC 04, 70	1515	2	.3	730	22.5	--	11.1	126	--	61
			1.5	750	22.3	--	10.4	118	--	--
			4.6	770	22.0	--	9.4	107	--	--
APR 08, 71	0930	2	.3	1200	19.6	8.6	9.0	97	--	--
			1.5	15000	19.4	8.6	8.0	91	--	--
			2.1	20000	19.9	7.6	3.2	37	--	--
			2.4	26000	20.0	7.1	.0	0	--	--
			2.7	26000	20.0	7.1	.0	0	--	--
					LINE 44					
NOV 06, 70	1440	2	.3	560	18.3	8.0	14.0	147	--	38
			1.5	560	18.0	7.9	13.2	139	--	--
			3.0	560	18.2	8.0	12.8	135	--	--
DEC 04, 70	1500	2	.3	910	22.8	--	11.4	131	--	58
			1.5	1000	22.2	--	10.6	120	--	--
			2.1	1000	22.5	--	11.0	125	--	--
			2.6	15000	20.8	--	1.0	12	--	--
			3.2	29000	20.3	--	.1	1	--	--
APR 08, 71	0950	2	.3	1900	20.0	8.3	8.7	96	--	25
			1.5	3000	20.0	8.1	7.7	85	--	--
			3.0	38000	20.4	7.3	.0	0	--	--
			4.3	37000	20.2	7.3	.0	0	--	--
					LINE 55					
NOV 06, 70	1430	2	.3	540	18.2	8.0	14.6	154	--	53
			1.5	540	18.1	8.0	13.4	141	--	--
			3.0	550	17.2	8.0	13.2	136	--	--
DEC 04, 70	1440	2	.3	1100	22.6	--	11.3	140	--	58

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

1971 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 55 CONTINUED						
DEC 04, 70	1440	2	.9	2700	22.2	--	10.9	125	--	--
			1.5	29000	21.8	--	8.7	109	--	--
			3.0	37000	19.3	--	2.7	33	--	--
			5.2	37000	19.6	--	1.4	17	--	--
APR 08, 71	1005	2	.3	3700	19.6	8.0	7.9	86	--	33
			1.5	17000	20.0	7.6	2.5	29	--	--
			3.7	38000	20.0	7.4	.6	8	--	--
				LINE 59						
NOV 06, 70	1555	2	.3	520	16.9	8.0	14.0	144	--	41
			6.1	540	16.9	7.8	13.2	136	--	--
				LINE 66						
NOV 06, 70	1400	2	.3	850	19.6	8.2	13.4	144	--	38
			1.5	1650	20.2	8.2	12.2	133	--	--
			2.4	640	20.0	8.0	12.0	130	--	--
			3.0	24000	20.7	7.7	7.3	87	--	--
			5.0	26000	21.8	7.7	6.3	78	--	--
DEC 04, 70	1430	2	.3	2000	22.5	--	10.9	127	--	61
			.9	2700	22.4	--	10.4	120	--	--
			1.5	39000	21.3	--	4.2	55	--	--
			3.0	39000	19.9	--	3.1	39	--	--
			4.9	39000	20.6	--	3.2	41	--	--
APR 08, 71	1015	2	.3	5000	19.4	8.0	8.4	91	--	30
			1.5	10000	19.2	7.6	4.2	46	--	--
			3.0	33000	19.0	7.4	2.1	25	--	--
			4.6	38000	19.0	7.5	2.3	28	--	--
				LINE 73						
NOV 06, 70	1345	2	.3	960	19.6	8.2	13.3	143	--	58
			.9	2500	20.1	8.1	11.5	126	--	--
			1.5	32000	21.5	7.8	6.3	79	--	--
			3.0	32000	21.5	7.8	6.1	76	--	--
			5.3	30000	21.1	7.8	6.5	81	--	--
DEC 04, 70	1325	2	.3	1900	22.3	8.7	10.5	121	--	71
			1.5	3400	21.8	8.5	9.1	105	--	--
			2.1	33000	21.5	8.3	7.6	97	--	--
			3.0	39000	20.0	7.9	4.1	52	--	--
			5.0	42000	20.0	8.0	3.3	42	--	--
APR 08, 71	1040	2	.3	6600	19.8	8.0	8.4	93	--	38
			1.5	41000	19.3	7.6	3.5	44	--	--
			3.0	41000	19.3	7.6	3.5	44	--	--
			4.6	39000	19.5	7.6	3.6	45	--	--
				LINE 81						
NOV 06, 70	1310	2	.3	2300	22.9	8.2	13.3	155	--	64
			.9	1300	22.5	8.2	8.8	100	--	--
			1.5	36000	23.3	7.9	7.7	101	--	--
			3.0	40000	23.3	8.0	7.9	107	--	--
			6.1	40000	22.1	8.1	9.8	129	--	--
			11.1	39000	21.6	8.1	10.4	135	--	--
DEC 04, 70	1250	2	.3	2900	22.7	8.5	11.1	129	--	69
			1.5	5000	22.3	8.1	10.4	120	--	--
			2.1	27000	22.1	8.1	7.8	98	--	--
			3.0	42000	21.0	7.9	6.1	80	--	--

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

1971 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 81 CONTINUED					
DEC 04, 70	1250	2	6.1	45000	20.3	7.7	3.7	49	--	--
			9.4	47000	19.5	8.0	3.3	43	--	--
DEC 04, 70	1625	2	.3	4400	21.8	--	11.3	130	--	--
			1.5	17000	20.9	--	8.6	101	--	--
			4.6	42000	19.8	--	5.5	71	--	--
			9.1	45000	18.8	--	3.9	49	--	--
APR 08, 71	1050	2	.3	16000	18.9	7.9	9.7	109	--	119
			1.5	41000	18.7	7.8	7.4	91	--	--
			3.0	41000	18.4	7.7	5.6	69	--	--
			6.1	41000	18.2	7.6	5.0	61	--	--
			7.9	41000	18.7	7.6	4.9	60	--	--
					LINE 95					
NOV 06, 70	1145	2	.3	7000	20.9	8.0	13.4	152	--	79
			1.5	26000	22.1	8.0	11.7	144	--	--
			3.7	46000	23.9	8.1	11.4	161	--	--
DEC 04, 70	1130	2	.3	12000	22.2	6.9	10.0	118	--	91
			1.5	31000	21.9	6.8	8.3	105	--	--
			3.0	39000	21.9	6.8	7.9	103	--	--
			4.3	45000	22.1	8.3	7.8	105	--	--
APR 08, 71	1240	2	.3	28000	21.0	7.7	8.6	106	--	71
			1.5	37000	18.9	7.8	7.8	95	--	--
			3.7	39000	19.3	7.7	7.2	90	--	--
					LINE 105					
NOV 06, 70	1115	2	.3	9000	20.6	8.0	13.0	148	--	91
			1.5	22000	20.7	8.0	11.9	142	--	--
			3.0	47000	21.1	8.1	11.4	154	--	--
			5.2	45000	22.5	8.1	11.8	159	--	--
DEC 04, 70	1115	2	.3	38000	22.4	7.6	9.2	121	--	91
			1.5	45000	22.2	7.6	7.4	100	--	--
			3.0	45000	21.9	7.7	8.4	114	--	--
			4.7	45000	21.9	8.3	8.6	116	--	--
APR 08, 71	1320	2	.3	30000	20.4	7.7	8.5	105	--	79
			1.5	30000	19.3	7.6	8.2	99	--	--
			4.3	34000	20.4	7.6	6.9	86	--	--
					LINE 115					
NOV 06, 70	1100	2	.3	10000	21.3	8.0	12.6	145	--	97
			1.5	19000	21.5	8.0	12.1	144	--	--
			3.0	46000	21.9	8.1	11.4	154	--	--
			5.5	46000	21.5	8.1	11.5	155	--	--
DEC 04, 70	1105	2	.3	34000	21.9	7.4	9.4	121	--	91
			1.5	46000	21.3	7.9	7.6	101	--	--
			3.0	46000	21.2	7.8	8.8	117	--	--
			5.0	45000	21.3	8.0	9.2	123	--	--
APR 08, 71	1330	2	.3	34000	20.0	7.7	8.8	109	--	86
			1.5	39000	19.8	7.6	8.1	103	--	--
			3.0	34000	19.8	7.6	7.6	94	--	--
			5.2	43000	18.9	7.6	7.0	88	--	--
					LINE 125					
NOV 06, 70	1040	2	.3	10000	19.5	8.0	12.3	137	--	94

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

1971 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 125 CONTINUED					
NOV 06, 70	1040	2	.9	14000	19.8	8.0	12.8	145	--	--
			1.5	46000	19.9	8.1	10.9	142	--	--
			3.0	46000	21.1	8.1	11.3	151	--	--
			6.7	46000	20.7	8.1	11.5	151	--	--
DEC 04, 70	1100	2	.3	24000	21.5	7.3	9.0	110	--	89
			1.5	46000	21.0	7.5	8.7	116	--	--
			4.0	46000	21.1	7.8	8.8	117	--	--
APR 08, 71	1335	2	.3	34000	19.3	7.7	8.9	109	--	76
			1.5	34000	19.1	7.6	8.2	99	--	--
			3.0	35000	18.9	7.6	7.4	90	--	--
			5.2	34000	18.4	7.6	6.9	82	--	--
					LINE 135					
NOV 06, 70	0950	2	.3	25000	15.9	8.1	12.6	138	--	74
			1.8	32000	16.5	8.1	11.8	134	--	--
			3.7	46000	18.5	8.1	11.3	141	--	--
DEC 04, 70	1025	2	.3	38000	20.9	7.3	9.0	117	--	81
			1.5	39000	20.8	7.3	8.4	109	--	--
			4.0	45000	20.6	7.8	9.5	125	--	--
APR 08, 71	1450	2	.3	41000	20.6	7.6	8.2	105	--	43
			1.5	42000	20.0	7.6	7.5	96	--	--
			3.0	42000	19.1	7.6	6.3	79	--	--
			4.6	40000	18.9	7.6	6.0	75	--	--
					LINE 147					
NOV 06, 70	0930	2	1.8	36000	16.9	7.9	11.8	139	--	--
DEC 04, 70	1010	2	.3	35000	20.7	7.2	9.0	114	--	84
			2.0	35000	20.7	7.3	9.1	115	--	--
APR 08, 71	1515	2	.3	41000	20.4	7.8	7.6	97	--	--
			1.5	41000	21.3	7.8	7.8	101	--	--
			3.4	41000	21.3	7.7	7.8	101	--	--
					LINE 152					
NOV 06, 70	1025	2	.3	23000	18.7	8.1	13.1	151	--	66
			3.2	25000	20.3	8.2	13.0	157	--	--
APR 08, 71	1435	2	.3	37000	20.6	7.7	8.4	106	--	51
			1.5	39000	20.4	7.6	7.9	101	--	--
			2.1	37000	20.2	7.6	7.0	88	--	--
					LINE 164					
NOV 06, 70	1250	2	.3	30000	20.8	8.1	11.6	145	--	66
			1.5	31000	20.8	8.1	11.5	144	--	--
			3.0	31000	20.9	8.1	11.3	141	--	--
			5.6	32000	21.8	8.1	11.3	143	--	--
DEC 04, 70	1155	2	.3	33000	23.3	7.8	8.9	117	--	64
			1.5	33000	22.9	7.9	8.8	114	--	--
			3.0	33000	22.4	7.7	8.7	112	--	--
			5.6	39000	22.2	7.9	7.1	92	--	--
APR 08, 71	1135	2	.3	43000	18.2	7.8	7.9	98	--	--
			1.5	42000	18.2	7.8	7.8	96	--	--
			3.0	40000	18.6	7.7	7.9	98	--	--
			5.5	18000	20.0	7.8	8.3	95	--	--

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

1971 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 175						
NOV 06, 70	1225	2	.3	21000	19.5	8.0	12.2	140	--	61
			1.5	21000	19.2	8.0	12.0	136	--	--
			3.0	21000	19.2	8.0	12.0	136	--	--
			5.3	21000	19.4	8.0	12.0	138	--	--
DEC 04, 70	1215	2	.3	33000	22.3	7.9	8.7	112	--	72
			1.5	33000	22.1	7.9	8.0	103	--	--
			3.0	33000	22.1	7.9	7.7	99	--	--
			5.3	34000	22.2	8.0	7.7	99	--	--
APR 08, 71	1200	2	.3	39000	18.2	7.6	7.3	89	--	30
			1.5	39000	18.4	7.6	7.1	87	--	--
			3.0	39000	18.7	7.7	7.1	88	--	--
			5.2	40000	18.9	7.6	6.9	86	--	--

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

1971 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-PHORUS ORTHO (P) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	TOTAL ORGANIC CARBON (MG/L)
						LINE 18						
NOV 06, 70	1525	2	.3	12.0	.7	.02	.02	.03	.04	.8	--	--
			2.1	12.0	.7	.04	.03	.00	.00	1.0	--	--
DEC 04, 70	1540	2	.3	5.7	.0	.07	.00	.01	.03	3.3	--	--
			2.4	6.1	.0	.05	.01	.01	.03	3.8	--	--
APR 08, 71	0905	2	.3	2.4	.1	.13	.03	.20	.24	6.1	--	--
			1.5	1.6	.2	.08	.04	.22	.27	6.5	--	--
						LINE 22						
NOV 06, 70	1510	2	.3	12.0	.6	.05	.03	.03	.04	.1	--	--
			4.0	12.0	.7	.04	.03	.03	.10	1.0	--	--
DEC 04, 70	1530	2	.3	7.5	.0	.12	.01	.01	.02	2.3	--	--
			4.0	9.5	.0	.02	.01	.02	.04	4.3	--	--
APR 08, 71	0915	2	.3	1.6	.1	.00	.02	.11	.14	2.8	--	--
			2.4	3.8	.0	.00	.03	.13	.13	3.0	--	--
						LINE 44						
NOV 06, 70	1440	2	.3	12.0	.7	.04	.02	.03	.04	2.2	--	--
			3.0	12.0	.8	.02	.02	.03	.05	1.3	--	--
DEC 04, 70	1500	2	.3	5.6	.0	.06	.01	.01	.02	3.7	--	--
			3.2	5.8	.0	.55	.02	.03	.04	2.3	--	--
APR 08, 71	0950	2	.3	2.0	.1	.11	.03	.14	.15	2.7	--	--
			4.3	1.8	.0	.98	.02	.19	.20	1.4	--	--
						LINE 66						
NOV 06, 70	1400	2	.3	12.0	.8	.02	.03	.02	.04	.7	--	--
			5.0	4.1	.2	.30	.03	.02	.04	.0	--	--
DEC 04, 70	1430	2	.3	6.2	.0	.00	.01	.01	.02	2.8	--	--
			4.9	2.5	.0	.34	.02	.02	.05	4.4	--	--
APR 08, 71	1015	2	.3	2.0	.0	.00	.03	.14	.14	2.1	--	--
			4.6	.0	.1	.02	.02	.13	.13	1.6	--	--
						LINE 81						
NOV 06, 70	1310	2	.3	12.0	.8	.02	.03	.02	.03	.9	--	--
			11.1	.2	.0	.09	.02	.02	.05	.7	--	--
DEC 04, 70	1250	2	.3	7.3	.0	.01	.01	.01	.02	2.8	--	--
			9.4	.4	.0	.36	.02	.01	.02	1.8	--	--
APR 08, 71	1050	2	.3	2.6	.0	.01	.01	.08	.10	2.6	--	--
			7.9	.8	.2	.11	.04	.12	.12	1.0	--	--
						LINE 95						
NOV 06, 70	1145	2	.3	9.7	.7	.05	.04	.02	.03	.0	--	--
			3.7	.0	.0	.01	.00	.01	.02	.6	--	--
DEC 04, 70	1130	2	.3	6.2	.0	.02	.01	.01	.02	2.3	--	--
			4.3	.0	.0	.07	.01	.01	.02	1.9	--	--
APR 08, 71	1240	2	.3	1.7	.2	.06	.02	.06	.06	1.3	--	--

TABLE 28--QUALITY OF WATER IN THE COLORADO ESTUARY,

1971 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)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	TOTAL ORGANIC CARBON (MG/L)
						LINE 95 CONTINUED						
APR 08, 71	1240	2	3.7	.3	.2	.01	.01	.08	.10	1.2	--	--
						LINE 135						
NOV 06, 70	0950	2	.3	1.9	.0	.03	.02	.01	.02	.2	--	--
			3.7	.0	.0	.02	.01	.01	.02	.0	--	--
DEC 04, 70	1025	2	.3	5.7	.0	.01	.01	.01	.02	1.9	--	--
			4.0	.0	.0	.02	.01	.00	.02	1.6	--	--
APR 08, 71	1450	2	.3	.4	.1	.28	.04	.07	.07	2.5	--	--
			4.6	.9	.2	.05	.04	.11	.14	1.8	--	--

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

1971 WATER YEAR

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (LAB)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM + POTASSIUM (NA+K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
						LINE 18					
NOV 06, 70	1525	2	.3	639	--	--	--	--	--	--	--
			2.1	646	74.0	15.0	33	236	30	63	347
DEC 04, 70	1540	2	.3	800	82.0	25.0	49	296	40	91	439
			2.4	806	80.0	22.0	53	293	40	88	433
APR 08, 71	0905	2	.3	657	--	--	--	--	--	--	--
			1.5	760	56.0	26.0	55	210	46	100	393
						LINE 22					
NOV 06, 70	1510	2	.3	574	--	--	--	--	--	--	--
			4.0	605	--	--	--	--	--	--	--
DEC 04, 70	1530	2	.3	812	--	--	--	--	--	--	--
			4.0	847	--	--	--	--	--	--	--
APR 08, 71	0915	2	.3	1130	59.0	43.0	110	212	48	240	607
			2.4	8540	120.0	380.0	1200	223	410	2800	5090
						LINE 44					
NOV 06, 70	1440	2	.3	630	--	--	--	--	--	--	--
			3.0	637	--	--	--	--	--	--	--
DEC 04, 70	1500	2	.3	858	--	--	--	--	--	--	--
			3.2	27900	--	--	--	--	--	--	--
APR 08, 71	0950	2	.3	2420	--	--	--	--	--	--	--
			4.3	37800	--	--	--	--	--	--	--
						LINE 66					
NOV 06, 70	1400	2	.3	621	--	--	--	--	--	--	--
			5.0	26200	--	--	--	--	--	--	--
DEC 04, 70	1430	2	.3	1770	84.0	39.0	200	288	85	330	887
			4.9	41100	340.0	1100.0	7800	180	2000	14000	25500
APR 08, 71	1015	2	.3	6580	--	--	--	--	--	--	--
			4.6	40600	--	--	--	--	--	--	--
						LINE 81					
NOV 06, 70	1310	2	.3	1220	70.0	27.0	140	217	59	250	672
			11.1	41600	360.0	950.0	8100	148	2000	14000	25800
DEC 04, 70	1250	2	.3	2780	90.0	60.0	420	296	190	660	1570
			9.4	47900	360.0	1200.0	9500	160	2400	17000	30500
APR 08, 71	1050	2	.3	14800	160.0	340.0	2700	210	700	4800	8900
			7.9	43500	360.0	1200.0	8400	150	2200	15000	27300
						LINE 95					
NOV 06, 70	1145	2	.3	6630	100.0	130.0	1200	240	300	2000	3800
			3.7	46800	390.0	1300.0	9300	144	2300	17000	30400
DEC 04, 70	1130	2	.3	11800	150.0	330.0	2200	272	560	4000	7350
			4.3	47700	390.0	1200.0	9600	153	2400	17000	30600
APR 08, 71	1240	2	.3	26400	240.0	670.0	5800	194	2200	9600	18600

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

1971 WATER YEAR--CONTINUED

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (LAB)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG) (MG/L)	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 95 CONTINUED					
APR 08, 71	1240	2	3.7	43500	360.0	1100.0	8500	154	2300	15000	27600
						LINE 135					
NOV 06, 70	0950	2	.3	23200	--	--	--	--	--	--	--
			3.7	45200	360.0	1100.0	9300	146	2200	17000	29700
DEC 04, 70	1025	2	.3	16100	--	--	--	--	--	--	--
			4.0	47600	360.0	1200.0	9400	150	2600	17000	30300
APR 08, 71	1450	2	.3	42300	--	--	--	--	--	--	--
			4.6	43800	340.0	1100.0	8600	152	2400	15000	27900

Lavaca-Tres Palacios Estuary

The Lavaca-Tres Palacios estuary covers about 350 square miles (900 square kilometers) 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 parts of the Intracoastal Waterway (Figure 6). Water depth at mlw is 13 feet (4 meters) or less in Matagorda Bay, except in the Matagorda Ship Channel, which is more than 40 feet (12 meters) deep. The rivers generally are less than 15 feet (5 meters) deep.

Water-quality data (Table 3) were collected during April and June at most sites shown on Figure 6.

The change in line numbers to facilitate storage in the Texas Water Oriented Data Bank and to provide opportunity to coordinate data-collection sites among all agencies are shown below. New line numbers are used in Table 3 and on Figure 6.

All data collected prior to the changes in line numbers are stored in the data bank under the new line numbers.

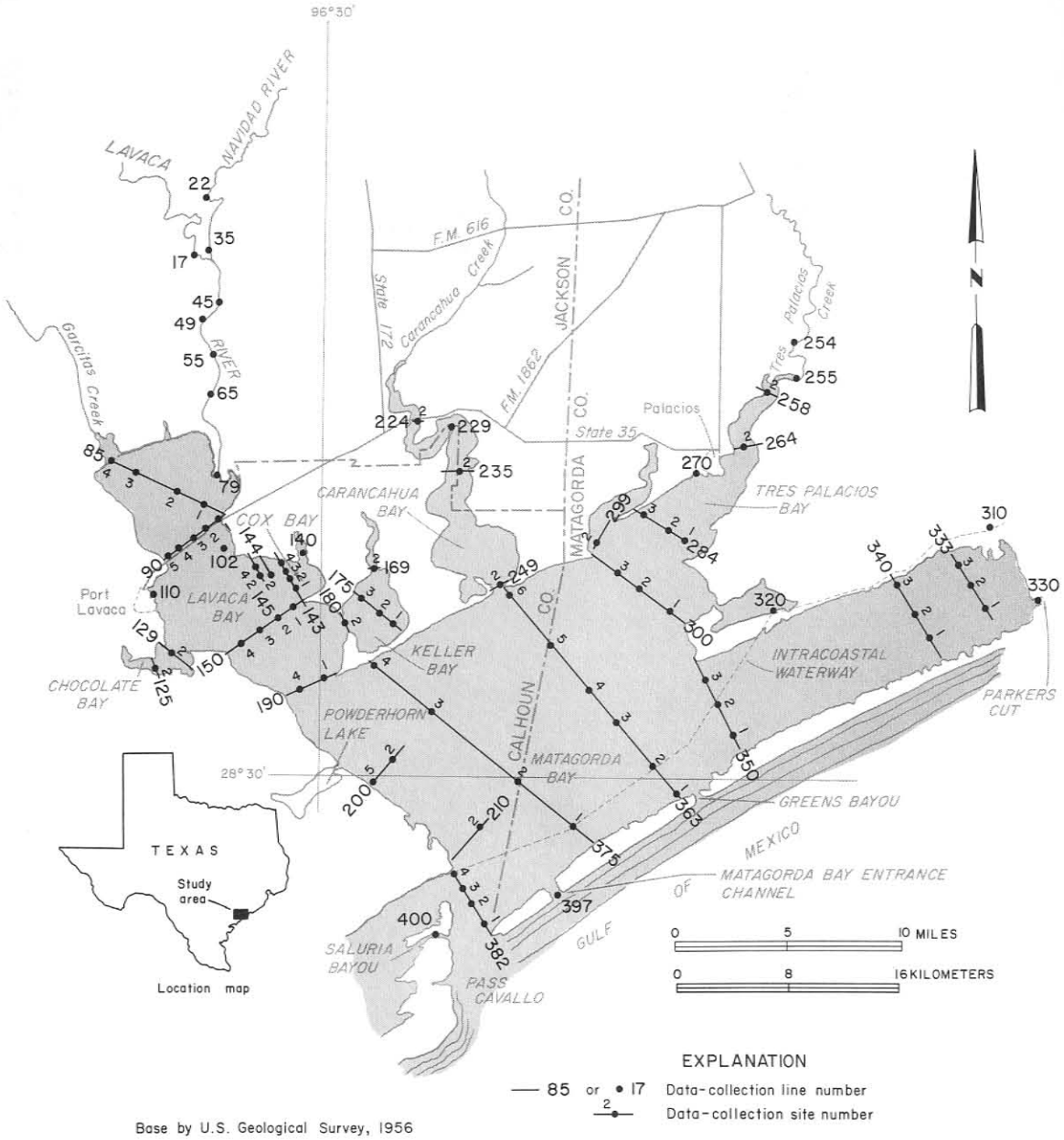


Figure 6.—Data-Collection Sites in the Lavaca-Tres Palacios Estuary

Lavaca-Tres Palacios Estuary Change in Line Numbers

OLD	NEW
1	17
2	22
3	35
4	45
4a	49
5	55
6	65
7	79
8	85
9	90
10	102
11	110
12	125
13	129
14	140
14a	143
14b	144
14c	145
15	150
16	169
17	175
18	180
19	190
20	200
21	210
22	224
22a	229
23	235
24	249
24a	254
24b	255
25	258
26	264
27	270
28	284
29	299
30	300
31	310
32	320
Colorado-Parkers Cut	330
33	333
34	340
35	350
36	363
37	375
38	382
39	397
Guadalupe 40	400

TABLE 3A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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					
APR 13, 71	0905	2	.3	6700	21.7	8.7	12.7	146	--	62
			.9	6600	21.9	8.7	12.1	141	--	--
			1.5	9700	22.1	8.5	9.6	112	--	--
			1.8	11000	21.9	8.5	8.4	98	--	--
			2.1	16000	21.5	8.0	2.1	25	--	--
			2.4	25000	20.6	7.6	.0	0	--	--
			3.0	27000	20.3	7.5	.0	0	--	--
			3.7	29000	20.3	7.5	.0	0	--	--
JUN 01, 71	1655	2	.3	1500	30.6	8.4	9.4	125	--	46
			1.5	1600	29.1	8.3	7.7	99	--	--
			2.1	2600	29.0	8.4	7.4	96	--	--
			2.7	4700	28.8	8.2	4.7	61	--	--
			3.0	21000	27.6	7.6	.0	0	--	--
			3.7	23000	26.5	7.3	.0	0	--	--
					LINE 22					
APR 13, 71	0940	2	.3	1900	21.2	8.4	9.7	109	--	51
			.9	1900	21.2	8.4	9.4	106	--	--
			1.5	2100	21.1	8.3	8.7	98	--	--
			1.8	2100	21.1	8.3	8.7	98	--	--
			2.1	9900	21.0	7.8	2.3	26	--	--
			2.4	18000	20.7	7.6	.0	0	--	--
			3.4	23000	20.5	7.5	.0	0	--	--
JUN 01, 71	1620	2	.3	610	31.0	8.4	10.2	136	--	33
			.9	600	30.5	8.2	8.4	110	--	--
			1.5	620	29.4	8.0	6.9	90	--	--
			2.4	620	29.2	7.8	5.8	74	--	--
			3.5	730	29.1	7.8	4.9	63	--	--
					LINE 35					
APR 13, 71	1005	2	.3	9800	22.9	8.7	11.5	135	--	46
			.9	10000	22.9	8.7	11.3	133	--	--
			1.5	11000	22.6	8.6	10.3	121	--	--
			1.8	12000	22.9	8.5	8.3	99	--	--
			2.1	14000	22.6	8.4	6.1	73	--	--
			2.4	19000	22.2	7.9	.9	11	--	--
			2.7	21000	21.7	7.7	.0	0	--	--
JUN 01, 71	1645	2	.3	1700	29.1	8.3	8.0	103	--	38
			1.5	1900	29.1	8.3	7.9	103	--	--
			2.1	2000	29.0	8.2	7.7	100	--	--
			2.6	3300	28.7	7.9	3.9	51	--	--
					LINE 45					
APR 13, 71	1030	2	.3	16000	22.4	8.6	10.2	121	--	58
			.9	16000	22.2	8.6	10.2	121	--	--
			1.5	16000	22.5	8.6	10.1	120	--	--
			2.4	20000	22.6	8.4	7.4	91	--	--
			2.7	22000	22.4	8.2	3.9	48	--	--
			3.0	23000	22.2	8.0	1.8	22	--	--
JUN 01, 71	1550	2	.3	4800	29.5	8.6	10.7	141	--	60
			1.2	4800	29.3	8.5	10.5	138	--	--
			1.5	5300	29.3	8.5	10.0	133	--	--
			1.8	5300	29.3	8.5	9.9	132	--	--
			2.1	8700	28.8	7.9	4.8	63	--	--
			2.4	16000	28.5	7.6	.7	9	--	--
			2.7	19000	28.1	7.5	.0	0	--	--

TABLE 3A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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 45 CONTINUED					
JUN 01, 71	1550	2	3.0	23000	27.6	7.2	.0	0	--	--
			3.5	28000	27.2	7.3	.0	0	--	--
JUN 01, 71	1715	2	.3	5100	28.8	8.6	11.0	145	--	56
			1.5	5800	28.7	8.5	10.3	136	--	--
			1.8	6000	28.6	8.5	10.0	132	--	--
			2.1	7100	28.4	8.4	8.8	114	--	--
			2.4	16000	27.7	7.7	1.1	14	--	--
			2.7	19000	27.2	7.5	.0	0	--	--
			3.0	28000	26.4	7.4	.0	0	--	--
JUN 01, 71	1950	2	.3	4900	28.1	8.7	10.3	132	--	56
			1.5	5400	28.1	8.7	10.4	135	--	--
			1.8	5400	28.1	8.7	10.4	135	--	--
			2.1	5600	28.0	8.7	10.3	134	--	--
			2.4	16000	27.1	7.7	1.1	14	--	--
			2.7	19000	26.8	7.6	.0	0	--	--
			3.0	23000	26.3	7.6	.0	0	--	--
			3.5	28000	25.8	7.5	.0	0	--	--
JUN 01, 71	1840	2	.3	5000	28.5	8.6	10.5	135	--	55
			1.5	5600	28.6	8.7	10.5	138	--	--
			1.8	5600	28.6	8.6	10.4	137	--	--
			2.1	6200	28.5	8.6	10.0	132	--	--
			2.4	16000	27.6	7.6	.9	12	--	--
			2.7	20000	27.1	7.5	.0	0	--	--
			3.0	26000	26.5	7.5	.0	0	--	--
			3.5	28000	26.4	7.4	.0	0	--	--
JUN 02, 71	1400	2	.3	4600	29.5	8.3	10.8	142	--	60
			1.5	5100	29.3	8.3	10.4	139	--	--
			1.8	5400	29.4	8.3	10.2	136	--	--
			2.1	6000	29.2	8.2	9.3	122	--	--
			2.4	17000	28.5	7.2	.2	3	--	--
			2.7	20000	28.1	7.2	.0	0	--	--
			3.4	28000	27.2	7.1	.0	0	--	--
JUN 02, 71	0610	2	.3	3200	26.6	8.2	7.3	91	--	48
			1.5	3200	26.6	8.3	7.7	96	--	--
			1.8	4700	26.8	8.4	8.0	100	--	--
			2.1	8400	26.9	8.2	6.6	84	--	--
			2.4	15000	26.4	7.6	.6	8	--	--
			2.7	23000	25.5	7.5	.0	0	--	--
			3.0	27000	24.8	7.3	.0	0	--	--
JUN 02, 71	0710	2	.3	3400	26.7	8.3	7.7	96	--	--
			1.5	3400	26.8	8.3	7.8	98	--	--
			1.8	3900	26.9	8.4	7.9	99	--	--
			2.1	6500	26.9	8.3	7.2	91	--	--
			2.4	13000	26.5	7.7	.9	12	--	--
			2.7	24000	25.4	7.5	.0	0	--	--
			3.2	28000	24.9	7.4	.0	0	--	--
JUN 02, 71	1235	2	.3	4500	29.6	8.4	10.7	141	--	62
			1.5	5400	29.4	8.3	9.4	125	--	--
			1.8	5800	29.2	8.2	8.9	117	--	--
			2.1	10000	28.6	7.7	4.5	59	--	--
			2.4	17000	28.4	7.3	.3	4	--	--
			2.7	20000	28.3	7.3	.0	0	--	--
			3.2	28000	27.6	7.2	.0	0	--	--
					LINE 49					
JUN 02, 71	0635	2	.3	4800	26.6	8.5	8.5	106	--	--
			1.5	14000	26.9	8.3	7.2	92	--	--
			1.8	15000	26.6	7.7	1.8	23	--	--
			2.1	24000	26.3	7.4	.0	0	--	--
			2.4	29000	26.1	7.4	.0	0	--	--

TABLE 3A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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 55					
APR 13, 71	1050	2	.3	23000	22.7	8.4	8.4	104	--	56
			.9	23000	22.8	8.4	8.4	104	--	--
			1.5	23000	22.8	8.4	8.4	104	--	--
			2.4	24000	22.7	8.3	7.7	95	--	--
			4.0	25000	22.7	8.0	5.2	65	--	--
JUN 01, 71	1530	2	.3	11000	29.3	8.5	9.3	124	--	61
			1.5	12000	29.3	8.5	10.0	135	--	--
			2.1	14000	29.2	8.3	8.1	108	--	--
			2.4	17000	29.1	8.0	4.8	66	--	--
			2.7	22000	28.9	7.9	2.2	31	--	--
			3.0	32000	28.7	7.5	.0	0	--	--
			3.8	34000	28.6	7.4	.0	0	--	--
					LINE 65					
APR 13, 71	1105	2	.3	29000	22.4	8.2	7.9	99	--	47
			1.5	30000	22.4	8.2	7.8	99	--	--
			2.4	30000	22.2	8.1	7.3	92	--	--
			4.0	36000	22.4	7.9	5.2	68	--	--
JUN 01, 71	1515	2	.3	21000	29.2	8.1	7.8	108	--	48
			1.5	22000	28.8	8.0	6.9	89	--	--
			2.1	23000	28.7	7.9	4.0	56	--	--
			2.4	29000	28.8	7.8	3.0	43	--	--
			3.0	34000	28.8	7.6	1.4	21	--	--
			4.0	36000	28.6	7.6	.4	6	--	--
					LINE 79					
APR 13, 71	1135	2	.3	43000	22.5	8.2	7.8	105	--	30
			1.5	43000	22.5	8.2	7.7	104	--	--
			2.4	42000	22.5	8.2	7.6	103	--	--
			3.4	41000	22.5	8.2	7.6	101	--	--
JUN 01, 71	1500	2	.3	43000	28.6	8.0	7.0	106	--	43
			1.5	43000	28.5	8.0	6.8	103	--	--
			2.4	41000	28.5	8.0	6.3	99	--	--
			3.7	40000	28.6	7.9	5.9	88	--	--
					LINE 85					
APR 14, 71	1317	1	.3	41000	22.8	8.0	7.0	95	--	66
			2.1	40000	22.9	8.3	7.1	96	--	--
JUN 02, 71	1253	1	.5	42000	27.5	8.0	8.6	126	--	41
			1.5	42000	27.4	8.0	8.1	119	--	--
			2.4	41000	27.4	8.0	7.9	114	--	--
APR 14, 71	1333	3	.3	40000	23.3	8.1	7.5	101	--	56
			1.5	40000	22.9	8.4	7.7	104	--	--
JUN 02, 71	1308	3	.5	43000	27.6	8.0	8.7	130	--	38
			1.5	43000	27.7	8.0	8.7	130	--	--
					LINE 90					
MAR 01, 71	1400	3	.3	40000	18.8	--	7.4	92	--	--
			1.5	40000	18.8	--	7.4	92	--	--
			3.0	40000	18.8	--	7.5	92	--	--
					LINE 102					
APR 14, 71	1120	1	.3	44000	23.0	7.9	6.3	86	--	117

TABLE 3A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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 102 CONTINUED					
APR 14, 71	1120	1	1.5	44000	22.6	7.9	6.2	85	--	--
			3.0	44000	22.1	8.0	6.4	86	--	--
			6.1	42000	21.8	8.0	6.2	83	--	--
			9.8	42000	21.4	8.4	6.5	86	--	--
JUN 02, 71	1033	1	.3	44000	26.9	8.1	7.2	107	--	96
			1.5	44000	26.9	8.1	7.8	116	--	--
			3.0	44000	26.8	8.1	8.4	125	--	--
			6.1	43000	26.7	8.1	7.9	116	--	--
			9.8	43000	26.8	8.1	7.5	110	--	--
MAR 01, 71	1130	2	.3	42000	18.6	--	8.0	100	--	--
			3.0	42000	18.2	--	8.0	99	--	--
			6.1	43000	18.0	--	7.9	98	--	--
			9.1	42000	17.9	--	7.4	91	--	--
			10.4	46000	17.8	--	6.7	84	--	--
			11.0	45000	18.0	--	5.3	66	--	--
					LINE 110					
MAR 01, 71	1320	2	.3	35000	19.0	--	--	--	--	--
			1.5	38000	19.0	--	--	--	--	--
			4.0	39000	19.0	--	--	--	--	--
APR 14, 71	1240	2	.3	41000	24.4	7.4	3.7	50	--	63
			1.5	42000	23.0	7.5	3.5	48	--	--
			3.4	42000	22.8	7.5	4.2	58	--	--
JUN 02, 71	1138	2	.3	42000	27.3	7.6	1.3	19	--	69
			.9	42000	27.2	7.6	1.3	19	--	--
			1.5	43000	27.1	7.6	2.9	43	--	--
			2.4	43000	27.1	7.6	2.8	41	--	--
			3.7	42000	27.3	7.6	3.0	44	--	--
					LINE 125					
MAR 01, 71	1205	2	.3	40000	19.5	--	7.8	99	--	--
			.9	38000	20.0	--	8.1	103	--	--
JUN 02, 71	1103	2	.5	43000	26.7	7.9	7.1	104	--	25
			1.5	43000	26.7	8.0	6.9	101	--	--
					LINE 129					
MAR 01, 71	1230	2	.3	41000	19.2	--	8.0	100	--	--
			1.5	40000	19.1	--	7.8	98	--	--
			3.4	40000	19.2	--	7.2	90	--	--
MAR 06, 71	1000	2	.3	40000	17.0	8.1	7.5	90	--	--
			1.5	40000	17.0	8.2	7.4	89	--	--
			3.0	40000	16.5	8.2	7.6	90	--	--
APR 14, 71	1150	2	3.4	42000	22.8	8.4	6.2	85	--	--
			.3	43000	22.7	8.0	6.3	85	--	63
			1.5	43000	22.8	8.0	6.0	82	--	--
JUN 02, 71	1114	2	.3	43000	26.8	8.0	7.5	110	--	43
			1.5	43000	26.6	8.0	7.4	109	--	--
			3.4	43000	26.8	8.0	7.5	110	--	--
					LINE 140					
MAR 01, 71	1000	2	.3	40000	16.7	8.3	6.6	79	--	97
			1.2	42000	16.9	8.3	6.7	82	--	--
APR 14, 71	0855	2	.3	43000	21.7	8.0	7.1	95	--	90

TABLE 3A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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 140 CONTINUED					
APR 14, 71	0855	2	1.1	43000	21.6	8.0	7.1	95	--	--
					LINE 143					
MAR 01, 71	0930	1	.3	41000	16.6	8.1	7.0	83	--	130
			1.7	41000	16.9	8.2	7.1	86	--	--
APR 14, 71	1000	1	.3	44000	23.5	8.2	7.0	97	--	76
			1.7	44000	23.0	8.1	6.8	93	--	--
JUN 02, 71	0945	1	.3	45000	26.4	8.1	6.6	97	--	38
			.9	45000	26.4	8.1	6.5	96	--	--
			1.8	45000	26.4	8.1	6.5	96	--	--
MAR 01, 71	1010	2	.3	41000	16.6	8.3	6.8	81	--	104
			1.8	41000	16.8	8.2	6.8	82	--	--
APR 14, 71	0950	2	.3	44000	24.2	8.1	7.3	103	--	47
			1.8	44000	23.5	8.1	7.0	97	--	--
JUN 02, 71	0950	2	.3	44000	26.8	8.0	6.4	96	--	33
			.9	44000	26.7	8.0	6.4	96	--	--
			2.0	44000	26.7	8.0	6.3	94	--	--
APR 14, 71	0945	3	.3	44000	23.6	8.1	7.4	103	--	42
			1.8	44000	22.9	8.1	7.0	98	--	--
JUN 02, 71	1000	3	.3	45000	27.0	8.1	6.4	96	--	28
			.9	45000	27.0	8.1	6.5	97	--	--
			2.0	45000	27.0	8.1	6.5	97	--	--
MAR 01, 71	0945	4	.3	38000	16.6	8.2	7.1	84	--	--
			1.8	42000	16.7	8.2	6.8	82	--	--
APR 14, 71	0940	4	.3	44000	23.5	8.1	7.3	101	--	42
			1.5	44000	23.0	8.1	6.9	94	--	--
JUN 02, 71	1010	4	.3	45000	27.0	8.0	6.4	96	--	23
			.9	45000	27.0	8.0	6.5	97	--	--
			1.4	45000	27.0	8.0	6.5	97	--	--
					LINE 144					
APR 14, 71	0920	2	.3	44000	22.7	8.1	7.2	99	--	--
			1.2	44000	22.5	8.1	7.0	95	--	--
JUN 02, 71	1020	2	.3	44000	27.0	8.0	6.4	96	--	23
			.9	44000	26.9	8.0	6.4	96	--	--
			1.4	45000	27.1	8.0	6.3	94	--	--
					LINE 145					
APR 14, 71	0925	2	.3	44000	23.1	8.2	7.0	96	--	37
			1.5	44000	22.8	8.2	7.0	96	--	--
APR 14, 71	0930	4	.3	45000	23.1	8.1	7.3	100	--	38
			1.7	45000	22.6	8.1	7.2	99	--	--
					LINE 150					
MAR 01, 71	1025	1	.3	41000	16.7	8.3	6.7	80	--	104
			1.8	41000	16.8	8.3	6.8	82	--	--
APR 14, 71	1005	1	.3	44000	23.1	8.2	6.9	94	--	61
			1.5	44000	22.7	8.1	6.8	93	--	--

TABLE 3A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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 150 CONTINUED					
MAR 01, 71	1030	2	.3	42000	16.5	8.4	6.5	78	--	84
			2.1	42000	16.6	8.3	6.5	78	--	--
APR 14, 71	1010	2	.3	44000	23.1	8.1	7.1	97	--	51
			2.0	44000	22.5	8.1	7.0	95	--	--
MAR 01, 71	1040	3	.3	42000	16.7	8.4	6.7	81	--	--
			1.1	42000	16.7	8.4	6.9	83	--	--
APR 14, 71	1015	3	.3	44000	23.6	8.1	7.1	99	--	58
			1.5	44000	23.3	8.1	6.9	96	--	--
			2.1	44000	22.9	8.1	6.8	93	--	--
OCT 12, 70	0900	4	.3	31000	22.6	8.3	7.1	91	20	89
			1.5	32000	22.7	8.3	6.5	83	30	--
			3.0	33000	22.8	8.3	6.4	83	40	--
			6.1	37000	22.9	8.2	5.0	66	50	--
			9.1	37000	23.0	8.2	4.9	64	30	--
			11.6	39000	22.8	8.2	6.9	92	45	--
MAR 01, 71	1100	4	.3	42000	18.0	--	7.8	96	--	--
			3.0	42000	18.1	--	7.7	95	--	--
			6.1	43000	18.0	--	7.4	91	--	--
			9.1	44000	18.0	--	7.2	90	--	--
			11.6	43000	18.0	--	7.4	91	--	--
MAR 06, 71	0940	4	.3	41000	15.2	8.1	7.6	88	--	--
			1.5	41000	15.2	8.2	7.6	88	--	--
			6.1	42000	15.0	8.3	7.5	88	--	--
			11.9	42000	15.0	8.4	7.6	89	--	--
APR 14, 71	1100	4	.3	44000	22.9	8.0	6.3	86	--	76
			3.0	44000	22.2	8.0	6.0	81	--	--
			6.1	44000	22.0	8.1	6.0	81	--	--
			11.3	42000	22.2	8.3	6.7	89	--	--
JUN 02, 71	1015	4	.5	43000	26.6	8.1	7.3	107	--	74
			1.5	43000	26.5	8.1	7.2	106	--	--
			3.0	43000	26.5	8.1	7.1	104	--	--
			6.1	43000	26.5	8.1	7.2	106	--	--
			10.7	43000	26.7	8.1	7.7	113	--	--
					LINE 169					
MAR 01, 71	0820	2	.3	40000	17.4	8.4	7.2	87	--	163
			1.2	40000	17.5	8.3	7.2	88	--	--
MAR 06, 71	0915	2	.3	38000	16.2	--	8.2	95	--	46
			.8	38000	16.4	--	8.0	94	--	--
APR 14, 71	1140	2	.3	44000	24.7	--	7.5	107	--	99
			.9	44000	24.5	--	7.5	107	--	--
JUN 02, 71	1110	2	.3	45000	27.2	8.6	6.4	96	--	33
			1.1	45000	27.4	8.6	6.4	96	--	--
					LINE 175					
MAR 01, 71	0855	1	.3	41000	17.3	8.5	7.6	92	--	163
			1.5	41000	17.3	8.4	7.6	92	--	--
MAR 06, 71	1000	1	.3	38000	15.5	--	8.9	103	--	107
			1.2	38000	15.7	--	8.4	98	--	--
APR 14, 71	1110	1	.3	44000	23.8	8.2	7.2	101	--	133
			1.5	44000	23.6	8.2	7.4	103	--	--
JUN 02, 71	0920	1	.3	45000	26.4	8.1	6.3	93	--	69

TABLE 3A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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 175 CONTINUED						
JUN 02, 71	0920	1	1.7	45000	26.4	8.1	6.3	93	--	--
MAR 01, 71	0845	2	.3	41000	17.3	8.5	7.5	90	--	152
			1.8	41000	17.5	8.4	7.4	90	--	--
MAR 06, 71	0950	2	.3	37000	15.5	--	9.2	106	--	135
			1.4	38000	15.7	--	9.1	106	--	--
APR 14, 71	1125	2	.3	44000	24.5	--	7.3	104	--	119
			1.7	44000	24.2	--	7.2	101	--	--
MAR 01, 71	0840	3	.3	40000	17.7	8.6	7.2	88	--	152
			1.4	40000	17.7	8.5	7.1	87	--	--
MAR 06, 71	0945	3	.3	37000	15.7	--	8.8	101	--	--
			1.4	37000	16.0	--	8.9	102	--	--
APR 14, 71	1130	3	.3	44000	24.6	--	7.4	106	--	112
			1.7	44000	24.2	--	7.4	104	--	--
JUN 02, 71	1100	3	.3	45000	27.5	8.0	5.9	89	--	28
			1.7	43000	27.3	8.0	6.8	100	--	--
				LINE 180						
MAR 01, 71	0905	2	.3	41000	16.7	8.5	7.1	85	--	107
			2.0	41000	17.6	8.4	7.3	89	--	--
MAR 06, 71	1010	2	.3	39000	15.7	--	9.7	113	--	130
			1.8	39000	15.9	--	10.1	117	--	--
APR 14, 71	1100	2	.3	44000	24.7	8.2	7.2	103	--	123
			2.0	44000	23.9	8.2	7.2	101	--	--
JUN 02, 71	0930	2	.3	44000	26.5	8.1	6.4	94	--	51
			2.0	45000	26.5	8.1	6.2	91	--	--
				LINE 190						
MAR 01, 71	1110	2	.3	42000	16.7	8.5	7.0	84	--	79
			1.5	42000	16.7	8.4	7.1	86	--	--
APR 14, 71	1040	2	.3	44000	23.4	8.2	7.2	100	--	61
			1.5	44000	23.3	8.2	7.1	99	--	--
APR 14, 71	1305	3	.3	41000	22.9	7.8	6.9	93	--	36
			1.5	39000	22.8	7.9	7.0	93	--	--
			3.0	40000	22.6	8.3	6.8	91	--	--
APR 14, 71	1033	3	.5	44000	22.0	7.9	5.6	76	--	66
			3.0	44000	21.9	7.9	5.6	76	--	--
			6.1	44000	21.9	8.0	5.8	78	--	--
			7.9	44000	21.8	8.2	5.7	77	--	--
JUN 02, 71	0952	3	.5	43000	26.0	8.0	7.0	104	--	81
			1.5	43000	26.0	8.0	8.0	112	--	--
			3.0	43000	26.0	8.0	8.0	113	--	--
			6.1	43000	26.0	8.0	8.0	112	--	--
			9.1	43000	26.0	8.0	8.0	112	--	--
MAR 01, 71	1155	4	.3	43000	18.6	7.7	7.7	96	--	86
			1.5	43000	18.5	7.7	7.8	96	--	--
			6.1	43000	18.5	7.8	7.6	94	--	--
			11.6	42000	18.1	8.2	7.4	91	--	--
MAR 01, 71	1015	4	.3	41000	18.2	--	7.9	96	--	--
			3.0	42000	18.1	--	7.8	96	--	--

TABLE 3A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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 190 CONTINUED					
MAR 01, 71	1015	4	6.1	42000	18.1	--	7.8	96	--	--
			9.1	44000	18.0	--	7.5	94	--	--
			12.2	46000	17.8	--	7.3	91	--	--
MAR 06, 71	0915	4	.3	42000	15.0	8.1	7.7	91	--	--
			1.5	42000	15.0	8.1	7.7	91	--	--
			6.1	42000	15.0	8.2	7.9	93	--	--
			12.2	42000	14.5	8.4	7.6	88	--	--
					LINE 200					
MAR 01, 71	1135	2	.3	43000	18.5	7.8	7.9	98	--	117
			1.5	44000	18.5	7.8	7.9	99	--	--
			6.1	47000	18.4	8.0	7.7	97	--	--
			12.5	46000	18.3	8.4	7.4	92	--	--
APR 14, 71	1010	2	.5	44000	21.7	8.1	6.7	91	--	127
			3.0	44000	21.6	8.2	6.7	91	--	--
			6.1	44000	21.6	8.2	6.4	87	--	--
			11.6	44000	21.6	8.3	6.3	85	--	--
JUN 02, 71	1525	2	.6	43000	26.8	8.1	9.7	143	--	71
			3.0	43000	26.8	8.1	9.9	146	--	--
			6.1	43000	26.8	8.1	10.5	154	--	--
			11.0	43000	26.9	8.1	10.2	150	--	--
					LINE 210					
MAR 01, 71	1105	2	.3	47000	18.0	7.7	7.0	89	--	102
			1.5	47000	18.0	7.8	7.0	89	--	--
			6.1	47000	18.1	7.9	7.0	89	--	--
			12.3	45000	18.1	8.3	6.9	86	--	--
APR 14, 71	0950	2	.3	42000	21.4	8.2	6.5	86	--	119
			3.0	42000	21.4	8.3	7.1	93	--	--
			6.1	42000	21.3	8.3	7.2	95	--	--
			11.3	42000	21.5	8.5	7.6	100	--	--
JUN 02, 71	1545	2	.6	46000	26.9	8.2	9.0	134	--	114
			3.0	46000	26.9	8.2	10.2	152	--	--
			6.1	46000	26.9	8.2	10.0	149	--	--
			10.7	46000	26.9	8.2	10.1	151	--	--
					LINE 224					
MAR 01, 71	1305	2	.3	29000	17.3	8.1	7.7	89	--	86
			.8	29000	17.4	8.1	7.8	90	--	--
APR 12, 71	1640	2	.3	34000	22.9	8.1	7.5	97	--	--
			1.1	34000	22.9	8.1	7.6	99	--	--
					LINE 235					
MAR 01, 71	1325	2	.3	36000	17.2	7.9	7.6	89	--	91
			1.7	36000	17.3	8.0	7.4	88	--	--
APR 12, 71	1605	2	.3	44000	22.7	8.3	7.1	97	--	28
			1.5	44000	22.8	8.3	7.1	97	--	--
					LINE 249					
MAR 01, 71	1410	2	.3	39000	17.4	8.2	8.1	98	--	91
			1.5	39000	17.4	8.2	7.9	95	--	--
			3.0	39000	17.5	8.1	7.9	95	--	--

TABLE 3A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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					
APR 12, 71	1535	2	.3	44000	23.2	8.2	7.4	101	--	43
			1.5	43000	23.6	8.2	7.2	100	--	--
					LINE 254					
APR 13, 71	1845	2	.3	9700	21.7	8.2	11.6	135	--	--
			1.5	10000	21.7	8.2	11.3	131	--	--
			2.4	11000	21.7	8.1	10.1	117	--	--
			2.7	11000	21.6	8.0	8.8	102	--	--
			3.0	16000	20.9	7.8	2.1	24	--	--
			3.4	18000	20.7	7.6	.3	3	--	--
JUN 01, 71	1245	2	.3	3000	28.4	8.4	7.7	99	--	46
			1.5	3900	28.4	8.4	7.6	97	--	--
			2.1	3800	28.2	8.2	5.9	76	--	--
			3.0	3900	28.1	8.2	4.9	63	--	--
			3.7	4000	28.1	8.1	4.6	59	--	--
					LINE 255					
JUN 02, 71	0952	2	.3	11000	28.0	8.0	7.0	96	--	30
			1.5	11000	28000.0	8.0	7.0	92	--	--
			2.7	12000	28.0	8.0	6.0	83	--	--
					LINE 258					
MAR 01, 71	1605	2	.3	36000	17.2	7.9	7.4	87	--	58
			.6	36000	17.3	7.7	7.4	88	--	--
APR 13, 71	1825	2	.8	34000	22.6	8.7	8.4	109	--	--
JUN 01, 71	1215	2	.3	27000	27.7	8.2	6.2	86	--	28
			.9	27000	27.7	8.2	6.2	86	--	--
					LINE 264					
MAR 01, 71	1530	2	.3	36000	17.2	9.1	7.8	92	--	--
			1.2	38000	17.3	8.5	7.9	95	--	--
APR 13, 71	1815	2	.3	43000	23.0	8.1	7.7	105	--	--
			1.2	43000	23.0	8.0	7.8	107	--	--
JUN 01, 71	1200	2	.3	36000	27.6	8.3	6.5	93	--	44
			1.4	36000	27.6	8.3	6.4	91	--	--
					LINE 270					
MAR 01, 71	1635	2	.3	39000	17.0	7.7	7.4	88	--	122
			2.4	39000	16.7	7.8	6.7	79	--	--
			3.8	38000	16.9	7.7	6.2	74	--	--
JUN 01, 71	1135	2	.3	40000	28.0	8.0	3.7	54	--	81
			1.5	40000	27.8	8.1	4.7	69	--	--
			3.0	41000	27.5	8.1	4.7	68	--	--
			4.0	42000	27.5	8.0	4.2	62	--	--
			4.9	42000	27.5	7.9	2.4	35	--	--
					LINE 284					
MAR 01, 71	1650	1	.3	39000	16.9	8.4	7.6	90	--	74
			1.2	40000	17.1	8.3	7.1	86	--	--
APR 13, 71	1725	1	.3	45000	23.8	8.1	7.5	106	--	37

TABLE 3A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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 284 CONTINUED						
APR 13, 71	1725	1	1.5	45000	23.7	8.1	7.7	107	--	--
JUN 01, 71	1015	1	.3	40000	27.0	8.2	6.0	87	--	46
			1.2	40000	27.0	8.2	5.8	84	--	--
MAR 01, 71	1700	2	.3	40000	16.7	8.6	7.5	89	--	99
			1.5	40000	16.7	8.6	7.1	85	--	--
			3.0	39000	16.6	8.3	7.2	85	--	--
			5.0	41000	16.6	8.4	7.1	85	--	--
APR 13, 71	1735	2	.3	44000	23.0	8.1	7.6	104	--	--
			1.8	44000	22.9	8.1	7.6	104	--	--
JUN 01, 71	1020	2	.3	42000	27.4	8.2	6.2	91	--	46
			1.5	42000	27.4	8.2	6.2	91	--	--
			3.0	43000	27.2	8.2	5.9	87	--	--
			4.6	43000	27.2	8.2	5.3	78	--	--
MAR 01, 71	1715	3	.3	40000	16.7	8.4	7.8	93	--	102
			1.8	40000	16.8	8.4	6.7	81	--	--
APR 13, 71	1750	3	.3	45000	23.1	9.2	7.5	103	--	--
			2.0	44000	23.1	9.4	7.5	103	--	--
JUN 01, 71	1035	3	.3	43000	27.5	8.3	6.1	90	--	47
			2.3	43000	27.4	8.2	6.0	88	--	--
				LINE 300						
MAR 06, 71	1020	1	.3	43000	16.0	7.5	7.8	93	--	76
			1.2	43000	15.9	7.5	7.8	93	--	--
			2.4	42000	16.1	7.5	7.4	88	--	--
APR 15, 71	1127	1	.5	46000	22.9	8.8	4.8	66	--	51
			2.0	46000	22.9	8.9	4.9	67	--	--
JUN 01, 71	1405	1	.5	44000	27.4	8.2	7.1	106	--	61
			1.2	44000	27.4	8.2	7.3	109	--	--
			1.5	44000	27.4	8.2	7.9	118	--	--
			1.8	44000	27.4	8.2	7.6	113	--	--
			2.4	46000	27.6	8.2	6.9	104	--	--
APR 15, 71	1106	2	.5	46000	22.1	8.7	5.0	68	--	74
			1.5	46000	22.1	8.7	5.0	68	--	--
			4.3	46000	22.2	8.9	5.8	78	--	--
JUN 01, 71	1420	2	.5	43000	27.6	8.2	6.8	101	--	71
			1.5	43000	27.6	8.2	7.1	106	--	--
			3.0	43000	27.4	8.2	7.2	106	--	--
			4.6	43000	27.6	8.2	6.7	100	--	--
MAR 06, 71	1005	3	.3	42000	15.8	7.6	7.8	93	--	81
			.9	42000	15.8	7.6	8.0	95	--	--
			2.3	42000	16.0	7.6	8.4	100	--	--
APR 15, 71	1055	3	.5	45000	22.9	8.8	5.6	77	--	53
			1.8	45000	22.9	8.9	6.0	82	--	--
JUN 01, 71	1430	3	.5	43000	27.6	8.3	7.4	110	--	58
			.9	43000	27.6	8.3	7.2	107	--	--
			1.8	43000	27.7	8.2	7.2	107	--	--
				LINE 310						
APR 01, 71	1005	2	.3	26000	26.8	8.2	6.9	93	--	71
			1.5	29000	26.8	8.2	6.2	85	--	--
			3.0	31000	26.3	8.2	6.2	85	--	--

TABLE 3A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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 310 CONTINUED					
APR 01, 71	1005	2	4.6	31000	26.2	8.1	6.1	84	--	--
APR 13, 71	1320	2	.3	31000	23.4	7.5	7.3	95	--	76
			1.5	31000	23.0	7.4	7.9	101	--	--
			3.0	33000	23.1	7.2	7.8	101	--	--
			5.2	33000	23.4	6.8	9.8	129	--	--
					LINE 320					
APR 13, 71	1400	2	.3	22000	23.6	8.1	6.8	85	--	28
			1.5	22000	23.5	8.1	6.8	85	--	--
			3.7	22000	23.7	8.3	7.2	90	--	--
JUN 01, 71	1050	2	.3	36000	27.3	8.2	6.8	97	--	48
			1.5	36000	27.3	8.2	6.6	94	--	--
			3.0	34000	27.4	8.2	6.2	87	--	--
					LINE 330					
MAR 04, 71	0910	2	.3	36000	14.1	--	7.8	87	--	--
			1.5	36000	13.8	--	8.8	98	--	--
			3.0	36000	13.8	--	8.8	98	--	--
MAR 04, 71	1110	2	.3	46000	15.1	--	8.4	100	--	--
			1.5	46000	15.0	--	8.4	100	--	--
			3.0	48000	14.9	--	8.3	100	--	--
MAR 04, 71	1315	2	.3	45000	15.0	--	8.6	102	--	--
			1.8	45000	15.2	--	8.6	102	--	--
			3.4	42000	15.7	--	8.7	104	--	--
MAR 04, 71	1410	2	.3	45000	14.9	--	8.7	104	--	--
			1.8	45000	14.9	--	8.8	105	--	--
			3.4	45000	15.0	--	8.8	105	--	--
MAR 04, 71	1740	2	.3	45000	14.4	--	8.6	101	--	--
			1.8	45000	14.5	--	8.6	101	--	--
			3.4	45000	14.4	--	8.8	104	--	--
MAR 05, 71	0720	2	.3	45000	14.5	--	7.4	87	--	--
			1.8	45000	14.5	--	7.4	87	--	--
			3.2	45000	14.5	--	7.4	87	--	--
MAR 05, 71	0910	2	.3	45000	14.9	--	7.3	87	--	--
			1.8	45000	14.9	--	7.4	88	--	--
			3.4	45000	14.9	--	7.4	88	--	--
MAR 05, 71	1110	2	.3	48000	15.9	--	7.6	93	--	--
			1.8	48000	16.0	--	7.6	93	--	--
			3.5	48000	16.4	--	7.6	94	--	--
MAR 05, 71	1325	2	.3	48000	16.3	--	7.7	95	--	--
			1.8	48000	16.8	--	7.8	99	--	--
			3.5	46000	16.9	--	7.6	96	--	--
MAR 05, 71	1510	2	.3	47000	16.0	--	7.6	93	--	--
			1.8	47000	16.0	--	7.4	90	--	--
			3.5	48000	16.0	--	7.4	90	--	--
MAR 05, 71	1710	2	.6	47000	15.8	--	8.4	102	--	--
			2.1	47000	15.8	--	8.4	102	--	--
			3.7	47000	15.8	--	8.4	102	--	--
MAR 04, 71	2000	3	.5	45000	14.0	--	8.4	98	--	--
			.9	45000	14.0	--	8.4	98	--	--
			1.7	45000	14.0	--	8.6	100	--	--
MAR 04, 71	2200	3	.5	45000	14.2	--	8.2	95	--	--

TABLE 3A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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 330 CONTINUED						
MAR 04, 71	2200	3	.9	45000	14.2	--	8.0	93	--	--
			1.7	44000	14.2	--	8.2	95	--	--
MAR 04, 71	2400	3	.5	44000	14.4	--	6.0	94	--	--
			.9	48000	14.4	--	7.9	94	--	--
			1.7	48000	14.6	--	8.0	95	--	--
MAR 05, 71	0200	3	.5	46000	14.1	--	7.4	86	--	--
			.9	46000	14.0	--	7.6	88	--	--
			1.7	47000	14.4	--	7.7	92	--	--
MAR 05, 71	0400	3	.5	42000	13.7	--	7.7	88	--	--
			.9	42000	13.7	--	7.7	88	--	--
			1.7	40000	13.8	--	8.0	91	--	--
				LINE 333						
MAR 01, 71	1540	1	.3	42000	19.3	--	8.0	101	--	102
			1.7	42000	18.9	--	7.7	96	--	--
MAR 06, 71	0850	1	.3	41000	15.7	7.9	8.5	100	--	76
			.9	35000	15.7	8.1	9.5	109	--	--
			1.8	41000	15.5	8.6	8.7	101	--	--
APR 13, 71	1605	1	.3	45000	23.5	8.6	7.0	97	--	56
			1.7	46000	23.5	8.7	7.6	106	--	--
APR 13, 71	1615	2	.3	45000	23.2	8.6	6.6	90	--	43
			1.5	46000	23.4	8.7	8.0	111	--	--
JUN 01, 71	1136	2	.3	44000	27.5	8.3	7.0	106	--	61
			1.5	40000	27.6	8.3	7.3	107	--	--
APR 13, 71	1623	3	.3	45000	23.7	8.4	6.6	92	--	30
			1.2	45000	23.8	8.6	8.3	117	--	--
				LINE 340						
APR 13, 71	1520	1	.3	48000	23.3	8.6	7.4	103	--	76
			1.5	48000	23.2	8.6	6.9	96	--	--
			2.3	48000	23.4	8.7	7.6	106	--	--
JUN 01, 71	1152	1	.3	46000	27.4	8.3	7.5	112	--	86
			1.8	46000	27.6	8.3	7.6	115	--	--
APR 13, 71	1530	2	.3	45000	22.9	8.5	5.9	81	--	58
			2.3	46000	23.1	8.7	7.0	96	--	--
JUN 01, 71	1159	2	.3	46000	27.6	8.3	7.7	117	--	61
			2.1	46000	27.6	8.3	7.1	108	--	--
APR 13, 71	1545	3	.3	45000	23.3	8.5	6.2	86	--	56
			1.5	48000	23.5	8.6	8.0	111	--	--
JUN 01, 71	1208	3	.5	46000	27.6	8.2	6.4	97	--	38
			1.2	46000	27.6	8.2	7.2	109	--	--
			1.8	46000	27.7	8.2	7.4	112	--	--
				LINE 350						
MAR 06, 71	0805	1	.3	43000	15.9	7.7	8.0	95	--	--
			1.2	43000	15.7	7.9	7.9	94	--	--
			2.4	41000	15.7	8.4	8.4	99	--	--
APR 13, 71	1450	1	.3	48000	23.4	8.5	6.3	88	--	74
			1.2	48000	23.5	8.7	8.0	111	--	--

TABLE 3A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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 350 CONTINUED						
JUN 01, 71	1317	1	.3	43000	28.0	8.4	8.2	142	--	89
			.9	43000	28.1	8.4	8.4	125	--	--
APR 13, 71	1435	2	.3	46000	22.4	8.3	6.0	81	--	114
			1.5	44000	22.3	8.4	6.4	86	--	--
			4.0	48000	23.0	8.5	7.6	104	--	--
JUN 01, 71	1335	2	.5	43000	27.5	8.3	7.6	115	--	91
			1.5	43000	27.5	8.3	7.6	112	--	--
			3.0	43000	27.5	8.3	7.6	112	--	--
			4.6	42000	27.5	8.2	7.3	107	--	--
MAR 06, 71	0930	3	.3	41000	15.7	8.0	8.4	99	--	66
			.9	41000	15.7	8.3	8.0	94	--	--
			2.1	39000	15.9	8.6	8.6	100	--	--
APR 13, 71	1422	3	.3	44000	22.7	8.3	6.3	87	--	61
			1.5	44000	22.6	8.3	6.4	88	--	--
			2.7	44000	23.6	8.5	6.2	86	--	--
JUN 01, 71	1345	3	.5	43000	27.5	8.2	7.0	103	--	61
			1.2	43000	27.5	8.3	7.4	109	--	--
			2.1	43000	27.8	8.3	7.6	113	--	--
				LINE 363						
MAR 01, 71	1445	1	.3	47000	19.0	--	8.0	103	--	122
			1.3	46000	18.9	--	8.2	104	--	--
MAR 06, 71	0755	1	.3	37000	16.5	7.5	8.4	98	--	--
			.9	37000	16.5	7.5	8.4	98	--	--
			1.8	51000	16.6	7.5	8.1	101	--	--
APR 15, 71	0910	1	.3	45000	21.5	8.7	6.1	82	--	122
			1.5	45000	21.5	8.8	6.2	84	--	--
			2.9	44000	21.6	9.1	6.6	89	--	--
JUN 01, 71	1614	1	.3	43000	27.8	8.3	7.7	115	--	69
			1.4	43000	27.7	8.3	7.7	115	--	--
MAR 01, 71	1435	2	.3	46000	18.7	--	8.1	103	--	152
			1.5	46000	18.7	--	8.2	104	--	--
			3.0	46000	18.6	--	7.8	99	--	--
			4.0	46000	18.7	--	7.6	96	--	--
APR 15, 71	0920	2	.5	45000	21.8	8.6	6.0	81	--	173
			1.5	45000	21.8	8.7	6.0	81	--	--
			4.1	48000	21.8	8.8	6.1	84	--	--
JUN 01, 71	1600	2	.5	44000	27.8	8.3	7.3	110	--	107
			1.5	44000	27.7	8.3	7.2	109	--	--
			3.7	43000	27.6	8.3	7.3	109	--	--
MAR 01, 71	1700	3	.3	42000	18.8	--	8.8	110	--	135
			1.5	42000	18.7	--	8.8	110	--	--
			2.4	43000	18.4	--	7.0	86	--	--
			3.5	42000	18.6	--	7.2	90	--	--
APR 15, 71	0937	3	.5	46000	21.9	8.6	5.7	78	--	117
			1.5	46000	21.9	8.7	5.9	80	--	--
			3.0	44000	22.0	8.8	6.2	84	--	--
JUN 01, 71	1545	3	.5	44000	27.6	8.2	6.8	103	--	61
			1.5	44000	27.6	8.2	7.2	109	--	--
			2.7	43000	27.7	8.3	7.7	115	--	--
APR 15, 71	0950	4	.5	48000	21.8	8.4	5.3	73	--	86
			1.5	46000	21.7	8.5	5.3	72	--	--

TABLE 3A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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 363 CONTINUED						
APR 15, 71	0950	4	3.0	46000	21.7	8.6	5.4	73	--	--
			4.9	48000	21.8	8.6	5.6	77	--	--
JUN 01, 71	1528	4	.5	43000	27.3	8.3	6.8	100	--	56
			1.5	43000	27.8	8.3	7.0	104	--	--
			3.4	43000	27.5	8.2	7.4	109	--	--
APR 15, 71	1006	5	.5	48000	22.1	8.5	4.7	64	--	56
			1.5	48000	22.2	8.6	5.3	73	--	--
			3.4	48000	22.2	8.7	5.3	73	--	--
JUN 01, 71	1504	5	.5	43000	27.5	8.2	7.4	109	--	--
			1.5	43000	27.5	8.2	7.6	112	--	--
			3.0	43000	27.5	8.2	7.8	115	--	--
APR 15, 71	1025	6	.5	45000	22.4	8.6	5.0	68	--	46
			1.5	45000	22.4	8.8	5.2	70	--	--
			2.9	48000	22.7	8.8	5.7	79	--	--
JUN 01, 71	1453	6	.5	43000	28.1	8.3	7.4	110	--	41
			.9	43000	28.2	8.2	7.4	110	--	--
				LINE 375						
MAR 01, 71	1420	1	.3	47000	18.8	8.4	8.2	105	--	103
			1.5	47000	18.5	8.5	8.2	104	--	--
			3.0	47000	18.0	8.6	7.8	99	--	--
			4.3	47000	18.0	8.7	7.6	96	--	--
APR 13, 71	1717	1	.3	43000	21.7	8.6	6.5	86	--	132
			1.5	44000	21.7	8.7	6.2	84	--	--
			3.0	42000	21.7	8.8	6.6	88	--	--
			4.3	44000	21.9	8.9	7.6	103	--	--
APR 14, 71	0800	1	.3	42000	21.0	8.0	7.8	103	--	130
			1.5	42000	21.0	8.1	7.8	103	--	--
			4.1	42000	21.0	8.2	7.8	103	--	--
APR 15, 71	0848	1	.5	44000	21.8	8.6	6.5	88	--	109
			1.5	44000	21.7	8.7	6.5	88	--	--
			4.3	44000	21.6	8.8	6.9	93	--	--
JUN 01, 71	1632	1	.5	44000	27.7	8.3	7.2	109	--	61
			1.5	44000	27.2	8.3	7.7	115	--	--
			4.0	44000	27.4	8.2	7.7	115	--	--
JUN 02, 71	0834	1	.5	44000	26.1	8.1	7.0	103	--	84
			1.5	44000	26.1	8.1	7.6	112	--	--
			3.7	44000	25.9	8.1	7.6	112	--	--
JUN 02, 71	1607	1	.5	44000	27.3	8.2	10.3	154	--	107
			1.5	43000	27.2	8.1	11.1	163	--	--
			3.7	46000	27.2	8.2	10.1	151	--	--
MAR 01, 71	1400	2	.3	46000	18.9	8.4	8.3	105	--	163
			1.5	47000	18.6	8.4	7.9	101	--	--
			3.0	47000	18.6	--	7.6	97	--	--
			4.0	46000	18.7	--	7.7	97	--	--
APR 15, 71	0830	2	.5	46000	21.6	8.5	6.5	88	--	61
			1.5	46000	21.6	8.6	6.7	91	--	--
			3.4	45000	21.6	8.9	7.3	99	--	--
JUN 02, 71	0853	2	.5	44000	26.4	8.1	7.0	103	--	48
			1.5	44000	26.4	8.1	7.3	107	--	--
			3.4	44000	26.5	8.1	7.6	112	--	--
MAR 01, 71	1335	3	.3	43000	18.9	8.4	8.4	105	--	107

TABLE 3A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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					
MAR 01, 71	1335	3	1.5	43000	18.6	8.5	8.2	102	--	--
			3.0	43000	18.6	8.3	7.6	95	--	--
			4.0	43000	18.7	8.4	7.8	98	--	--
APR 15, 71	0810	3	.5	45000	21.6	8.1	6.7	91	--	61
			1.5	45000	21.6	8.1	6.6	92	--	--
			3.7	45000	21.5	8.1	7.4	100	--	--
JUN 02, 71	0913	3	.5	43000	26.4	8.1	7.4	107	--	33
			1.5	44000	26.4	8.1	7.2	106	--	--
			3.4	43000	26.7	8.1	8.0	118	--	--
MAR 01, 71	1315	4	.3	42000	19.3	8.1	8.0	101	--	81
			1.5	42000	19.2	8.3	8.0	100	--	--
			2.6	41000	19.2	8.6	7.6	98	--	--
APR 15, 71	0752	4	.5	44000	21.6	7.7	6.9	93	--	51
			1.5	44000	21.6	7.5	7.1	96	--	--
			2.7	44000	21.5	7.3	7.4	100	--	--
JUN 02, 71	0932	4	.5	43000	26.7	8.1	7.3	107	--	23
			1.5	43000	26.7	8.1	7.5	110	--	--
			2.4	43000	26.7	8.1	7.6	112	--	--
					LINE 382					
MAR 01, 71	1000	1	.3	45000	17.5	8.6	8.0	100	--	--
			2.7	45000	17.5	8.5	7.9	99	--	--
APR 14, 71	1505	1	.3	43000	22.4	8.3	7.7	104	--	157
			1.5	42000	22.5	8.7	8.1	109	--	--
JUN 01, 71	1705	1	.3	44000	27.6	8.3	7.6	115	--	122
			1.4	44000	27.7	8.3	8.5	129	--	--
MAR 01, 71	0930	2	.3	47000	17.6	8.3	7.9	100	--	46
			1.5	47000	17.6	8.3	7.9	100	--	--
			3.4	46000	17.6	8.5	7.9	99	--	--
APR 14, 71	1523	2	.5	42000	22.0	8.5	7.6	101	--	152
			2.4	42000	22.0	8.8	7.9	105	--	--
MAR 01, 71	0920	3	.3	46000	17.6	8.2	8.0	100	--	--
			1.5	46000	17.6	8.2	7.9	99	--	--
			4.0	46000	17.6	8.2	7.8	98	--	--
APR 14, 71	1530	3	.5	43000	22.0	8.3	7.3	97	--	152
			1.5	43000	22.0	8.3	7.3	97	--	--
			3.7	42000	22.1	8.7	7.8	104	--	--
JUN 01, 71	1725	3	.5	46000	27.5	8.3	7.4	112	--	178
			1.5	46000	27.5	8.3	7.8	118	--	--
			3.4	46000	27.5	8.3	8.2	124	--	--
MAR 01, 71	0908	4	.3	47000	18.0	7.7	7.7	97	--	91
			1.5	47000	17.9	7.7	7.7	97	--	--
			4.1	46000	18.0	7.8	7.7	96	--	--
MAR 04, 71	1240	4	.3	--	.8	--	--	--	--	--
MAR 04, 71	1400	4	.3	--	12.0	--	--	--	--	--
MAR 06, 71	1200	4	.3	39000	16.1	8.1	8.0	93	--	91
			1.8	39000	16.1	8.2	7.9	92	--	--
			4.0	42000	15.8	9.1	7.4	88	--	--
APR 14, 71	1541	4	.3	43000	22.2	8.2	6.5	87	--	152
			1.5	43000	22.2	8.3	7.1	95	--	--

TABLE 3A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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 382 CONTINUED					
APR 14, 71	1541	4	3.7	43000	22.2	8.3	7.7	103	--	--
JUN 01, 71	1730	4	.3	46000	27.6	8.3	7.2	109	--	74
			1.5	46000	27.5	8.3	7.5	114	--	--
			3.4	46000	27.6	8.3	7.8	118	--	--
					LINE 397					
MAR 04, 71	1150	2	.3	47000	14.7	7.7	7.8	93	--	--
			3.0	47000	14.7	7.7	7.9	94	--	--
			9.1	47000	14.8	7.7	7.9	95	--	--
			15.2	47000	14.8	7.7	7.9	95	--	--
MAR 04, 71	1400	2	.3	49000	15.2	8.0	7.5	91	--	117
			3.0	49000	15.1	8.1	7.8	95	--	--
			9.1	49000	15.2	8.1	7.8	95	--	--
			15.2	47000	15.2	8.5	8.0	96	--	--
MAR 04, 71	1940	2	.3	39000	15.3	8.5	8.2	94	--	--
			3.0	39000	15.3	8.5	8.5	98	--	--
			9.1	38000	15.3	8.7	8.8	101	--	--
			15.2	36000	15.4	9.2	9.1	103	--	--
MAR 05, 71	0008	2	.3	42000	15.3	8.5	8.0	94	--	--
			3.0	42000	15.3	8.6	8.2	96	--	--
			9.1	41000	15.3	8.7	8.4	98	--	--
			15.2	41000	15.3	9.2	8.5	99	--	--
MAR 05, 71	0825	2	.3	47000	15.4	--	8.0	96	--	--
			1.5	46000	15.4	--	8.2	98	--	--
			6.1	46000	15.4	--	8.2	98	--	--
			13.7	46000	15.4	--	8.4	100	--	--
MAR 05, 71	1220	2	.3	47000	16.1	--	8.2	100	--	--
			1.5	47000	16.1	--	8.2	100	--	--
			6.1	47000	16.1	--	8.3	101	--	--
			15.2	47000	16.2	--	8.4	102	--	--
MAR 05, 71	1545	2	.3	47000	16.9	--	8.0	100	--	--
			1.5	47000	16.8	--	8.1	101	--	--
			6.1	47000	16.5	--	8.4	104	--	--
			15.2	47000	16.5	--	8.4	104	--	--
APR 14, 71	0740	2	.3	43000	21.0	7.8	7.6	100	--	122
			3.0	43000	20.9	7.7	7.8	103	--	--
			6.1	43000	20.9	7.7	7.8	103	--	--
			9.1	43000	20.9	7.7	7.8	103	--	--
			12.8	42000	20.8	7.6	7.8	103	--	--
JUN 02, 71	0800	2	.6	44000	26.2	8.2	7.0	103	--	150
			1.5	46000	26.2	8.1	7.0	103	--	--
			3.0	46000	26.2	8.2	6.9	101	--	--
			6.1	46000	26.2	8.1	7.2	106	--	--
			9.1	46000	26.2	8.1	7.2	106	--	--
			13.7	46000	25.9	8.1	7.4	109	--	--
					LINE 400					
MAR 04, 71	2107	3	.3	50000	15.0	--	--	--	--	--
			1.5	50000	15.0	--	--	--	--	--
			5.5	50000	15.0	--	--	--	--	--
MAR 04, 71	2310	3	.3	50000	14.4	--	--	--	--	--
			1.5	50000	14.4	--	--	--	--	--
			5.5	50000	14.4	--	--	--	--	--
MAR 04, 71	1110	3	.3	50000	12.3	--	--	--	--	--

TABLE 3A--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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 400 CONTINUED					
MAR 04, 71	1110	3	1.5	50000	12.3	--	--	--	--	--
			5.5	50000	12.2	--	--	--	--	--
MAR 04, 71	1302	3	.3	48000	13.9	--	--	--	--	--
			1.5	49000	14.4	--	--	--	--	--
			5.6	48000	14.4	--	--	--	--	--
MAR 04, 71	1500	3	.3	40000	14.4	--	--	--	--	--
			1.5	41000	14.4	--	--	--	--	--
			5.8	49000	14.4	--	--	--	--	--
MAR 04, 71	1601	3	.3	48000	14.4	--	--	--	--	--
			1.5	48000	15.0	--	--	--	--	--
			5.8	48000	15.0	--	--	--	--	--
MAR 04, 71	1904	3	.3	49000	15.0	--	--	--	--	--
			1.5	49000	15.0	--	--	--	--	--
			5.5	49000	15.0	--	--	--	--	--
MAR 05, 71	0148	3	.3	50000	14.4	--	--	--	--	--
			1.5	50000	14.4	--	--	--	--	--
			5.8	50000	14.4	--	--	--	--	--
MAR 05, 71	0308	3	.3	50000	14.4	--	--	--	--	--
			1.5	50000	14.4	--	--	--	--	--
			5.3	50000	14.4	--	--	--	--	--
MAR 05, 71	0507	3	.3	50000	14.4	--	--	--	--	--
			1.5	50000	14.4	--	--	--	--	--
			5.8	50000	14.4	--	--	--	--	--
APR 03, 71	2107	3	.3	50000	15.0	--	--	--	--	--
			1.5	50000	15.0	--	--	--	--	--
			5.5	50000	15.0	--	--	--	--	--
MAR 04, 71	1330	4	.3	--	13.0	--	--	--	--	--
						LINE 902				
MAR 04, 71	1430	49	3.0	49000	15.5	7.9	7.6	94	--	152
			6.1	49000	15.4	7.8	7.9	96	--	--
			12.8	49000	15.7	7.8	6.6	81	--	--
						LINE 905				
MAR 04, 71	1220	49	3.0	49000	15.5	8.2	7.5	93	--	305
			9.1	49000	15.5	8.4	7.5	93	--	--
			16.8	47000	16.0	8.6	7.6	93	--	--
						LINE 910				
MAR 04, 71	1255	49	3.0	49000	15.5	8.0	7.6	94	--	366
			9.1	49000	15.6	8.1	7.5	93	--	--
			18.3	49000	16.0	8.4	7.6	94	--	--

TABLE 3B--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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-PHORUS ORTHO (P) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	TOTAL ORGANIC CARBON (MG/L)
						LINE 17						
APR 13, 71	0905	2	.3	16.0	.4	.06	.04	.05	.14	5.5	--	--
			3.7	11.0	.0	.97	.00	.43	.43	2.3	--	--
JUN 01, 71	1655	2	.3	14.0	.4	.07	.16	.08	.13	4.3	--	--
			3.7	14.0	.0	1.60	.01	.42	.44	3.3	--	--
						LINE 22						
APR 13, 71	0940	2	.3	15.0	.6	.13	.05	.12	.15	4.3	--	--
			3.4	13.0	.0	1.10	.00	.58	.58	2.4	--	--
JUN 01, 71	1620	2	.3	15.0	.2	.04	.12	.15	.20	4.8	--	--
			3.5	16.0	.6	.24	.13	.19	.21	2.8	--	--
						LINE 65						
APR 13, 71	1105	2	.3	7.9	.1	.16	.00	.06	.07	2.1	--	--
			4.0	7.5	.2	.24	.00	.06	.06	1.4	--	--
JUN 01, 71	1515	2	.3	12.0	.0	.02	.01	.05	.05	2.1	--	--
			4.0	7.0	.0	.42	.01	.07	.07	1.7	--	--
						LINE 85						
APR 14, 71	1333	3	.3	4.3	.1	.14	.00	.05	.05	1.1	--	--
			1.5	4.4	.1	.12	.00	.05	.05	1.2	--	--
JUN 02, 71	1308	3	.5	4.1	.0	.05	.02	.06	.06	2.9	--	--
			1.5	4.7	.0	.01	.02	.10	.10	2.3	--	--
						LINE 90						
MAR 01, 71	1400	3	.3	3.3	.0	.10	.02	.08	.08	1.9	--	--
			3.0	3.4	.0	.09	.01	.02	.16	1.9	--	--
						LINE 110						
MAR 01, 71	1320	2	.3	4.2	.2	2.20	.07	1.20	1.20	7.8	--	--
			4.0	3.2	.0	.18	.02	.09	.10	3.5	--	--
						LINE 125						
MAR 01, 71	1205	2	.3	3.2	.0	.06	.01	.04	.04	2.2	--	--
			.9	3.2	.0	.08	.01	.05	.05	3.0	--	--
						LINE 129						
MAR 06, 71	1000	2	.3	4.0	.1	.00	.01	.08	.08	3.2	--	--
			3.0	3.7	.0	.00	.00	.04	.07	3.0	--	--
APR 14, 71	1150	2	3.4	3.0	.0	.09	.00	.03	.03	.8	--	--
			.3	2.9	.0	.09	.00	.02	.02	.9	--	--
JUN 02, 71	1114	2	.3	3.4	.2	.01	.02	.03	.04	2.7	--	--
			3.4	3.2	.0	.05	.02	.03	.09	2.1	--	--
						LINE 140						
MAR 01, 71	1000	2	.3	2.5	.0	.04	.00	.02	.02	2.9	--	--

TABLE 38--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	TOTAL ORGANIC CARBON (MG/L)
						LINE 140 CONTINUED						
MAR 01, 71	1000	2	1.2	2.5	.0	.12	.00	.02	.05	4.9	--	--
						LINE 143						
JUN 02, 71	0945	1	1.8	1.4	.0	.00	.01	.02	.02	.7	--	--
MAR 01, 71	1010	2	.3	2.0	.0	.05	.00	.01	.02	3.8	--	--
			1.8	2.4	.0	.04	.00	.02	.03	1.4	--	--
APR 14, 71	0950	2	.3	1.8	.1	.10	.00	.04	.04	1.4	--	--
			1.8	2.1	.1	.10	.00	.05	.05	2.1	--	--
JUN 02, 71	1000	3	.3	2.0	.0	.00	.02	.04	.08	1.2	--	--
			2.0	1.9	.0	.00	.02	.04	.04	1.7	--	--
						LINE 150						
MAR 01, 71	1030	2	.3	2.6	.0	.19	.00	.02	.03	.5	--	--
			2.1	2.8	.0	.07	.00	.02	.03	.7	--	--
OCT 12, 70	0900	4	.3	4.9	.0	.00	.00	.00	.00	2.5	--	--
			11.6	.4	.0	.00	.01	.00	.00	1.8	--	--
MAR 01, 71	1100	4	.3	2.1	.0	.08	.01	.02	.02	3.4	--	--
			11.6	2.4	.0	.10	.00	.02	.13	3.3	--	--
MAR 06, 71	0940	4	.3	3.0	.0	.00	.01	.05	.05	1.9	--	--
			11.9	2.1	.0	.00	.00	.03	.35	1.4	--	--
						LINE 169						
MAR 01, 71	0820	2	.3	.5	.0	.05	.00	.01	.03	2.0	--	--
			1.2	.2	.0	.14	.00	.02	.03	.9	--	--
MAR 06, 71	0915	2	.8	.8	.1	.01	.02	.03	.03	1.5	--	--
						LINE 180						
MAR 01, 71	0905	2	.3	1.5	.0	.15	.00	.02	.02	2.1	--	--
			2.0	1.1	.0	.09	.00	.02	.02	.6	--	--
MAR 06, 71	1010	2	.3	.6	.0	.00	.00	.01	.01	2.2	--	--
			1.8	.0	.0	.01	.00	.01	.02	2.2	--	--
APR 14, 71	1100	2	.3	1.4	.0	.11	.00	.00	.06	1.4	--	--
			2.0	1.1	.0	.05	.00	.00	.08	1.9	--	--
JUN 02, 71	0930	2	.3	1.6	.0	.00	.01	.02	.03	.6	--	--
			2.0	1.7	.0	.00	.01	.02	.02	1.2	--	--
						LINE 190						
APR 14, 71	1305	3	.3	3.9	.2	.12	.00	.05	.05	1.4	--	--
			3.0	3.6	.1	.18	.00	.06	.06	1.5	--	--
APR 14, 71	1033	3	.5	2.4	.0	.07	.00	.05	.05	.9	--	--
			7.9	2.7	.0	.11	.00	.03	.03	.9	--	--
JUN 02, 71	0952	3	.5	18.0	.0	.00	.02	.03	.03	2.4	--	--
			9.1	1.7	.0	.00	.02	.02	.02	1.9	--	--
MAR 01, 71	1155	4	.3	2.1	.0	.06	.01	.04	.04	1.6	--	--
			11.6	2.3	.0	.12	.00	.01	.05	1.5	--	--
MAR 01, 71	1015	4	.3	1.8	.0	.07	.01	.03	.03	4.3	--	--

TABLE 38--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	TOTAL ORGANIC CARBON (MG/L)
						LINE 190 CONTINUED						
MAR 01, 71	1015	4	12.2	3.1	.0	.09	.00	.02	.55	5.6	--	--
MAR 06, 71	0915	4	.3	1.7	.1	.01	.01	.08	.08	1.9	--	--
			12.2	2.0	.0	.01	.00	.03	.67	2.8	--	--
						LINE 210						
MAR 01, 71	1105	2	.3	1.3	.0	.10	.01	.03	.03	1.0	--	--
			12.3	2.0	.0	.10	.00	.03	.08	.7	--	--
						LINE 224						
MAR 01, 71	1305	2	.3	4.8	.0	.06	.00	.02	.03	2.5	--	--
			.8	5.2	.0	.05	.00	.02	.03	2.8	--	--
APR 12, 71	1640	2	1.1	2.4	.0	.08	.00	.07	.07	1.6	--	--
						LINE 235						
MAR 01, 71	1325	2	.3	3.5	.0	.06	.00	.01	.03	1.3	--	--
			1.7	3.2	.0	.06	.00	.02	.03	1.6	--	--
						LINE 249						
MAR 01, 71	1410	2	.3	1.8	.0	.14	.00	.01	.02	2.0	--	--
			3.0	1.7	.0	.05	.00	.02	.02	1.5	--	--
APR 12, 71	1535	2	.3	3.0	.0	.04	.00	.04	.04	1.2	--	--
			1.5	3.3	.0	.33	.00	.00	.04	1.1	--	--
						LINE 254						
APR 13, 71	1845	2	.3	7.0	.0	.13	.00	.07	.11	6.3	--	--
			3.4	7.3	.1	.22	.00	.05	.15	7.2	--	--
JUN 01, 71	1245	2	.3	9.3	.0	.04	.02	.05	.07	3.0	--	--
			3.7	11.0	.0	.27	.02	.34	.40	2.8	--	--
						LINE 258						
MAR 01, 71	1605	2	.6	4.1	.1	.18	.00	.05	.05	1.1	--	--
APR 13, 71	1825	2	.8	5.8	.1	.09	.00	.06	.06	3.8	--	--
						LINE 264						
MAR 01, 71	1530	2	.3	2.3	.0	.10	.00	.03	.03	1.5	--	--
			1.2	2.3	.0	.10	.00	.03	.04	1.3	--	--
JUN 01, 71	1200	2	.3	3.6	.0	.03	.01	.03	.03	2.6	--	--
			1.4	4.6	.1	.01	.01	.07	.07	3.1	--	--
						LINE 270						
MAR 01, 71	1635	2	.3	2.4	.0	.33	.02	.08	.09	3.6	--	--
			3.8	1.7	.0	.15	.00	.04	.04	1.4	--	--
						LINE 284						
MAR 01, 71	1650	1	.3	2.0	.0	.06	.00	.05	.05	1.2	--	--

TABLE 38--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	TOTAL ORGANIC CARBON (MG/L)
						LINE 284 CONTINUED						
MAR 01, 71	1650	1	1.2	2.3	.0	.08	.00	.05	.05	1.8	--	--
APR 13, 71	1725	1	.3	2.5	.2	.05	.00	.03	.03	1.1	--	--
			1.5	2.0	.0	.10	.00	.01	.35	1.8	--	--
JUN 01, 71	1015	1	.3	2.5	.0	.00	.01	.05	.05	1.1	--	--
			1.2	2.8	.0	.02	.02	.06	.06	1.7	--	--
MAR 01, 71	1715	3	.3	1.7	.0	.05	.00	.02	.02	2.2	--	--
			1.8	2.6	.0	.12	.00	.06	.06	1.3	--	--
APR 13, 71	1750	3	.3	3.2	.1	.12	.00	.05	.05	1.2	--	--
			2.0	2.7	.0	.12	.01	.01	.16	1.0	--	--
JUN 01, 71	1035	3	.3	2.3	.0	.00	.02	.03	.03	1.3	--	--
			2.3	2.5	.0	.01	.02	.05	.05	1.6	--	--
						LINE 300						
MAR 06, 71	1020	1	.3	2.2	.0	.00	.01	.05	.05	2.1	--	--
			2.4	2.3	.0	.00	.00	.10	.10	2.4	--	--
MAR 06, 71	1005	3	.3	1.6	.0	.00	.00	.04	.04	2.0	--	--
			2.3	1.5	.1	.00	.00	.08	.08	1.7	--	--
						LINE 310						
MAR 04, 71	1010	2	.3	3.8	.0	.02	.02	.05	.06	--	--	--
MAR 04, 71	1945	2	.3	3.2	.0	.24	.02	.05	.05	--	--	--
MAR 05, 71	0510	2	.3	2.8	.0	.27	.01	.04	.04	--	--	--
MAR 05, 71	1215	2	.3	2.7	.0	.22	.02	.04	.06	--	--	--
						LINE 330						
MAR 02, 71	1445	2	.3	2.2	.3	--	--	--	--	--	--	--
						LINE 333						
MAR 01, 71	1540	1	.3	1.8	.0	.09	.00	.01	.03	1.8	--	--
			1.7	1.9	.1	.16	.03	.07	.07	1.1	--	--
MAR 06, 71	0850	1	.3	2.2	.0	.00	.01	.05	.05	2.0	--	--
			1.8	2.2	.0	.00	.02	.06	.06	2.0	--	--
						LINE 340						
APR 13, 71	1530	2	.3	1.5	.0	.10	.00	.03	.03	1.3	--	--
			2.3	1.7	.0	.09	.00	.03	.03	1.3	--	--
JUN 01, 71	1159	2	.3	1.6	.0	.00	.03	.02	.02	.2	--	--
			2.1	1.6	.0	.00	.01	.03	.04	1.5	--	--
						LINE 350						
MAR 06, 71	0805	1	.3	1.9	.0	.00	.00	.02	.03	--	--	--
			2.4	2.2	.0	.00	.01	.06	.06	1.4	--	--
APR 13, 71	1450	1	.3	1.6	.0	.16	.00	.03	.04	1.5	--	--
			1.2	1.5	.0	.14	.00	.04	.04	1.8	--	--
JUN 01, 71	1317	1	.3	1.1	.0	.00	.03	.02	.03	2.2	--	--

TABLE 36--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	TOTAL ORGANIC CARBON (MG/L)
						LINE 350 CONTINUED						
JUN 01, 71	1317	1	.9	1.3	.0	.00	.01	.02	.02	2.4	--	--
MAR 06, 71	0930	3	.3	1.9	.0	.00	.01	.05	.06	1.4	--	--
			2.1	1.4	.0	.00	.01	.07	.07	1.6	--	--
APR 13, 71	1422	3	.3	2.0	.0	.37	.00	.02	.02	.9	--	--
			2.7	2.1	.0	.35	.00	.02	.02	1.3	--	--
JUN 01, 71	1345	3	.5	2.1	.0	.02	.01	.02	.02	2.3	--	--
			2.1	2.1	.0	.00	.02	.03	.03	1.7	--	--
						LINE 363						
MAR 01, 71	1445	1	.3	1.0	.0	.06	.00	.04	.04	1.3	--	--
			1.3	1.0	.0	.03	.01	.02	.02	1.4	--	--
MAR 06, 71	0755	1	.3	1.0	.0	.00	.00	.02	.02	1.0	--	--
			1.8	1.1	.0	.00	.01	.04	.04	1.1	--	--
APR 15, 71	0920	2	.5	.0	.0	.08	.00	.00	.04	.9	--	--
			4.1	.0	.0	.06	.00	.01	.03	.9	--	--
JUN 01, 71	1600	2	.5	1.6	.0	.05	.01	.02	.02	2.7	--	--
			3.7	1.8	.0	.00	.02	.02	.02	2.0	--	--
MAR 01, 71	1700	3	.3	1.6	.0	.06	.00	.04	.04	1.5	--	--
			3.5	1.9	.0	.18	.01	.06	.06	1.1	--	--
APR 15, 71	0950	4	.5	1.2	.0	.13	.00	.03	.05	.5	--	--
			4.9	1.4	.0	.09	.00	.03	.05	.7	--	--
JUN 01, 71	1528	4	.5	2.0	.0	.00	.02	.03	.03	1.7	--	--
			3.4	2.3	.0	.00	.02	.03	.04	2.1	--	--
APR 15, 71	1006	5	.5	1.7	.1	.05	.00	.06	.06	1.7	--	--
			3.4	1.8	.1	.08	.00	.06	.06	.9	--	--
JUN 01, 71	1504	5	.5	2.4	.0	.05	.03	.02	.02	1.7	--	--
			3.0	2.6	.0	.00	.01	.02	.02	1.9	--	--
						LINE 375						
MAR 01, 71	1420	1	.3	.8	.0	.07	.00	.01	.01	1.6	--	--
			4.3	.9	.1	.06	.01	.05	.05	1.1	--	--
APR 15, 71	0848	1	.5	.0	.0	.09	.00	.02	.05	1.5	--	--
			4.3	.0	.0	.06	.00	.03	.05	1.0	--	--
JUN 02, 71	0834	1	.5	1.1	.0	.00	.01	.02	.02	2.2	--	--
			3.7	.9	.0	.00	.01	.01	.02	1.3	--	--
MAR 01, 71	1400	2	.3	1.6	.0	.07	.00	.01	.01	1.6	--	--
			4.0	1.2	.0	.06	.00	.02	.02	.9	--	--
MAR 01, 71	1335	3	.3	1.7	.0	.17	.01	.00	.00	1.2	--	--
			4.0	2.5	.0	.10	.01	.01	.04	1.4	--	--
APR 15, 71	0810	3	.5	1.1	.1	.02	.00	.06	.06	2.7	--	--
			3.7	1.0	.1	.07	.00	.05	.05	1.7	--	--
JUN 02, 71	0913	3	.5	1.6	.0	.03	.03	.02	.04	2.8	--	--
			3.4	2.1	.0	.00	.01	.03	.04	2.3	--	--
MAR 01, 71	1315	4	.3	1.4	.0	.11	.01	.02	.02	.5	--	--
			2.6	2.2	.0	.10	.01	.03	.03	1.2	--	--
						LINE 382						
MAR 01, 71	1000	1	.3	1.2	.1	.10	.01	.05	.05	1.4	--	--

TABLE 3B--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	TOTAL ORGANIC CARBON (MG/L)
					LINE 382 CONTINUED							
MAR 01, 71	1000	1	2.7	1.5	.0	.04	.01	.04	.04	1.3	--	--
APR 14, 71	1505	1	.3	1.3	.0	.39	.00	.01	.01	.8	--	--
			1.5	1.0	.0	.11	.00	.00	.01	.9	--	--
JUN 01, 71	1705	1	.3	.7	.0	.01	.01	.01	.01	2.9	--	--
			1.4	.8	.0	.04	.02	.01	.01	2.5	--	--
MAR 01, 71	0930	2	.3	1.4	.1	.08	.02	.04	.04	1.7	--	--
			3.4	1.4	.1	.10	.02	.06	.06	.9	--	--
MAR 04, 71	1710	2	.3	1.6	.0	.00	.01	.10	.10	--	--	--
MAR 04, 71	0830	2	.3	2.3	.5	.08	.01	.17	.20	--	--	--
MAR 04, 71	0940	2	.3	1.8	.1	.00	.00	.13	.13	--	--	--
MAR 04, 71	1000	2	.3	1.8	.0	.00	.01	.05	.05	--	--	--
MAR 04, 71	1140	2	.3	1.5	.0	.00	.00	.04	.04	--	--	--
MAR 04, 71	1922	2	.3	1.4	.0	.00	.00	.03	.04	--	--	--
MAR 04, 71	2310	2	.3	1.4	.0	.00	.00	.03	.04	--	--	--
MAR 05, 71	0215	2	.3	1.7	.0	.00	.00	.04	.04	--	--	--
MAR 05, 71	0510	2	.3	1.2	.0	.00	.00	.05	.05	--	--	--
MAR 05, 71	0810	2	.3	1.3	.0	.00	.00	.05	.05	--	--	--
MAR 05, 71	1310	2	.3	2.0	.1	.00	.00	.11	.11	--	--	--
MAR 05, 71	0120	3	.3	1.2	.0	.00	.00	.12	.12	--	--	--
MAR 05, 71	0210	3	.3	1.3	.0	.00	.01	.07	.07	--	--	--
MAR 05, 71	0840	3	.3	1.2	.0	.00	.00	.06	.06	--	--	--
MAR 05, 71	1205	3	.3	.9	.0	.00	.00	.04	.05	--	--	--
MAR 05, 71	1600	3	.3	1.5	.0	.00	.01	.11	.11	--	--	--
APR 14, 71	1530	3	.5	1.3	.0	.45	.00	.00	.01	.8	--	--
			3.7	1.3	.0	.41	.00	.00	.02	1.0	--	--
MAR 01, 71	0908	4	.3	1.2	.0	.11	.01	.02	.02	1.3	--	--
			4.1	1.6	.0	.07	.01	.04	.04	1.7	--	--
MAR 04, 71	0955	4	.3	2.4	.0	.05	.00	.03	.05	--	--	--
MAR 04, 71	1240	4	.3	3.0	.0	--	--	--	--	--	--	--
MAR 04, 71	1400	4	.3	2.5	.0	.04	.00	.05	.07	--	--	--
MAR 05, 71	0055	4	.3	1.2	.0	.00	.01	.02	.03	--	--	--
MAR 05, 71	0830	4	.3	.9	.0	.00	.01	.02	.02	--	--	--
MAR 05, 71	1355	4	.3	.0	.0	.00	.00	.02	.02	--	--	--
MAR 05, 71	1600	4	.3	.7	.0	.00	.01	.03	.03	--	--	--
MAR 06, 71	1200	4	.3	1.4	.0	.00	.01	.03	.03	.6	--	--
			4.0	1.4	.0	.00	.01	.04	.04	.5	--	--
APR 14, 71	1541	4	.3	1.3	.0	.37	.00	.00	.01	.8	--	--
			3.7	1.4	.0	.41	.00	.00	.00	.6	--	--
JUN 01, 71	1730	4	.3	1.1	.0	.00	.01	.02	.02	1.4	--	--

TABLE 38--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 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)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	TOTAL ORGANIC CARBON (MG/L)
						LINE 382 CONTINUED						
JUN 01, 71	1730	4	3.4	4.0	.0	.00	.01	.03	.03	2.8	--	--
						LINE 397						
MAR 04, 71	1150	2	.3	.5	.0	.07	.00	.01	.01	--	--	--
MAR 04, 71	1400	2	.3	1.0	.0	.06	.00	.03	.03	1.5	--	--
			15.2	.4	.0	.07	.00	.03	.03	1.5	--	--
MAR 04, 71	1940	2	.3	.2	.0	.10	.00	.05	.05	--	--	--
MAR 05, 71	0825	2	.3	.6	.0	.00	.01	.02	.03	--	--	--
MAR 05, 71	1220	2	.3	.8	.0	.00	.01	.05	.05	--	--	--
MAR 05, 71	1545	2	.3	.7	.0	.00	.02	.02	.04	--	--	--
APR 14, 71	0740	2	.3	1.0	.0	.10	.00	.00	.01	.7	--	--
			12.8	.1	.0	.09	.00	.00	.00	.3	--	--
JUN 02, 71	0800	2	.6	.9	.0	.00	.01	.01	.01	.5	--	--
			13.7	.7	.0	.05	.01	.01	.01	2.4	--	--
						LINE 400						
MAR 04, 71	1110	3	.3	2.0	.0	.00	.00	.04	.04	--	--	--
MAR 04, 71	1904	3	.3	1.1	.0	.00	.01	.04	.04	--	--	--
MAR 05, 71	0507	3	.3	.6	.0	.00	.01	.03	.03	--	--	--
MAR 05, 71	0800	3	.3	.6	.0	.00	.01	.04	.04	--	--	--
MAR 05, 71	1205	3	.3	.7	.0	.00	.01	.02	.03	--	--	--
MAR 05, 71	1405	3	.3	.4	.0	.00	.01	.04	.05	--	--	--
MAR 05, 71	1550	3	.3	.8	.0	.00	.01	.02	.04	--	--	--
MAR 04, 71	0840	4	.3	1.0	.0	.03	.00	.03	.03	--	--	--
MAR 04, 71	1330	4	.3	.7	.0	.06	.00	.01	.02	--	--	--
MAR 04, 71	1530	4	.3	2.0	.0	--	--	--	--	--	--	--
MAR 04, 71	1700	4	.3	.6	.0	.04	.00	.04	.04	--	--	--
MAR 05, 71	0730	4	.3	.4	.0	.00	.01	.02	.02	--	--	--
MAR 05, 71	1540	4	.3	.6	.0	.00	.01	.02	.03	--	--	--
						LINE 902						
MAR 04, 71	1430	49	3.0	.0	.0	.05	.00	.02	.02	1.4	--	--
			12.8	.0	.0	.01	.00	.02	.03	.8	--	--
						LINE 910						
MAR 04, 71	1255	49	3.0	.1	.0	.06	.00	.01	.01	1.2	--	--
			18.3	.1	.0	.09	.00	.02	.02	.9	--	--

TABLE 3C--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 WATER YEAR

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (LAB)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM + POTASSIUM (NA+K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
						LINE 17					
APR 13, 71	0905	2	.3	6140	120.0	140.0	1100	263	600	1800	3930
			3.7	28400	300.0	720.0	5600	215	1500	10000	18900
JUN 01, 71	1655	2	.3	1540	53.0	31.0	210	164	68	360	817
			3.7	23400	230.0	572.0	4400	162	1100	8000	14400
						LINE 22					
APR 13, 71	0940	2	.3	2060	84.0	43.0	290	258	81	500	1150
			3.4	23600	250.0	600.0	4800	234	1500	8300	15500
JUN 01, 71	1620	2	.3	622	48.0	15.0	51	164	33	86	331
			3.5	637	--	--	--	--	--	--	--
						LINE 65					
APR 13, 71	1105	2	.3	28400	--	--	--	--	--	--	--
			4.0	36600	330.0	860.0	7200	167	1800	13000	23100
JUN 01, 71	1515	2	.3	21500	--	--	--	--	--	--	--
			4.0	36500	--	--	--	--	--	--	--
						LINE 85					
APR 14, 71	1333	3	.3	41800	--	--	--	--	--	--	--
			1.5	41800	--	--	--	--	--	--	--
JUN 02, 71	1308	3	.5	44200	--	--	--	--	--	--	--
			1.5	44400	--	--	--	--	--	--	--
						LINE 90					
MAR 01, 71	1400	3	.3	40100	330.0	1000.0	7700	152	1920	14000	25100
			3.0	42300	380.0	1300.0	7300	150	2000	14000	25100
						LINE 110					
MAR 01, 71	1320	2	.3	36500	--	--	--	--	--	--	--
			4.0	40200	--	--	--	--	--	--	--
						LINE 125					
MAR 01, 71	1205	2	.3	41000	--	--	--	--	--	--	--
			.9	41000	--	--	--	--	--	--	--
						LINE 129					
MAR 06, 71	1000	2	.3	40700	--	--	--	--	--	--	--
			3.0	41200	340.0	990.0	8100	152	1900	14000	25800
APR 14, 71	1150	2	3.4	45300	--	--	--	--	--	--	--
			.3	45300	--	--	--	--	--	--	--
JUN 02, 71	1114	2	.3	44300	--	--	--	--	--	--	44400
			3.4	44400	--	--	--	--	--	--	--
						LINE 140					
MAR 01, 71	1000	2	.3	41800	--	--	--	--	--	--	--

TABLE 3C--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 WATER YEAR--CONTINUED

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (LAB)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG) (MG/L)	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 140 CONTINUED					
MAR 01, 71	1000	2	1.2	41900	320.0	1000.0	8200	154	2000	15000	26200
						LINE 143					
JUN 02, 71	0945	1	1.8	45900	--	--	--	--	--	--	--
MAR 01, 71	1010	2	.3	42400	330.0	1200.0	8300	152	2000	15200	27000
			1.8	42600	340.0	1000.0	8300	152	2000	15000	27000
APR 14, 71	0950	2	.3	46700	--	--	--	--	--	--	--
			1.8	46800	380.0	1200.0	9200	149	2300	17000	29900
JUN 02, 71	1000	3	.3	45500	--	--	--	--	--	--	--
			2.0	45500	--	--	--	--	--	--	--
						LINE 150					
MAR 01, 71	1030	2	.3	42900	--	--	--	--	--	--	--
			2.1	42800	--	--	--	--	--	--	--
OCT 12, 70	0900	4	.3	34200	--	--	--	--	--	--	--
			11.6	44300	--	--	--	--	--	--	--
MAR 01, 71	1100	4	.3	42900	350.0	1100.0	8100	145	2000	15000	26200
			11.6	46200	370.0	1200.0	8600	152	2300	16000	28400
MAR 06, 71	0940	4	.3	42100	--	--	--	--	--	--	--
			11.9	42800	--	--	--	--	--	--	--
						LINE 169					
MAR 01, 71	0820	2	.3	42200	--	--	--	--	--	--	--
			1.2	41900	380.0	1000.0	8100	162	2000	15000	26200
MAR 06, 71	0915	2	.8	42500	340.0	960.0	8500	162	1900	15000	26800
						LINE 180					
MAR 01, 71	0905	2	.3	42700	--	--	--	--	--	--	--
			2.0	42700	340.0	1100.0	8300	158	2000	15200	27000
MAR 06, 71	1010	2	.3	43100	--	--	--	--	--	--	--
			1.8	43600	350.0	1100.0	8400	159	2000	15000	27200
APR 14, 71	1100	2	.3	47000	--	--	--	--	--	--	--
			2.0	47100	--	--	--	--	--	--	--
JUN 02, 71	0930	2	.3	45300	--	--	--	--	--	--	--
			2.0	45400	--	--	--	--	--	--	--
						LINE 190					
APR 14, 71	1305	3	.3	42100	--	--	--	--	--	--	--
			3.0	42700	360.0	1200.0	8500	146	2100	16000	27700
APR 14, 71	1033	3	.5	46300	380.0	1100.0	10000	146	2300	18000	31400
			7.9	46400	--	--	--	--	--	--	--
JUN 02, 71	0952	3	.5	45000	--	--	--	--	--	--	--
			9.1	45200	360.0	1200.0	8600	140	2200	1600	28600
MAR 01, 71	1155	4	.3	43700	340.0	1100.0	7600	154	2200	14000	25100
			11.6	48900	380.0	1200.0	9600	152	2400	18000	31500
MAR 01, 71	1015	4	.3	44800	300.0	1300.0	7800	152	2200	15000	26200

TABLE 3C--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 WATER YEAR--CONTINUED

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (LAB)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM + POTASSIUM (NA+K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
					LINE 190 CONTINUED						
MAR 01, 71	1015	4	12.2	48700	380.0	1300.0	9100	152	2400	17000	29800
MAR 06, 71	0915	4	.3	42700	--	--	--	--	--	--	--
			12.2	43900	340.0	1000.0	8700	150	2100	15000	27700
					LINE 210						
MAR 01, 71	1105	2	.3	49800	--	--	--	--	--	--	--
			12.3	49800	--	--	--	--	--	--	--
					LINE 224						
MAR 01, 71	1305	2	.3	32200	--	--	--	--	--	--	--
			.8	33200	280.0	830.0	6000	160	1500	11000	20000
APR 12, 71	1640	2	1.1	34900	320.0	1000.0	6400	170	1700	12000	21500
					LINE 235						
MAR 01, 71	1325	2	.3	40000	--	--	--	--	--	--	--
			1.7	40200	320.0	1000.0	8000	154	2400	14000	25800
					LINE 249						
MAR 01, 71	1410	2	.3	42900	340.0	1000.0	8300	158	2200	15000	26600
			3.0	42900	330.0	1000.0	8400	158	2100	1500	27200
APR 12, 71	1535	2	.3	46900	--	--	--	--	--	--	--
			1.5	46900	380.0	1300.0	9200	154	2300	17000	30100
					LINE 254						
APR 13, 71	1845	2	.3	9200	130.0	210.0	1600	243	420	2800	5200
			3.4	17000	190.0	440.0	3200	224	870	5800	10600
JUN 01, 71	1245	2	.3	3690	70.0	91.0	580	212	160	1000	2060
			3.7	4710	--	--	--	--	--	--	--
					LINE 258						
MAR 01, 71	1605	2	.6	39000	320.0	950.0	7200	162	1900	13000	23500
APR 13, 71	1825	2	.8	34100	--	--	--	--	--	--	--
					LINE 264						
MAR 01, 71	1530	2	.3	40700	--	--	--	--	--	--	--
			1.2	41100	320.0	1000.0	7700	158	2000	14000	24900
JUN 01, 71	1200	2	.3	37500	--	--	--	--	--	--	--
			1.4	37500	--	--	--	--	--	--	--
					LINE 270						
MAR 01, 71	1635	2	.3	41500	--	--	--	--	--	--	--
			3.8	42700	--	--	--	--	--	--	--
					LINE 284						
MAR 01, 71	1650	1	.3	42600	--	--	--	--	--	--	--

TABLE 3C--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 WATER YEAR--CONTINUED

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (LAB)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM + POTASSIUM (NA+K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
					LINE 284 CONTINUED						
MAR 01, 71	1650	1	1.2	42500	340.0	1000.0	8200	160	2100	15000	26300
APR 13, 71	1725	1	.3	47000	--	--	--	--	--	--	--
			1.5	46800	380.0	1200.0	9600	153	2300	17000	30500
JUN 01, 71	1015	1	.3	40900	--	--	--	--	--	--	--
			1.2	40900	--	--	--	--	--	--	--
MAR 01, 71	1715	3	.3	42600	--	--	--	--	--	--	--
			1.8	43000	340.0	1100.0	8000	162	2100	14000	26000
APR 13, 71	1750	3	.3	45600	--	--	--	--	--	--	--
			2.0	45600	--	--	--	--	--	--	--
JUN 01, 71	1035	3	.3	43700	--	--	--	--	--	--	--
			2.3	43600	--	--	--	--	--	--	--
					LINE 300						
MAR 06, 71	1020	1	.3	44200	360.0	1100.0	8600	160	2000	16000	27800
			2.4	45500	--	--	--	--	--	--	--
MAR 06, 71	1005	3	.3	43600	340.0	1100.0	8600	160	2100	15000	27600
			2.3	44100	--	--	--	--	--	--	--
					LINE 310						
MAR 04, 71	1010	2	.3	33100	280.0	1100.0	5700	194	1500	11000	20200
MAR 04, 71	1945	2	.3	32000	270.0	860.0	5900	198	1500	11000	19400
MAR 05, 71	0510	2	.3	33400	280.0	800.0	6400	192	1600	11000	20500
MAR 05, 71	1215	2	.3	36000	280.0	900.0	6900	160	1600	12000	22200
					LINE 330						
MAR 02, 71	1445	2	.3	44000	380.0	1200.0	8400	158	2200	16000	27900
					LINE 333						
MAR 01, 71	1540	1	.3	42800	--	--	--	--	--	--	--
			1.7	43700	350.0	1100.0	8800	160	2200	16000	28100
MAR 06, 71	0850	1	.3	44600	340.0	1000.0	9000	162	2200	16000	28400
			1.8	44600	--	--	--	--	--	--	--
					LINE 340						
APR 13, 71	1530	2	.3	47200	--	--	--	--	--	--	--
			2.3	47100	--	--	--	--	--	--	--
JUN 01, 71	1159	2	.3	46000	--	--	--	--	--	--	--
			2.1	45600	--	--	--	--	--	--	--
					LINE 350						
MAR 06, 71	0805	1	.3	45200	350.0	1100.0	9200	160	2200	16000	29400
			2.4	45600	--	--	--	--	--	--	--
APR 13, 71	1450	1	.3	47300	--	--	--	--	--	--	--
			1.2	47600	--	--	--	--	--	--	--
JUN 01, 71	1317	1	.3	46000	--	--	--	--	--	--	--

TABLE 3C--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 WATER YEAR--CONTINUED

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (LAB)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG) (MG/L)	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 350 CONTINUED					
JUN 01, 71	1317	1	.9	45900	--	--	--	--	--	--	--
MAR 06, 71	0930	3	.3	43900	350.0	1000.0	8700	159	2200	15000	27700
			2.1	43800	--	--	--	--	--	--	--
APR 13, 71	1422	3	.3	46900	--	--	--	--	--	--	--
			2.7	46900	--	--	--	--	--	--	--
JUN 01, 71	1345	3	.5	45700	--	--	--	--	--	--	--
			2.1	45600	--	--	--	--	--	--	--
						LINE 363					
MAR 01, 71	1445	1	.3	47600	--	--	--	--	--	--	--
			1.3	47600	380.0	1200.0	9600	156	2300	17000	30800
MAR 06, 71	0755	1	.3	49400	380.0	1200.0	9900	150	2400	18000	31600
			1.8	49800	--	--	--	--	--	--	--
APR 15, 71	0920	2	.5	46900	--	--	--	--	--	--	--
			4.1	47000	--	--	--	--	--	--	--
JUN 01, 71	1600	2	.5	45300	--	--	--	--	--	--	--
			3.7	45200	--	--	--	--	--	--	--
MAR 01, 71	1700	3	.3	43500	--	--	--	--	--	--	--
			3.5	45800	360.0	1200.0	9300	156	2300	17000	30100
APR 15, 71	0950	4	.5	47700	--	--	--	--	--	--	--
			4.9	47400	--	--	--	--	--	--	--
JUN 01, 71	1528	4	.5	44700	--	--	--	--	--	--	--
			3.4	44700	360.0	1200.0	8800	152	2200	16000	28600
APR 15, 71	1006	5	.5	47500	--	--	--	--	--	--	--
			3.4	47700	--	--	--	--	--	--	--
JUN 01, 71	1504	5	.5	45000	--	--	--	--	--	--	--
			3.0	45000	--	--	--	--	--	--	--
						LINE 375					
MAR 01, 71	1420	1	.3	47900	--	--	--	--	--	--	--
			4.3	49000	390.0	1200.0	9800	150	2400	18000	31600
APR 15, 71	0848	1	.5	44700	--	--	--	--	--	--	--
			4.3	47400	--	--	--	--	--	--	--
JUN 02, 71	0834	1	.5	45500	--	--	--	--	--	--	--
			3.7	45500	--	--	--	--	--	--	--
MAR 01, 71	1400	2	.3	44700	--	--	--	--	--	--	--
			4.0	47900	--	--	--	--	--	--	--
MAR 01, 71	1335	3	.3	44300	--	--	--	--	--	--	--
			4.0	46400	--	--	--	--	--	--	--
APR 15, 71	0810	3	.5	46700	--	--	--	--	--	--	--
			3.7	46700	--	--	--	--	--	--	--
JUN 02, 71	0913	3	.5	45500	--	--	--	--	--	--	--
			3.4	45500	--	--	--	--	--	--	--
MAR 01, 71	1315	4	.3	43500	--	--	--	--	--	--	--
			2.6	43700	350.0	1200.0	7700	154	2100	14200	25600
						LINE 382					
MAR 01, 71	1000	1	.3	49800	--	--	--	--	--	--	--

TABLE 3C--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 WATER YEAR--CONTINUED

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICROMHOS) (LAB)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (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 382 CONTINUED							
MAR 01, 71	1000	1	2.7	49800	--	--	--	--	--	--	--
APR 14, 71	1505	1	.3	44700	--	--	--	--	--	--	--
			1.5	44700	360.0	1100.0	8900	137	2200	16000	28700
JUN 01, 71	1705	1	.3	46500	--	--	--	--	--	--	--
			1.4	46400	350.0	1200.0	9400	140	2200	17000	30000
MAR 01, 71	0930	2	.3	49800	--	--	--	--	--	--	--
			3.4	49800	--	--	--	--	--	--	--
MAR 04, 71	1710	2	.3	49800	380.0	1200.0	10000	154	2400	18000	32500
MAR 04, 71	0830	2	.3	49400	400.0	1200.0	10000	152	2300	18000	31700
MAR 04, 71	0940	2	.3	48100	400.0	1200.0	9800	154	2400	18000	31500
MAR 04, 71	1000	2	.3	48500	380.0	1200.0	10000	151	2400	18000	31900
MAR 04, 71	1140	2	.3	49300	380.0	1200.0	10000	149	2400	18000	31900
MAR 04, 71	1922	2	.3	48900	400.0	1200.0	10000	150	2400	18000	32000
MAR 04, 71	2310	2	.3	49300	380.0	1200.0	10000	150	2400	18000	32200
MAR 05, 71	0215	2	.3	49400	380.0	1200.0	10000	150	2500	18000	32600
MAR 05, 71	0510	2	.3	49300	400.0	1200.0	10000	150	2400	18000	32000
MAR 05, 71	0810	2	.3	49300	400.0	1200.0	10000	150	2500	18000	32300
MAR 05, 71	1310	2	.3	49600	400.0	1300.0	10000	150	2500	18000	32300
MAR 05, 71	0120	3	.3	49500	400.0	1200.0	10000	152	2400	18000	32600
MAR 05, 71	0210	3	.3	49500	390.0	1200.0	10000	150	2400	18000	32200
MAR 05, 71	0840	3	.3	49800	400.0	1200.0	10000	152	2400	18000	32600
MAR 05, 71	1205	3	.3	49800	430.0	1200.0	10000	151	2500	18000	33000
MAR 05, 71	1600	3	.3	49500	400.0	1300.0	10000	150	2500	18000	32600
APR 14, 71	1530	3	.5	44800	--	--	--	--	--	--	--
			3.7	44900	--	--	--	--	--	--	--
MAR 01, 71	0908	4	.3	49800	--	--	--	--	--	--	--
			4.1	49800	--	--	--	--	--	--	--
MAR 04, 71	0955	4	.3	44300	380.0	1200.0	8500	166	2200	15000	27700
MAR 04, 71	1240	4	.3	43500	340.0	1200.0	8300	168	2100	15000	27500
MAR 04, 71	1400	4	.3	43100	350.0	1100.0	8200	170	1900	15000	26700
MAR 05, 71	0055	4	.3	47400	370.0	1100.0	9600	156	2300	17000	30500
MAR 05, 71	0830	4	.3	48800	380.0	1200.0	9900	154	2400	18000	31600
MAR 05, 71	1355	4	.3	49400	400.0	1200.0	10000	150	2400	18000	31900
MAR 05, 71	1600	4	.3	49200	380.0	1200.0	9800	150	2200	18000	31200
MAR 06, 71	1200	4	.3	50100	380.0	1300.0	9900	150	2400	2400	31800
			4.0	50100	--	--	--	--	--	--	--
APR 14, 71	1541	4	.3	44800	--	--	--	--	--	--	--
			3.7	44700	--	--	--	--	--	--	--
JUN 01, 71	1730	4	.3	46200	--	--	--	--	--	--	--

TABLE 3C--QUALITY OF WATER IN THE LAVACA-TRES PALACIOS ESTUARY,

1971 WATER YEAR--CONTINUED

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (LAB)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM + POTASSIUM (NA+K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
					LINE 382 CONTINUED						
JUN 01, 71	1730	4	3.4	46300	--	--	--	--	--	--	--
					LINE 397						
MAR 04, 71	1150	2	.3	48700	--	--	--	--	--	--	--
MAR 04, 71	1400	2	.3	48800	380.0	1200.0	9800	152	2600	17000	31500
			15.2	47400	380.0	1200.0	9500	150	2500	17000	30700
MAR 04, 71	1940	2	.3	49100	390.0	1400.0	9400	150	2400	17400	31000
MAR 05, 71	0825	2	.3	48900	380.0	1200.0	9800	150	2400	18000	31600
MAR 05, 71	1220	2	.3	49000	380.0	1200.0	9800	150	2400	17000	31300
MAR 05, 71	1545	2	.3	49000	380.0	1200.0	9900	150	2400	18000	31600
APR 14, 71	0740	2	.3	44600	--	--	--	--	--	--	--
			12.8	44500	360.0	1000.0	9100	137	2200	16000	28600
JUN 02, 71	0800	2	.6	46300	--	--	--	--	--	--	--
			13.7	46200	360.0	1100.0	9500	140	2400	17000	30100
					LINE 400						
MAR 04, 71	1110	3	.3	50100	400.0	1200.0	10000	154	2500	18000	32600
MAR 04, 71	1904	3	.3	48900	380.0	1300.0	8700	152	2400	16000	28900
MAR 05, 71	0507	3	.3	49300	380.0	1200.0	10000	152	2400	18000	31900
MAR 05, 71	0800	3	.3	49200	380.0	1200.0	10000	150	2400	18000	31900
MAR 05, 71	1205	3	.3	49100	380.0	1200.0	10000	150	2300	18000	31800
MAR 05, 71	1405	3	.3	49200	380.0	1200.0	10000	150	2400	18000	31900
MAR 05, 71	1550	3	.3	49200	380.0	1200.0	10000	150	2400	18000	31900
MAR 04, 71	0840	4	.3	49500	380.0	1300.0	9700	152	2300	18000	31300
MAR 04, 71	1330	4	.3	49900	400.0	1300.0	9700	152	2400	18000	31500
MAR 04, 71	1530	4	.3	48500	400.0	1200.0	9500	152	2400	17000	30600
MAR 04, 71	1700	4	.3	48700	380.0	1300.0	9500	152	2400	17000	30800
MAR 05, 71	0730	4	.3	49300	400.0	1300.0	9800	150	2400	18000	31500
MAR 05, 71	1540	4	.3	49300	380.0	1300.0	9800	150	2400	18000	31800
					LINE 902						
MAR 04, 71	1430	49	3.0	49000	380.0	1200.0	9700	150	2500	17000	31300
			12.8	50100	--	--	--	--	--	--	--
					LINE 910						
MAR 04, 71	1255	49	3.0	50800	--	--	--	--	--	--	--
			18.3	51700	400.0	1300.0	10000	151	2300	18000	32100

Table 3-D--Quality of water in the Lavaca-Tres Palacios estuary, 1971 water year

Insecticide and herbicide analyses

(Whole water analyses in micrograms per liter; bottom deposits analyses in micrograms per kilogram, dry weight)

Date of Collection	Time	Type of Sample	Insecticides														Herbicides		
			Aldrin	DDD	DDE	DDT	Dieldrin	Endrin	Heptachlor	Heptachlor Epoxide	Lindane	Chlordane	Parathion	Methyl Parathion	Malathion	Diazinon	2,4-D	Silvex	2,4,5-T
Line 90. Site 3. Lavaca Bay																			
1971 Mar. 1	1420	Water	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Bottom deposits	<.2	<1.0	3.7	<.2	<.2	<.2	<.2	<.2	<.2	<1.0	<.2	<.2	<.2	--	--	--	--
Line 235. Site 2. Carancahua Bay																			
Mar. 1	1325	Water	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
		Bottom deposits	.2	<1.0	5.3	<.2	<.2	<.2	<.2	<.2	<.2	<1.0	<.2	<.2	<.2	--	--	--	--
Line 264. Site 2. Tres Palacios Bay																			
Mar. 1	1530	Water	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
		Bottom deposits	<.2	3.7	18	<.2	<.2	<.2	<.2	<.2	<.2	<1.0	<.2	<.2	<.2	--	--	--	--
Line 333. Site 1. Matagorda Bay																			
Mar. 1	1540	Water	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
		Bottom deposits	<.2	1.5	1.6	<.2	<.2	<.2	<.2	<.2	<.2	<1.0	<.2	<.2	<.2	--	--	--	--
Line 363. Site 3. Matagorda Bay																			
Mar. 1	1700	Water	.00	.00	.00	.00	.00	.00	.00	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00
		Bottom deposits	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<1.0	<.2	<.2	<.2	--	--	--	--

Guadalupe Estuary

The Guadalupe estuary covers an area of almost 210 square miles (540 square kilometers) 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 meters) deep; Mission Lake, Guadalupe Bay, and Hynes Bay are less than 3 feet (1 meter) deep; San Antonio Bay is less than 6 feet (2 meters) deep; Espiritu Santo Bay is about 8 feet (2.4 meters) deep; Mesquite Bay is about 4 feet (1.2 meters) deep; Victoria Channel is more than 8 feet (2.4 meters) deep; and the Intracoastal Waterway is about 15 feet (5 meters) deep.

Water-quality data (Table 4) were collected in April, July, August, and September at most sites shown on Figure 7.

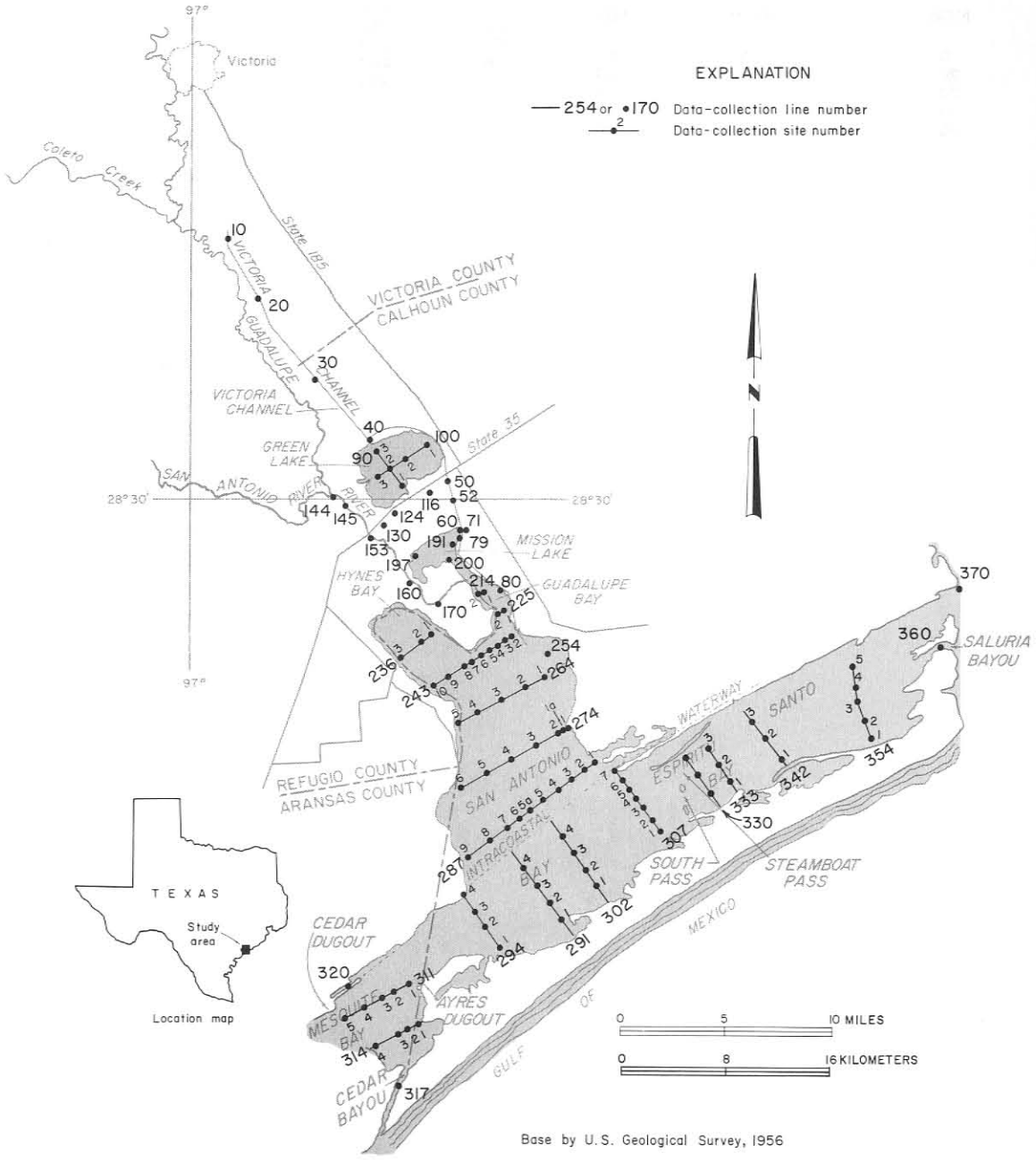


Figure 7.—Data Collection Sites in the Guadalupe Estuary

The changes in line numbers to facilitate storage in the Texas Water Oriented Data Bank and to provide opportunity to coordinate data-collection sites among all agencies are shown below. New line numbers are used in Table 4 and on Figure 7.

All data collected prior to the changes in line number are stored in the data bank under the new line numbers.

Guadalupe Estuary Change in Line Numbers

OLD	NEW	OLD	NEW
1	10	5a	52
2	20	6	60
3	30	6a	79
4	40	7	71
5	50	8	80
9	90	28	287
10	100	29	294
11	116	30	307
12	124	31	291
13	130	32	302
13a	144	33	311
14	145	34	314
15	153	35	317
16	160	36	320
17	170	37	330
18	191	37a	333
19	197	38	342
20	200	39	354
21	214	40	360
22	225	Lavaca-Tres Palacios 38-site 4	370
23	236		
24	243		
25	254		
26	264		
27	274		

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

1971 WATER YEAR

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 10					
APR 29, 71	1137	2	.3	940	25.8	--	8.4	102	--	51
			1.5	940	25.8	--	8.4	102	--	--
			4.0	940	25.8	--	8.0	98	--	--
JUL 14, 71	1025	2	.3	880	33.6	7.4	6.1	85	--	48
			1.5	850	33.3	7.4	5.8	79	--	--
			3.0	900	33.0	7.4	5.0	68	--	--
			4.0	900	32.4	7.4	3.4	46	--	--
AUG 10, 71	1545	2	.3	970	31.1	7.8	9.1	121	--	81
			1.5	970	30.9	7.9	8.8	117	--	--
			3.0	970	30.1	7.8	9.2	121	--	--
			4.0	1200	29.2	7.4	2.0	26	--	--
SEP 27, 71	1545	2	.3	600	27.5	7.7	10.8	135	--	--
			1.5	600	27.2	7.6	9.6	119	--	--
			2.4	600	27.0	7.5	9.0	111	--	--
			3.0	610	26.8	7.3	7.4	91	--	--
			3.7	660	26.5	7.1	5.8	71	--	--
			4.3	700	26.3	7.0	3.7	45	--	--
					LINE 20					
APR 29, 71	1120	2	.3	1200	25.4	--	8.4	101	--	30
			1.5	1200	25.4	--	8.4	101	--	--
			3.4	1200	25.6	--	8.4	101	--	--
JUL 14, 71	1010	2	.3	1100	31.4	7.7	7.3	97	--	28
			1.5	1000	30.9	7.6	6.8	91	--	--
			4.0	1100	30.8	7.6	6.6	88	--	--
AUG 10, 71	1615	2	.3	1200	30.2	7.8	8.7	114	--	28
			1.5	1300	30.1	7.8	8.1	107	--	--
			3.0	1200	30.3	7.7	7.8	103	--	--
			3.7	1200	29.4	7.6	7.7	100	--	--
SEP 27, 71	1525	2	.3	810	27.0	7.4	8.1	100	--	--
			1.5	810	26.9	7.4	8.1	100	--	--
			3.0	800	26.9	7.3	7.7	95	--	--
			4.6	800	26.9	7.3	8.0	99	--	--
					LINE 30					
APR 29, 71	1100	2	.3	1500	25.4	--	8.4	101	--	36
			1.5	1500	25.4	--	8.5	102	--	--
			3.0	1500	25.6	--	8.5	102	--	--
JUL 14, 71	1055	2	.3	1300	32.6	8.0	7.2	99	--	--
			1.5	1300	32.0	7.9	6.8	92	--	--
			2.4	1300	31.8	7.9	6.7	91	--	--
			3.7	1200	31.8	7.9	6.7	91	--	--
AUG 10, 71	1630	2	.3	1400	30.6	8.2	8.2	109	--	33
			1.5	1400	30.5	8.2	8.3	109	--	--
			3.0	1400	30.4	8.1	9.0	118	--	--
SEP 27, 71	1510	2	.3	800	26.9	7.8	7.9	98	--	--
			1.5	800	26.9	7.8	7.9	98	--	--
			2.4	800	26.8	7.8	7.9	98	--	--
			4.3	800	26.7	7.7	8.0	99	--	--
					LINE 40					
APR 29, 71	1044	2	.3	3900	25.8	--	8.1	100	--	43

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

1971 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 40 CONTINUED						
APR 29, 71	1044	2	1.5	4600	25.9	--	8.1	100	--	--
			3.4	4600	25.9	--	7.5	92	--	--
JUL 14, 71	0945	2	.3	2200	32.0	8.1	6.7	92	--	13
			1.5	2200	31.6	8.1	6.4	88	--	--
			3.7	2300	31.4	8.1	6.3	85	--	--
AUG 10, 71	1650	2	.3	3300	31.1	8.3	8.8	119	--	22
			1.5	3100	31.0	8.3	7.8	105	--	--
			3.0	3100	30.8	8.2	6.9	93	--	--
SEP 27, 71	1450	2	.3	500	26.7	7.5	6.2	77	--	--
			1.5	500	26.7	7.5	6.2	77	--	--
			3.4	530	26.6	7.5	6.0	74	--	--
				LINE 50						
APR 29, 71	1017	2	.3	14000	25.8	--	6.7	85	--	56
			1.5	15000	25.8	--	6.4	82	--	--
			3.4	16000	26.0	--	6.3	81	--	--
JUL 14, 71	0945	2	.3	9000	31.1	8.2	7.2	99	--	38
			1.5	9000	31.1	8.2	6.1	84	--	--
			2.4	10000	31.1	8.2	5.9	81	--	--
			3.7	10000	31.1	8.2	5.9	81	--	--
AUG 10, 71	1705	2	.3	9600	32.7	8.3	8.6	121	--	30
			1.5	9500	32.6	8.3	8.5	120	--	--
			3.0	9400	32.5	8.3	8.2	114	--	--
			3.4	9300	32.6	8.3	8.2	115	--	--
SEP 27, 71	1430	2	.3	710	26.5	7.5	5.0	61	--	--
			1.5	710	26.5	7.5	5.0	61	--	--
			3.4	810	26.5	7.5	5.2	63	--	--
				LINE 52						
JUL 14, 71	0915	2	.5	11000	31.4	8.2	6.3	86	--	28
				LINE 60						
APR 29, 71	1005	2	.3	19000	25.8	--	6.6	86	--	48
			1.5	20000	25.7	--	4.4	57	--	--
			3.0	22000	25.8	--	4.0	53	--	--
JUL 14, 71	0855	2	.3	15000	30.3	8.3	6.5	89	--	48
			1.5	16000	30.3	8.2	5.1	70	--	--
			3.4	17000	30.3	8.2	4.8	67	--	--
AUG 10, 71	1730	2	.3	16000	31.1	8.2	7.6	106	--	36
			1.5	16000	31.2	8.2	7.4	103	--	--
			3.0	16000	31.2	8.2	7.6	106	--	--
			3.5	16000	31.3	8.2	7.4	103	--	--
SEP 27, 71	1420	2	.3	1300	26.6	7.5	4.2	52	--	--
			1.5	1300	26.6	7.5	3.8	47	--	--
			2.4	1300	26.6	7.5	3.5	43	--	--
			4.3	1400	26.6	7.5	3.0	37	--	--
				LINE 71						
APR 29, 71	0940	2	.3	22000	25.5	--	2.2	28	--	71
			.9	22000	25.4	--	2.1	27	--	--
			1.5	22000	25.4	--	2.0	26	--	--
			2.1	22000	25.4	--	1.8	23	--	--

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

1971 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 71 CONTINUED					
APR 29, 71	0940	2	3.0	22000	25.8	--	1.2	16	--	--
			3.7	23000	25.8	--	1.2	16	--	--
JUL 14, 71	0845	2	.3	18000	30.4	8.4	7.2	100	--	63
			1.5	18000	30.4	8.2	6.0	83	--	--
			2.1	19000	30.5	8.2	5.0	69	--	--
			3.0	21000	30.1	8.0	1.2	17	--	--
			4.1	21000	29.8	7.9	.4	6	--	--
AUG 10, 71	1720	2	.3	15000	31.6	8.3	8.9	125	--	33
			1.5	15000	31.4	8.3	7.6	106	--	--
			3.0	15000	31.2	8.2	6.4	89	--	--
			3.7	15000	31.3	8.1	5.5	76	--	--
SEP 27, 71	1410	2	.3	1300	26.7	7.6	5.3	65	--	--
			1.5	1400	26.6	7.5	4.6	57	--	--
			2.4	1400	26.5	7.4	4.0	49	--	--
			4.3	1400	26.1	7.3	3.2	39	--	--
					LINE 80					
APR 29, 71	0920	2	.3	24000	25.4	--	5.9	77	--	56
			1.5	24000	25.3	--	5.6	73	--	--
			3.0	26000	25.4	--	5.6	74	--	--
JUL 14, 71	0825	2	.3	23000	29.6	8.2	6.2	87	--	48
			1.5	24000	29.7	8.1	5.6	79	--	--
			3.0	26000	29.7	8.1	5.5	79	--	--
			4.0	26000	29.6	8.0	5.5	79	--	--
AUG 10, 71	1745	2	.3	17000	31.4	8.4	8.6	121	--	27
			1.5	17000	31.3	8.4	8.6	121	--	--
			3.4	17000	31.5	8.4	8.4	120	--	--
SEP 27, 71	1350	2	.3	3500	27.0	7.7	5.9	74	--	--
			1.5	3600	27.0	7.7	5.9	74	--	--
			2.4	3600	27.0	7.7	5.8	73	--	--
			4.3	3600	27.0	7.7	5.7	71	--	--
					LINE 145					
APR 29, 71	1105	2	.3	820	26.6	7.8	5.8	72	--	20
			1.5	820	26.6	7.8	5.8	72	--	--
			3.2	820	26.6	7.8	5.4	67	--	--
JUL 13, 71	1435	2	.3	640	34.5	7.3	5.0	69	--	25
			1.5	640	33.9	7.3	5.0	69	--	--
			3.0	630	33.9	7.3	5.0	69	--	--
			4.0	640	34.0	7.3	5.0	69	--	--
AUG 10, 71	1000	2	.3	320	27.0	7.3	4.8	59	--	--
			3.0	320	26.9	7.3	5.1	63	--	--
SEP 29, 71	1005	2	.3	420	28.4	7.3	6.1	77	--	10
			1.5	420	28.3	7.3	6.0	76	--	--
			3.4	420	28.0	7.3	6.0	76	--	--
					LINE 153					
APR 29, 71	1050	2	.3	820	27.3	7.6	5.7	71	--	30
			1.5	810	27.3	7.6	5.4	68	--	--
			3.0	820	27.3	7.6	5.4	68	--	--
			4.9	820	27.3	7.6	5.5	69	--	--
JUL 13, 71	1535	2	.3	660	34.7	7.4	5.7	80	--	36
			1.5	660	34.7	7.4	5.5	77	--	--

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

1971 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 153 CONTINUED						
JUL 13, 71	1535	2	3.0	650	34.6	7.3	5.1	72	--	--
			4.6	660	35.8	7.3	4.9	70	--	--
AUG 10, 71	1030	2	.3	320	27.4	7.4	5.2	65	--	5
			4.6	320	27.4	7.3	5.3	66	--	--
SEP 29, 71	0950	2	.3	420	27.7	7.3	6.3	79	--	10
			1.5	420	27.7	7.3	6.3	79	--	--
			3.0	420	27.7	7.3	6.4	80	--	--
			6.1	420	27.7	7.3	6.6	82	--	--
				LINE 160						
APR 29, 71	1035	2	.3	810	27.2	7.7	4.8	59	--	30
			1.5	810	27.1	7.7	4.5	56	--	--
			3.0	810	27.1	7.7	4.4	54	--	--
			4.4	810	27.1	7.7	4.4	54	--	--
JUL 13, 71	1555	2	.3	610	34.0	7.4	5.3	74	--	33
			1.5	610	34.0	7.2	4.2	58	--	--
			3.0	610	34.0	7.2	4.1	57	--	--
			4.0	610	33.9	7.2	4.5	62	--	--
AUG 10, 71	1050	2	.3	320	27.6	7.3	4.6	58	--	5
			4.3	320	27.8	7.8	3.9	49	--	--
SEP 29, 71	0930	2	.3	490	27.5	7.4	6.0	75	--	10
			1.5	490	27.5	7.4	6.1	76	--	--
			3.0	490	27.4	7.4	6.0	75	--	--
			4.6	490	27.3	7.4	6.2	78	--	--
				LINE 170						
APR 29, 71	1020	2	.3	850	26.5	7.8	4.6	56	--	--
			1.5	850	26.4	7.7	4.4	54	--	--
			2.1	850	26.4	7.7	4.4	54	--	--
JUL 13, 71	1735	2	.3	600	32.7	7.4	5.5	75	--	28
			1.5	600	32.3	7.3	4.3	58	--	--
			2.7	600	32.6	7.3	4.3	59	--	--
AUG 09, 71	1535	2	.3	340	27.7	7.5	5.2	65	--	3
			1.5	340	27.7	7.4	5.4	68	--	--
			2.7	340	28.0	7.5	5.2	66	--	--
AUG 10, 71	1110	2	.3	320	27.2	7.4	5.1	63	--	3
			3.4	320	27.3	7.3	4.9	61	--	--
AUG 13, 71	1200	2	.3	380	29.5	7.6	3.9	51	--	8
			3.0	660	29.4	7.7	4.1	53	--	--
SEP 29, 71	0915	2	.3	520	27.1	7.5	6.3	78	--	10
			1.5	520	27.0	7.5	6.4	79	--	--
			3.0	520	26.9	7.5	6.6	81	--	--
				LINE 191						
APR 28, 71	1305	2	.3	1100	28.3	8.1	6.6	83	--	--
			.8	1100	28.4	8.1	6.8	86	--	--
JUL 13, 71	1105	2	.3	720	32.6	8.2	5.8	79	--	61
			.6	700	32.4	8.2	5.8	78	--	--
AUG 10, 71	1200	2	.8	440	30.6	7.4	4.1	55	--	14
SEP 29, 71	1110	2	.3	400	28.2	6.9	3.2	41	--	61

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

1971 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 191 CONTINUED					
SEP 29, 71	1110	2	.9	400	28.2	6.9	3.3	42	--	--
					LINE 197					
APR 28, 71	1330	1	.3	880	27.4	8.0	6.5	81	--	--
			.8	870	27.3	8.0	6.5	81	--	--
JUL 13, 71	1120	1	.3	620	33.4	8.4	7.8	107	--	36
			.9	640	33.2	8.4	7.9	108	--	--
AUG 10, 71	1150	1	.6	330	29.0	7.5	5.7	73	--	5
SEP 29, 71	1100	1	.3	490	27.7	7.0	5.2	65	--	28
			.9	490	27.9	7.0	4.6	58	--	--
APR 28, 71	1315	2	.3	870	28.7	8.3	8.5	109	--	--
			.6	880	28.7	8.3	9.2	118	--	--
JUL 13, 71	1115	2	.3	640	31.8	8.4	6.8	92	--	36
			.6	640	31.8	8.4	6.8	92	--	--
AUG 10, 71	1145	2	.6	330	28.7	7.5	5.6	72	--	4
SEP 29, 71	1055	2	.3	500	28.0	7.4	7.1	90	--	28
			.9	500	28.1	7.4	7.4	94	--	--
					LINE 200					
APR 28, 71	1255	2	.3	1200	28.0	9.0	10.0	132	--	--
			.9	1400	28.0	9.0	10.0	130	--	--
			.3	1200	28.1	8.7	10.4	132	--	--
			.9	1400	28.5	8.7	10.3	130	--	--
JUL 13, 71	1055	2	.3	700	32.3	8.3	6.6	89	--	41
			1.1	730	32.4	8.2	6.2	84	--	--
			.3	700	32.0	8.0	7.0	89	--	41
			1.1	730	32.0	8.0	6.0	84	--	--
AUG 10, 71	1205	2	.3	350	28.2	7.6	6.1	77	--	8
			.9	350	28.2	7.6	6.1	77	--	--
SEP 29, 71	1115	2	.3	460	27.4	7.4	6.4	80	--	41
			1.5	500	27.5	7.4	6.6	82	--	--
					LINE 214					
APR 28, 71	1350	1	.3	1700	27.3	8.9	12.8	160	--	--
			1.1	1700	27.3	8.9	12.8	160	--	--
JUL 13, 71	1045	1	.3	1000	32.8	8.6	7.7	105	--	61
			1.2	1100	32.4	8.6	6.9	93	--	--
AUG 10, 71	1230	1	.3	350	29.5	7.7	6.3	82	--	15
			1.1	340	29.1	7.6	5.7	73	--	--
SEP 29, 71	1135	1	.3	420	28.7	7.3	7.3	94	--	46
			1.5	420	28.7	7.3	7.2	92	--	--
APR 28, 71	1345	2	.3	2000	27.8	8.5	10.5	135	--	--
			.9	1800	27.8	8.4	10.4	132	--	--
JUL 13, 71	1035	2	.3	950	33.0	8.6	7.7	105	--	41
			.9	990	32.5	8.6	6.4	86	--	--
AUG 10, 71	1225	2	.3	340	28.9	7.6	5.7	73	--	5
			.9	340	28.6	7.6	5.3	68	--	--

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

1971 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 214 CONTINUED					
SEP 29, 71	1130	2	.3	520	28.2	7.5	7.0	89	--	30
			1.2	520	28.2	7.5	6.9	87	--	--
					LINE 225					
APR 28, 71	1240	1	.3	6400	26.8	8.7	10.7	135	--	--
			.9	6700	27.0	8.7	10.4	132	--	--
JUL 13, 71	1025	1	.3	6000	32.6	8.6	9.1	128	--	--
			.9	17000	32.1	8.2	5.6	80	--	--
AUG 10, 71	1300	1	.3	970	31.2	8.6	9.3	124	--	22
			.9	900	31.0	8.4	9.1	121	--	--
SEP 29, 71	1150	1	.3	350	28.8	7.3	6.2	79	--	28
			1.2	380	28.8	7.3	6.3	81	--	--
APR 28, 71	1230	2	.3	8500	27.3	8.7	9.8	126	--	--
			.9	8800	27.4	8.7	9.7	124	--	--
JUL 13, 71	1005	2	.3	12000	30.0	8.4	7.6	104	--	48
			.6	18000	30.0	8.1	5.1	71	--	--
			.9	21000	29.9	8.0	3.9	55	--	--
AUG 10, 71	1245	2	.3	380	30.5	7.8	6.7	88	--	9
			1.1	390	30.5	7.8	6.7	88	--	--
SEP 29, 71	1145	2	.3	500	28.2	7.5	6.8	86	--	36
			1.5	500	28.2	7.5	6.9	87	--	--
					LINE 236					
APR 28, 71	1205	1	.3	30000	26.3	8.2	6.6	90	--	--
			.8	30000	26.3	8.2	6.5	89	--	--
JUL 13, 71	0940	1	.3	22000	30.3	7.9	5.8	83	--	48
			.8	22000	30.3	7.9	5.3	76	--	--
SEP 29, 71	1320	1	.3	1000	29.6	7.6	7.0	91	--	10
			1.2	1000	29.7	7.7	7.1	92	--	--
APR 28, 71	1200	2	.3	30000	26.5	8.3	6.4	88	--	--
			.9	30000	26.5	8.3	6.4	88	--	--
JUL 13, 71	0930	2	.3	18000	30.5	8.1	6.0	83	--	46
			.9	21000	30.2	8.0	5.2	73	--	--
AUG 10, 71	1435	2	.3	14000	30.8	8.5	9.5	132	--	23
			1.1	14000	30.8	8.5	9.5	132	--	--
SEP 29, 71	1315	2	.3	2400	29.8	8.0	8.0	107	--	10
			1.5	2400	29.7	8.0	8.0	105	--	--
SEP 29, 71	1530	2	.3	1300	29.1	8.1	7.1	91	--	13
			1.2	1300	29.1	8.1	7.2	92	--	--
SEP 30, 71	0930	2	.3	2600	27.0	8.2	11.1	139	--	15
			1.2	2600	27.0	8.2	11.2	140	--	--
SEP 30, 71	1530	2	.3	2000	28.9	8.3	8.0	104	--	15
			1.2	2000	28.9	8.3	8.2	106	--	--
APR 28, 71	1155	3	.3	30000	26.5	.8	.6	88	--	--
			.9	30000	26.5	8.4	6.4	88	--	--
JUL 13, 71	0925	3	.3	21000	30.2	8.1	6.3	89	--	53
			.9	22000	29.9	8.0	5.8	83	--	--

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

1971 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 236 CONTINUED						
SEP 29, 71	1310	3	.3	2800	29.2	7.8	7.6	99	--	10
			.9	2800	29.0	7.8	7.9	103	--	--
				LINE 243						
APR 28, 71	1050	1	.3	31000	25.9	8.1	7.0	96	--	--
			.6	31000	25.9	8.1	6.4	88	--	--
JUL 13, 71	0805	1	.3	36000	29.3	7.9	5.4	81	--	53
			.8	34000	29.2	7.9	5.3	78	--	--
SEP 29, 71	1205	1	.3	1300	29.2	7.7	6.8	87	--	10
			.9	1300	29.3	7.6	7.0	91	--	--
APR 28, 71	1035	2	.3	30000	25.7	8.1	6.1	82	--	--
			1.5	32000	25.5	8.1	5.6	76	--	--
			3.0	32000	25.4	8.1	5.6	76	--	--
APR 29, 71	0900	2	.3	31000	25.3	--	6.4	86	--	64
			1.5	33000	25.2	--	6.0	81	--	--
			4.3	36000	25.1	--	6.2	84	--	--
JUL 13, 71	0800	2	.3	38000	28.9	7.9	5.1	76	--	38
			1.5	38000	28.9	7.9	5.0	75	--	--
			2.4	37000	28.9	7.9	5.1	75	--	--
			3.8	37000	28.7	7.9	5.2	76	--	--
AUG 10, 71	1400	2	.3	11000	31.9	8.5	9.6	133	--	38
			.9	11000	31.8	8.5	9.6	133	--	--
			1.5	14000	31.6	8.5	8.9	125	--	--
			2.1	18000	31.2	8.2	6.4	90	--	--
			2.7	29000	30.8	8.0	5.9	87	--	--
SEP 29, 71	1210	2	.3	600	28.9	7.6	6.6	85	--	25
			1.5	1900	28.9	7.6	6.6	86	--	--
			3.0	2600	28.8	7.6	6.7	87	--	--
			4.6	4000	28.8	7.6	6.3	82	--	--
APR 28, 71	1100	3	.3	31000	26.4	8.1	5.0	68	--	--
			1.1	32000	26.6	8.1	5.1	71	--	--
JUL 13, 71	0810	3	.3	29000	28.9	8.1	5.7	81	--	51
			1.2	36000	28.9	8.0	5.3	78	--	--
AUG 10, 71	1350	3	.8	7000	32.5	8.6	10.2	142	--	23
SEP 29, 71	1220	3	.3	450	28.8	7.4	6.6	85	--	25
			1.2	450	28.8	7.4	6.5	83	--	--
APR 28, 71	1105	4	.3	28000	26.6	8.1	7.0	96	--	--
			1.1	30000	26.4	8.1	5.6	77	--	--
JUL 13, 71	0820	4	.3	26000	29.1	8.1	5.1	72	--	48
			1.2	36000	29.2	7.9	4.5	66	--	--
AUG 10, 71	1345	4	.3	3000	32.4	8.6	10.0	137	--	20
			1.1	3500	32.3	8.6	9.6	132	--	--
APR 28, 71	1110	5	.3	22000	26.7	8.4	7.7	103	--	--
			.9	24000	26.8	8.4	7.6	101	--	--
JUL 13, 71	0825	5	.3	27000	29.2	8.0	4.8	69	--	38
			1.2	33000	29.2	7.9	4.2	62	--	--
AUG 09, 71	1225	5	.3	1000	31.2	--	8.4	112	--	23
			.6	24000	30.8	--	6.2	90	--	--
			.9	29000	30.9	--	4.6	68	--	--
AUG 09, 71	1500	5	.3	9000	32.2	8.4	10.7	149	--	--

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

1971 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

LINE 243 CONTINUED

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)
AUG 09, 71	1500	5	.6	11000	32.2	8.4	11.0	153	--	--
			1.2	29000	30.3	7.9	4.8	70	--	--
AUG 09, 71	1615	5	.3	11000	33.1	8.2	10.4	146	--	--
			.6	11000	33.0	8.2	9.8	138	--	--
			1.1	27000	30.7	7.6	4.6	68	--	--
AUG 09, 71	1715	5	.3	10000	33.7	8.3	10.2	146	--	41
			.6	11000	33.7	8.3	10.2	146	--	--
			1.1	28000	32.5	7.6	4.0	61	--	--
AUG 09, 71	1810	5	.3	4700	33.2	8.4	11.4	158	--	33
			.6	5200	33.3	8.4	10.4	146	--	--
			1.1	28000	31.7	7.4	3.0	45	--	--
AUG 09, 71	1900	5	.3	3700	32.2	8.5	11.1	152	--	33
			.6	4000	32.1	8.5	11.1	152	--	--
			1.1	20000	31.0	7.5	3.5	50	--	--
AUG 10, 71	0900	5	.3	860	28.2	8.3	7.4	94	--	15
			.6	1100	28.1	8.3	7.3	92	--	--
			1.1	1600	28.8	7.7	6.4	82	--	--
AUG 10, 71	1330	5	.3	1300	31.6	8.3	8.1	109	--	14
			1.1	1800	31.7	8.3	7.4	100	--	--
AUG 10, 71	1515	5	.5	630	30.7	8.1	8.1	108	--	15
			1.1	660	30.6	8.0	7.8	104	--	--
AUG 12, 71	1130	5	.3	360	30.4	7.9	7.2	95	--	9
			1.2	400	30.4	7.9	7.2	95	--	--
AUG 13, 71	1240	5	.3	400	29.3	8.1	7.1	92	--	5
			1.1	430	29.3	8.0	7.5	97	--	--
SEP 29, 71	1230	5	.3	490	28.5	7.6	7.3	94	--	--
			1.2	520	28.5	7.5	7.2	92	--	--
SEP 30, 71	1040	5	.3	550	27.5	8.0	6.9	86	--	--
			1.1	550	27.4	8.0	7.1	89	--	--
APR 28, 71	1115	6	.3	26000	27.0	8.3	7.8	105	--	--
			.9	26000	27.0	8.3	7.7	104	--	--
JUL 13, 71	0845	6	.3	30000	29.1	8.1	5.3	77	--	43
			1.2	34000	29.0	7.9	4.7	69	--	--
AUG 10, 71	1505	6	.3	730	30.5	8.1	7.8	103	--	15
			.9	1300	30.3	8.1	7.1	93	--	--
APR 28, 71	1120	7	.3	25000	26.4	8.4	7.8	104	--	--
			.9	27000	26.2	8.3	7.6	103	--	--
JUL 13, 71	0850	7	.3	29000	29.3	8.0	5.7	81	--	48
			1.1	33000	29.4	8.0	4.9	72	--	--
AUG 10, 71	1450	7	.5	2100	30.6	8.3	8.4	114	--	30
			1.1	19000	29.8	7.9	3.2	44	--	--
AUG 12, 71	1010	7	.3	690	28.7	8.2	7.8	100	--	8
			1.2	1100	28.7	8.2	7.4	95	--	--
AUG 12, 71	1120	7	.3	840	30.8	7.8	7.1	95	--	8
			1.2	810	30.9	7.7	6.7	89	--	--
AUG 13, 71	1250	7	.3	450	29.4	8.1	7.3	95	--	8
			1.1	460	29.3	8.1	7.7	100	--	--
SEP 29, 71	1240	7	.3	570	28.6	7.6	7.7	99	--	25

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

1971 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 243 CONTINUED					
SEP 29, 71	1240	7	1.2	540	28.5	7.1	7.5	96	--	--
SEP 30, 71	1030	7	.3	720	27.5	8.0	7.1	89	18	--
			1.2	720	27.4	8.1	7.5	94	--	--
APR 28, 71	1125	8	.3	30000	26.6	8.2	7.1	99	--	--
			1.1	30000	26.4	8.2	7.0	96	--	--
JUL 13, 71	0910	8	.3	26000	30.1	8.0	6.0	86	--	61
			1.2	31000	30.2	8.0	5.2	76	--	--
AUG 10, 71	1445	8	.5	19000	31.4	8.4	9.3	131	--	61
			.9	20000	31.3	8.3	9.3	133	--	--
APR 28, 71	1135	9	.3	32000	26.6	8.2	7.1	99	--	--
			1.1	32000	26.3	8.2	7.0	96	--	--
AUG 09, 71	1505	9	.3	26000	31.8	8.3	7.8	115	--	53
			.9	26000	31.9	8.3	7.9	116	--	--
AUG 10, 71	1415	9	.3	27000	31.1	8.2	7.8	115	--	41
			1.2	27000	31.2	8.2	7.6	112	--	--
SEP 29, 71	1300	9	.3	2400	29.1	7.8	7.6	99	--	23
			1.2	2400	29.0	7.8	7.6	99	--	--
APR 28, 71	1140	10	.3	34000	26.6	8.1	6.5	91	--	--
			1.1	34000	26.0	8.1	6.7	93	--	--
JUL 13, 71	0915	10	.3	23000	30.3	8.0	4.8	69	--	38
			1.2	26000	30.3	7.9	4.2	60	--	--
					LINE 254					
APR 28, 71	0845	2	.3	36000	24.7	7.9	6.0	81	--	61
			1.5	37000	24.8	7.9	6.0	81	--	--
			2.4	36000	24.5	7.6	6.0	81	--	--
JUL 13, 71	0745	2	.3	39000	27.9	7.9	5.7	84	--	38
			1.4	39000	27.6	7.9	6.5	94	--	--
JUL 13, 71	1605	2	.3	42000	31.1	8.1	6.3	100	--	38
			.9	42000	31.0	8.1	6.0	95	--	--
			1.5	42000	31.1	8.1	6.7	106	--	--
AUG 10, 71	0900	2	.3	28000	29.2	8.1	6.2	89	--	--
			1.2	35000	28.9	8.1	6.0	88	--	--
AUG 12, 71	0900	2	.3	22000	28.7	8.2	6.6	92	--	--
			1.2	25000	28.6	8.1	6.0	84	--	--
AUG 12, 71	1140	2	.3	22000	30.7	8.2	7.0	101	--	53
			1.5	24000	30.4	8.1	6.2	89	--	--
			2.4	27000	30.5	8.0	5.0	74	--	--
SEP 30, 71	1115	2	.3	2700	27.6	8.1	7.0	89	--	20
			2.1	3700	27.5	8.1	6.4	81	--	--
					LINE 264					
APR 28, 71	1742	1	.5	36000	26.0	--	5.0	69	--	51
			1.5	36000	25.9	--	5.4	75	--	--
			3.5	37000	25.7	--	3.8	52	--	--
JUL 13, 71	1557	1	.3	40000	30.3	8.1	6.2	95	--	61
			.9	40000	30.2	8.1	6.3	97	--	--
			1.5	40000	30.2	8.1	6.5	100	--	--

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

1971 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 264 CONTINUED										
JUL 13, 71	1557	1	3.4	39000	30.2	8.1	6.0	91	--	--
AUG 10, 71	0915	1	.3	34000	28.9	8.1	6.5	96	--	51
			1.5	34000	28.8	8.1	6.5	96	--	--
			3.7	38000	28.7	8.1	6.9	96	--	--
SEP 30, 71	0830	1	.3	460	26.6	8.0	7.5	93	--	13
			1.5	520	26.7	8.1	7.2	89	--	--
			2.4	1200	26.7	7.9	7.0	86	--	--
			3.0	1600	26.9	7.9	6.9	85	--	--
			3.4	5400	27.1	7.8	5.8	73	--	--
APR 28, 71	1725	2	.5	38000	26.0	--	5.3	75	--	10
			1.5	37000	25.9	--	6.2	86	--	--
JUL 13, 71	1534	2	.3	39000	31.5	8.2	6.6	103	--	63
			1.2	39000	31.5	8.2	6.6	103	--	--
AUG 10, 71	0920	2	.3	33000	29.1	8.2	6.4	94	--	46
			1.2	33000	29.0	8.1	6.0	88	--	--
SEP 30, 71	0845	2	.3	5000	27.0	8.3	7.5	94	--	23
			1.5	5500	26.9	8.3	7.7	97	--	--
APR 28, 71	1705	3	.5	34000	25.8	--	6.2	86	--	46
			1.2	34000	25.8	--	6.6	92	--	--
JUL 13, 71	1520	3	.3	39000	30.9	8.2	5.7	88	--	66
			.9	39000	30.7	8.2	5.8	89	--	--
			1.5	42000	30.3	8.2	5.5	86	--	--
			2.1	42000	30.0	8.1	6.2	97	--	--
AUG 10, 71	0930	3	.3	33000	29.2	8.2	6.4	94	--	74
			1.5	33000	29.2	8.2	6.2	91	--	--
SEP 30, 71	0850	3	.3	2800	27.0	8.3	7.5	94	--	25
			1.5	6100	26.9	8.3	7.7	97	--	--
APR 28, 71	1650	4	.5	36000	25.7	--	5.5	75	--	43
			1.5	36000	25.7	--	5.9	81	--	--
			2.4	36000	25.4	--	5.5	75	--	--
JUL 13, 71	1505	4	.3	38000	31.5	8.2	6.4	100	--	53
			1.4	36000	31.2	8.2	6.2	95	--	--
AUG 09, 71	1250	4	.3	31000	31.2	--	6.8	101	--	84
			.9	33000	31.0	--	6.4	97	--	--
			1.5	34000	30.8	--	6.4	97	--	--
AUG 09, 71	1450	4	.3	35000	31.2	8.2	6.8	105	--	119
			1.5	35000	31.2	8.2	7.0	108	--	--
AUG 09, 71	1650	4	.3	35000	31.6	8.2	7.0	109	--	69
			1.7	35000	31.7	8.2	7.1	111	--	--
AUG 09, 71	1800	4	.3	35000	31.4	8.2	7.0	108	--	--
			1.2	35000	31.4	8.2	7.0	108	--	--
AUG 09, 71	1850	4	.3	34000	31.1	8.2	7.1	108	--	63
			1.4	35000	31.5	8.2	7.0	109	--	--
AUG 10, 71	0940	4	.3	33000	29.3	8.2	6.1	90	--	91
			1.5	33000	29.3	8.2	6.3	93	--	--
			2.6	35000	29.2	8.2	5.7	84	--	--
AUG 10, 71	1405	4	.5	33000	30.7	8.2	7.5	114	--	76
			.9	33000	30.7	8.2	7.5	114	--	--
AUG 12, 71	0925	4	.3	25000	29.6	8.1	6.8	97	--	69

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

1971 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 264 CONTINUED					
AUG 12, 71	0925	4	1.2	30000	29.7	8.0	5.3	78	--	--
SEP 30, 71	0900	4	.3	2100	27.2	8.2	7.1	89	--	18
			1.5	2800	27.1	8.2	7.7	96	--	--
APR 28, 71	1640	5	.5	36000	26.0	--	6.2	86	--	30
			1.2	36000	26.1	--	6.6	92	--	--
JUL 13, 71	1455	5	.3	31000	32.1	8.2	6.4	97	--	61
			.9	34000	32.1	8.2	6.3	97	--	--
AUG 10, 71	1000	5	.3	42000	29.3	8.1	5.8	89	--	61
			.9	43000	29.4	8.1	5.6	86	--	--
AUG 13, 71	1320	5	.3	23000	30.2	8.4	8.4	120	--	71
			.9	23000	30.2	8.4	8.4	120	--	--
			1.4	33000	29.9	8.1	5.6	84	--	--
SEP 30, 71	0910	5	.3	3800	26.8	8.2	7.4	93	--	15
			1.2	3800	26.9	8.2	7.9	99	--	--
					LINE 274					
APR 28, 71	1539	1	.3	40000	26.0	--	5.1	73	--	58
			1.5	40000	26.0	--	5.3	76	--	--
			4.1	43000	26.1	--	5.7	83	--	--
JUL 13, 71	1317	1	.3	44000	30.9	8.1	5.8	94	--	53
			.9	44000	30.5	8.1	5.6	90	--	--
			1.5	44000	30.1	8.1	5.4	86	--	--
			2.7	42000	30.1	8.1	5.2	81	--	--
AUG 10, 71	1100	1	.3	44000	29.4	8.2	6.7	105	--	61
			1.5	44000	29.3	8.1	6.7	105	--	--
			3.0	44000	29.3	8.1	6.7	105	--	--
SEP 29, 71	1035	1	.3	11000	27.6	8.1	6.0	77	--	--
			1.5	12000	27.7	8.1	5.8	75	--	--
			2.4	12000	27.7	8.1	5.8	75	--	--
			3.0	13000	27.8	8.0	5.6	74	--	--
APR 28, 71	1600	2	.5	42000	26.4	--	6.4	93	--	38
			1.2	41000	26.4	--	6.2	88	--	--
JUL 13, 71	1348	2	.3	44000	31.6	8.2	7.4	121	--	51
			.9	47000	31.9	8.2	7.6	127	--	--
AUG 10, 71	1045	2	.3	44000	29.4	8.0	5.9	92	--	46
			.9	43000	29.4	8.0	6.0	92	--	--
SEP 29, 71	1320	2	.3	10000	28.3	8.3	7.0	91	--	65
			1.5	10000	28.2	8.3	7.3	95	--	--
JUL 13, 71	1405	3	.3	42000	31.5	8.2	6.6	106	--	91
			1.2	42000	31.3	8.2	6.7	106	--	--
AUG 10, 71	1038	3	.5	39000	29.6	8.2	6.1	92	--	86
			1.5	39000	29.7	8.2	6.1	92	--	--
SEP 29, 71	1310	3	.3	12000	28.2	8.4	7.5	99	--	65
			1.5	12000	28.1	8.3	7.5	99	--	--
APR 28, 71	1615	4	.5	38000	25.9	--	6.5	92	--	69
			1.5	40000	25.7	--	6.6	93	--	--
			2.7	40000	25.3	--	5.0	70	--	--
JUL 13, 71	1417	4	.3	40000	31.2	8.2	6.2	97	--	74
			.9	42000	30.8	8.2	6.0	95	--	--

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

1971 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 274 CONTINUED						
JUL 13, 71	1417	4	1.5	43000	30.3	8.1	5.8	91	--	--
AUG 10, 71	1030	4	.3	39000	29.3	8.2	6.2	93	--	91
			1.8	39000	29.2	8.2	6.1	91	--	--
SEP 29, 71	1300	4	.3	7100	27.9	8.3	7.2	94	--	61
			1.5	7200	27.8	8.2	7.3	95	--	--
APR 28, 71	1630	5	.5	37000	26.0	--	6.6	92	--	43
			1.5	37000	26.1	--	6.8	94	--	--
JUL 13, 71	1430	5	.3	42000	31.2	8.2	5.8	92	--	36
			.9	42000	31.0	8.2	6.0	95	--	--
			1.5	42000	30.4	8.2	6.0	94	--	--
AUG 10, 71	1010	5	.3	43000	29.4	8.2	6.2	95	--	89
			1.5	43000	29.4	8.2	6.2	95	--	--
SEP 29, 71	1250	5	.3	4500	28.0	8.2	7.4	95	--	61
			1.5	4800	28.0	8.2	7.6	97	--	--
SEP 29, 71	1600	5	.3	3400	28.6	8.2	7.5	97	--	30
			1.8	3400	28.6	8.2	7.6	99	--	--
SEP 30, 71	0930	5	.3	5100	27.1	8.3	7.4	94	--	23
			1.5	5400	27.1	8.3	7.6	96	--	--
SEP 30, 71	1615	5	.3	5800	28.7	8.4	8.8	116	--	23
			1.8	5700	28.2	8.3	7.8	101	--	--
JUL 13, 71	1447	6	.3	44000	31.4	8.2	6.9	111	--	38
			1.4	42000	31.1	8.2	6.0	95	--	--
				LINE 287						
APR 28, 71	1528	1	.3	43000	26.2	--	5.7	83	--	53
			1.5	43000	26.2	--	6.3	91	--	--
			3.4	44000	26.3	--	6.8	100	--	--
JUL 13, 71	1111	1	.3	44000	30.7	8.2	5.7	92	--	86
			.9	44000	30.5	8.1	5.6	90	--	--
			1.5	44000	30.1	8.1	4.3	68	--	--
			3.0	44000	30.1	8.1	4.3	68	--	--
AUG 10, 71	1110	1	.5	44000	29.6	8.2	7.2	114	--	56
			1.5	44000	29.6	8.2	7.2	114	--	--
			3.4	44000	29.6	8.1	6.7	106	--	--
SEP 29, 71	1050	1	.3	17000	27.5	8.2	6.2	83	--	66
			1.5	17000	27.4	8.2	6.4	85	--	--
			2.4	17000	27.4	8.1	6.4	85	--	--
			4.0	17000	27.3	8.0	5.9	79	--	--
APR 28, 71	1444	2	.5	41000	26.2	--	6.0	86	--	53
			1.2	40000	26.3	--	6.6	94	--	--
JUL 13, 71	1043	2	.3	44000	30.2	8.1	5.6	89	--	66
			.9	44000	30.1	8.1	4.7	75	--	--
AUG 10, 71	1125	2	.5	43000	29.7	8.2	6.9	108	--	66
			1.2	43000	29.8	8.2	7.1	111	--	--
SEP 29, 71	1105	2	.3	15000	27.6	8.3	7.5	99	--	53
			1.5	15000	27.7	8.3	7.5	99	--	--
APR 28, 71	1501	3	.5	41000	26.3	--	6.2	88	--	64
			1.4	41000	26.4	--	6.8	97	--	--
JUL 13, 71	1053	3	.3	44000	30.4	8.1	5.6	89	--	61

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

1971 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 287 CONTINUED						
JUL 13, 71	1053	3	1.4	44000	30.2	8.1	5.7	90	--	--
AUG 10, 71	1130	3	.3	43000	29.7	8.1	6.9	108	--	61
			1.2	43000	29.7	8.2	6.9	108	--	--
SEP 29, 71	1110	3	.3	15000	27.6	8.3	6.8	89	--	64
			1.5	15000	27.5	8.3	7.4	97	--	--
APR 28, 71	0925	4	.5	40000	24.3	--	6.5	90	--	89
			.9	40000	24.4	--	6.5	90	--	--
			1.7	40000	24.3	--	4.7	65	--	--
JUL 13, 71	0829	4	.3	42000	29.1	8.1	6.7	103	--	61
			.9	42000	29.0	8.1	6.7	103	--	--
			1.8	42000	29.0	8.1	6.9	106	--	--
AUG 10, 71	1155	4	.3	43000	30.0	8.1	6.7	105	--	61
			1.7	43000	30.1	8.1	6.9	108	--	--
SEP 29, 71	1125	4	.5	13000	27.6	8.3	7.2	94	--	74
			2.1	13000	27.7	8.3	6.9	90	--	--
APR 28, 71	1222	5	.5	41000	25.7	--	6.6	93	--	61
			1.4	40000	25.7	--	6.5	92	--	--
JUL 13, 71	1020	5	.3	43000	30.3	8.2	6.2	97	--	76
			.9	43000	30.1	8.2	6.0	94	--	--
			1.5	42000	29.7	8.2	5.9	92	--	--
			2.9	42000	29.7	8.1	5.6	88	--	--
AUG 10, 71	1245	5	.5	44000	30.2	8.2	6.4	102	--	51
			1.4	43000	30.1	8.1	6.0	94	--	--
SEP 29, 71	1130	5	.3	10000	27.5	8.3	6.6	85	--	66
			1.5	10000	27.5	8.3	6.8	87	--	--
			2.4	10000	27.6	8.3	6.8	87	--	--
JUL 13, 71	1000	6	.3	43000	29.5	8.1	5.9	92	--	61
			.9	44000	29.4	8.1	5.7	89	--	--
			1.7	44000	29.4	8.1	5.4	84	--	--
AUG 10, 71	1300	6	.5	45000	30.2	8.1	7.1	113	--	46
			1.4	45000	30.2	8.1	7.2	114	--	--
SEP 29, 71	1145	6	.3	11000	27.8	8.3	7.3	95	--	54
			1.5	11000	27.8	8.3	7.4	96	--	--
APR 28, 71	1040	7	.5	38000	24.8	--	6.5	89	--	56
			1.2	38000	24.9	--	7.1	97	--	--
JUL 13, 71	0942	7	.3	43000	29.7	8.1	5.3	83	--	56
			.9	43000	29.6	8.1	5.3	83	--	--
			1.5	43000	29.7	8.1	5.1	80	--	--
AUG 10, 71	1310	7	.3	45000	30.2	8.1	6.7	106	--	41
			1.4	45000	30.3	8.1	6.8	108	--	--
APR 28, 71	1021	8	.5	40000	24.6	--	6.6	92	--	61
			1.5	40000	24.6	--	7.0	97	--	--
JUL 13, 71	0925	8	.3	44000	29.6	8.1	6.6	105	--	--
			.9	44000	29.6	8.1	6.3	100	--	--
			1.5	44000	29.8	8.1	6.3	100	--	--
JUL 14, 71	1100	8	.3	44000	30.7	8.2	7.2	116	--	81
			.9	44000	30.2	8.2	5.9	94	--	--
			1.5	44000	30.3	8.1	5.7	90	--	--
AUG 09, 71	1200	8	.3	45000	29.9	8.2	6.5	103	--	94

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

1971 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 287 CONTINUED										
AUG 09, 71	1200	8	1.7	45000	29.6	8.1	5.8	92	--	--
AUG 09, 71	1420	8	.3	46000	30.6	8.2	6.7	108	--	86
			1.7	45000	30.6	8.2	6.5	105	--	--
AUG 10, 71	1320	8	.5	46000	30.5	8.1	7.1	115	--	53
			1.7	45000	30.2	8.1	7.2	114	--	--
SEP 29, 71	1205	8	.3	7100	27.7	8.2	6.4	82	--	54
			1.5	7100	27.7	8.2	6.5	83	--	--
SEP 30, 71	1700	8	.3	9000	28.3	8.4	7.8	101	--	25
			1.8	9000	28.2	8.4	8.7	113	--	--
APR 28, 71	1013	9	.5	40000	24.7	--	6.8	94	--	61
			1.7	41000	24.7	--	7.2	100	--	--
JUL 13, 71	0915	9	.3	44000	29.8	8.2	6.7	106	--	63
			1.7	47000	29.6	8.1	5.8	92	--	--
AUG 10, 71	1340	9	.5	49000	30.5	8.2	7.0	113	--	61
			1.5	47000	30.5	8.2	6.8	110	--	--
SEP 29, 71	1230	9	.5	6500	27.8	8.3	7.0	91	--	51
			1.5	6200	27.8	8.3	7.3	95	--	--
LINE 291										
APR 28, 71	1135	1	.5	46000	25.3	--	6.8	98	--	102
			2.0	46000	25.4	--	6.8	98	--	--
JUL 14, 71	1220	1	.3	48000	31.4	8.2	6.8	111	--	94
			.9	49000	30.9	8.2	6.8	111	--	--
			1.8	47000	30.8	8.2	7.0	115	--	--
SEP 28, 71	1330	1	.3	15000	30.6	8.3	9.8	136	--	71
			1.2	18000	30.6	8.3	9.5	134	--	--
			2.1	18000	30.2	8.1	7.6	106	--	--
APR 28, 71	1145	2	.5	46000	25.4	--	6.6	96	--	147
			2.1	46000	25.4	--	6.8	98	--	--
JUL 14, 71	1227	2	.3	48000	31.6	8.2	6.1	102	--	76
			.9	48000	31.1	8.2	6.3	103	--	--
			1.8	48000	31.1	8.2	6.2	102	--	--
SEP 28, 71	1345	2	.3	16000	29.6	8.4	9.9	136	--	56
			1.2	17000	29.1	8.2	7.5	103	--	--
			2.1	18000	29.2	8.1	6.5	89	--	--
APR 28, 71	1155	3	.5	43000	25.4	--	6.6	94	--	104
			2.0	43000	25.5	--	6.9	98	--	--
JUL 14, 71	1235	3	.3	47000	31.6	8.2	6.2	103	--	76
			.9	47000	30.9	8.2	6.7	110	--	--
			1.8	47000	30.8	8.2	6.0	98	--	--
SEP 28, 71	1400	3	.3	13000	30.5	8.5	10.1	140	--	61
			1.2	14000	29.0	8.3	8.6	115	--	--
			2.1	16000	28.9	8.1	5.8	78	--	--
APR 28, 71	1202	4	.5	42000	25.6	--	6.6	94	--	81
			2.0	42000	25.5	--	7.1	101	--	--
JUL 14, 71	1242	4	.3	45000	31.6	8.2	5.9	97	--	74
			.9	48000	31.4	8.2	5.8	95	--	--
			1.8	47000	30.6	8.2	5.8	95	--	--
SEP 28, 71	1410	4	.3	9000	30.3	8.4	10.9	147	--	56

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

1971 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 291 CONTINUED					
SEP 28, 71	1410	4	1.2	9500	29.4	8.2	9.1	121	--	--
			2.1	15000	29.4	8.2	7.3	99	--	--
					LINE 294					
APR 28, 71	1120	1	.5	45000	25.1	--	6.8	97	--	107
			2.0	45000	25.1	--	7.3	104	--	--
JUL 14, 71	1133	1	.3	50000	30.7	8.2	6.6	108	--	61
			.9	49000	30.3	8.2	6.6	106	--	--
			1.8	49000	30.4	8.2	7.1	114	--	--
SEP 28, 71	1315	1	.3	14000	29.0	8.4	9.7	129	--	66
			1.2	15000	28.8	8.4	9.6	130	--	--
			2.1	18000	28.6	8.2	6.7	92	--	--
APR 28, 71	1106	2	.5	45000	25.0	--	6.6	94	--	117
			1.8	43000	24.9	--	7.3	103	--	--
JUL 14, 71	1120	2	.3	49000	30.5	8.2	6.4	103	--	--
			.9	49000	30.5	8.2	7.1	114	--	--
			1.8	48000	30.7	8.2	6.9	113	--	--
AUG 09, 71	1330	2	.3	49000	30.3	8.2	6.6	106	--	91
			1.8	49000	30.1	8.2	6.6	106	--	--
SEP 28, 71	1300	2	.3	12000	29.0	8.5	10.1	135	--	69
			.9	13000	28.6	8.5	9.9	132	--	--
			1.5	17000	28.5	8.1	5.6	76	--	--
APR 28, 71	1056	3	.5	42000	24.8	--	6.3	89	--	58
			1.5	40000	24.9	--	7.2	100	--	--
JUL 14, 71	1112	3	.3	50000	30.8	8.2	6.0	98	--	63
			.9	50000	30.5	8.2	5.9	95	--	--
			1.5	48000	30.5	8.2	6.1	98	--	--
SEP 28, 71	1245	3	.3	9500	28.8	8.5	9.6	126	--	30
			1.2	10000	28.3	8.4	7.6	99	--	--
			2.1	12000	28.4	8.1	5.6	74	--	--
APR 28, 71	0950	4	.3	43000	24.5	8.1	6.4	89	--	74
			1.5	43000	24.4	8.1	6.2	86	--	--
			3.0	43000	24.4	8.0	6.3	88	--	--
			4.3	42000	24.4	7.8	6.5	90	--	--
JUL 14, 71	1045	4	.3	50000	30.5	8.2	6.6	106	--	53
			1.5	50000	30.3	8.2	5.7	92	--	--
			2.4	50000	30.3	8.2	5.6	90	--	--
			3.7	50000	30.4	8.1	4.4	71	--	--
SEP 28, 71	0900	4	.3	12000	26.6	8.4	6.9	88	--	46
			1.5	12000	26.6	8.3	6.8	87	--	--
			3.0	12000	26.6	8.3	6.7	86	--	--
			5.2	12000	26.4	8.3	6.7	85	--	--
SEP 28, 71	1230	4	.3	10000	29.0	8.4	8.8	116	--	48
			1.5	12000	29.0	8.3	7.9	105	--	--
			3.0	12000	29.2	8.3	7.4	99	--	--
			4.6	12000	29.5	8.3	8.1	109	--	--
					LINE 302					
APR 28, 71	1308	1	.5	48000	25.7	--	6.5	96	--	122
			1.8	48000	25.8	--	6.8	100	--	--
JUL 14, 71	1326	1	.3	47000	31.6	8.2	5.6	93	--	99

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

1971 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 302 CONTINUED						
JUL 14, 71	1326	1	.9	47000	31.3	8.2	5.0	82	--	--
			1.7	47000	30.8	8.2	5.1	84	--	--
SEP 28, 71	1410	1	.3	21000	31.6	8.1	8.9	129	--	79
			1.2	21000	31.6	8.1	8.9	129	--	--
			2.1	21000	31.4	8.1	8.9	127	--	--
APR 28, 71	1258	2	.5	48000	25.7	--	6.5	96	--	140
			1.8	46000	25.7	--	6.6	96	--	--
JUL 14, 71	1312	2	.3	47000	31.9	8.2	5.8	97	--	86
			.9	47000	31.5	8.2	6.6	110	--	--
			1.7	47000	30.8	8.2	5.4	88	--	--
SEP 28, 71	1310	2	.3	19000	28.0	8.3	7.5	101	--	46
			1.5	19000	27.5	8.3	7.0	93	--	--
			2.1	19000	27.4	8.2	6.7	89	--	--
APR 28, 71	1251	3	.5	48000	26.0	--	6.0	96	--	91
			2.0	46000	26.0	--	7.0	100	--	--
JUL 14, 71	1305	3	.3	47000	31.9	8.2	5.8	97	--	81
			.9	47000	31.5	8.2	5.8	97	--	--
			1.8	45000	30.8	8.1	5.5	89	--	--
SEP 28, 71	1300	3	.3	13000	29.0	8.0	9.0	117	--	76
			.9	15000	28.0	8.0	8.0	109	--	--
			1.5	17000	28.0	8.0	7.0	95	--	--
			2.1	17000	28.0	8.0	7.0	96	--	--
SEP 28, 71	1445	3	.3	12000	30.0	8.0	11.0	149	--	61
			1.2	16000	29.0	8.0	9.0	126	--	--
			2.1	17000	29.0	8.0	7.0	101	--	--
APR 28, 71	1240	4	.5	43000	25.8	--	6.4	93	--	99
			2.0	44000	25.8	--	6.0	88	--	--
JUL 14, 71	1257	4	.3	44000	31.9	8.2	5.7	93	--	66
			.9	47000	31.7	8.2	5.6	93	--	--
			1.8	45000	31.0	8.1	5.5	89	--	--
SEP 28, 71	1245	4	.3	11000	28.6	8.4	8.9	117	--	71
			.9	12000	28.2	8.3	8.5	112	--	--
			1.5	15000	27.5	8.2	7.1	93	--	--
			2.1	17000	27.9	8.1	5.6	76	--	--
SEP 28, 71	1430	4	.3	11000	30.5	8.3	10.3	139	--	53
			1.2	14000	29.7	8.1	9.0	122	--	--
			2.1	15000	29.5	8.1	8.1	109	--	--
				LINE 307						
APR 28, 71	1400	1	.3	48000	26.5	--	6.2	91	--	107
			1.2	45000	26.6	--	6.6	98	--	--
JUL 14, 71	1342	1	.3	47000	31.4	8.2	5.7	93	--	86
			1.1	47000	31.2	8.2	6.4	105	--	--
SEP 28, 71	1210	1	.3	22000	28.0	8.2	7.5	103	--	76
			1.5	25000	27.5	8.1	6.1	84	--	--
			2.4	30000	28.0	7.9	3.9	56	--	--
APR 28, 71	1411	3	.5	44000	25.9	--	5.8	85	--	91
			2.0	44000	25.9	--	6.4	94	--	--
JUL 14, 71	1350	3	.3	45000	31.9	8.2	5.8	95	--	112
			.9	47000	31.4	8.2	4.3	70	--	--
			1.8	47000	30.6	8.0	3.8	62	--	--

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

1971 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 307 CONTINUED					
AUG 09, 71	1240	3	.3	45000	29.7	8.2	6.2	98	--	91
			1.8	43000	29.4	8.2	6.2	95	--	--
AUG 11, 71	1410	3	.5	45000	30.2	8.2	6.3	100	--	58
			2.1	45000	30.2	8.2	6.3	100	--	--
SEP 28, 71	1215	3	.3	20000	28.3	8.3	7.4	101	--	99
			1.5	23000	27.6	8.1	5.8	78	--	--
			2.1	24000	27.6	8.0	6.0	81	--	--
APR 28, 71	1422	5	.5	42000	25.9	--	6.3	91	--	74
			1.8	42000	26.0	--	6.7	97	--	--
JUL 14, 71	1405	5	.3	44000	31.5	8.2	5.9	95	--	69
			.9	44000	31.1	8.1	5.9	95	--	--
			1.8	45000	30.8	8.1	5.6	90	--	--
SEP 28, 71	1225	5	.3	19000	28.4	8.3	7.7	104	--	71
			.9	21000	27.7	8.3	7.5	101	--	--
			1.8	23000	27.6	8.0	6.2	84	--	--
APR 28, 71	1517	7	.3	42000	25.6	--	5.3	76	--	56
			1.5	43000	25.6	--	5.5	78	--	--
			3.0	42000	25.5	--	5.5	78	--	--
			5.2	42000	25.4	--	5.5	78	--	--
					LINE 311					
SEP 28, 71	1115	1	.3	24000	27.0	8.3	7.9	105	--	79
			1.2	24000	26.9	8.3	7.8	104	--	--
JUL 14, 71	0935	2	.3	54000	30.1	8.1	4.8	80	--	46
			1.2	54000	30.1	8.1	5.2	87	--	--
AUG 11, 71	1515	2	.3	50000	30.6	8.2	6.2	102	--	41
			1.1	51000	30.5	8.2	6.4	103	--	--
SEP 28, 71	1130	2	.3	20000	27.0	8.3	8.2	109	--	71
			1.5	24000	26.7	8.2	7.2	96	--	--
JUL 14, 71	0908	3	.3	54000	29.9	8.2	5.1	85	--	46
			1.1	53000	29.8	8.1	5.3	87	--	--
SEP 28, 71	1140	3	.3	17000	27.0	8.3	9.3	122	--	43
			1.5	21000	26.9	8.3	9.4	125	--	--
JUL 14, 71	0855	4	.3	53000	29.6	8.1	4.9	79	--	58
			1.1	53000	29.6	8.1	5.4	87	--	--
AUG 11, 71	1500	4	.3	51000	30.5	8.3	6.8	110	--	33
			1.2	50000	30.5	8.3	6.8	110	--	--
SEP 28, 71	1150	4	.3	15000	27.0	8.3	7.8	101	--	33
			1.5	17000	26.9	8.2	8.3	109	--	--
JUL 14, 71	0845	5	.3	52000	29.5	8.2	5.0	81	--	61
			1.2	52000	29.6	8.1	4.9	79	--	--
SEP 28, 71	1200	5	.3	16000	27.1	8.2	7.6	99	--	46
			1.8	17000	27.0	8.2	6.9	91	--	--
					LINE 314					
JUL 14, 71	0950	1	.3	57000	30.2	8.1	4.7	80	--	63
			1.2	57000	30.3	8.1	5.0	85	--	--
SEP 28, 71	1050	1	.3	26000	27.3	8.3	7.8	107	--	91

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

1971 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 314 CONTINUED					
SEP 28, 71	1050	1	.9	30000	27.3	8.2	7.5	106	--	--
JUL 14, 71	0937	2	.3	57000	30.0	8.2	5.0	85	--	63
			1.2	57000	30.1	8.2	5.1	86	--	--
AUG 11, 71	1535	2	.3	50000	30.7	8.3	7.3	120	--	47
			.9	50000	30.5	8.3	7.4	119	--	--
SEP 28, 71	1030	2	.3	22000	27.7	8.3	7.6	103	--	81
			.9	22000	28.0	8.3	8.0	110	--	--
			1.8	36000	28.0	8.2	6.8	99	--	--
JUL 14, 71	1000	3	.3	57000	29.8	8.2	5.2	88	--	61
			1.2	57000	29.9	8.2	6.1	103	--	--
SEP 28, 71	1010	3	.3	21000	27.7	8.3	7.0	95	--	89
			.9	24000	27.6	8.3	7.3	99	--	--
			1.5	40000	27.6	8.2	7.2	106	--	--
JUL 14, 71	1015	4	.3	57000	29.7	8.1	5.8	97	--	76
			1.2	57000	29.7	8.1	5.7	95	--	--
SEP 28, 71	0955	4	.3	21000	27.2	8.4	8.0	107	--	74
			.9	22000	27.2	8.4	7.4	99	--	--
			1.5	30000	27.2	8.3	6.7	93	--	--
					LINE 317					
AUG 11, 71	1550	2	.3	50000	30.9	8.3	7.2	118	--	53
			1.5	50000	30.9	8.4	7.2	118	--	--
			3.0	50000	30.8	8.4	7.1	116	--	--
SEP 28, 71	0935	2	.3	41000	27.0	8.3	7.8	113	--	81
			1.5	41000	27.0	8.3	7.8	113	--	--
			3.0	41000	26.9	8.3	7.6	110	--	--
			4.3	41000	26.9	8.2	7.3	106	--	--
					LINE 320					
JUL 14, 71	0832	2	.3	52000	30.0	8.1	5.3	87	--	71
			1.5	52000	30.0	8.1	5.3	87	--	--
			3.0	52000	30.0	8.1	5.4	88	--	--
			4.9	50000	30.0	8.0	5.6	90	--	--
AUG 11, 71	1430	2	.3	50000	30.5	8.1	6.2	100	--	50
			1.5	50000	30.5	8.1	5.8	94	--	--
			3.0	48000	30.5	8.1	5.6	90	--	--
			4.9	50000	30.7	8.1	5.6	92	--	--
SEP 28, 71	0920	2	.3	14000	27.0	8.3	7.4	95	--	41
			1.5	15000	26.9	8.3	7.4	96	--	--
			3.0	15000	26.9	8.3	7.4	96	--	--
			5.8	15000	26.8	8.3	7.7	100	--	--
					LINE 333					
JUL 14, 71	1425	1	.3	48000	31.4	8.1	5.3	87	--	109
			.9	48000	31.3	8.2	4.3	70	--	--
			1.5	52000	30.6	8.2	4.2	70	--	--
			2.3	52000	30.5	8.2	4.0	67	--	--
SEP 28, 71	1120	1	.3	26000	27.3	8.2	6.9	95	--	127
			1.5	33000	27.1	8.2	6.9	97	--	--
			2.4	34000	27.4	8.1	6.2	89	--	--
JUL 14, 71	1433	2	.3	48000	31.5	8.2	5.8	97	--	99

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

1971 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 333 CONTINUED						
JUL 14, 71	1433	2	.9	49000	31.1	8.2	4.3	70	--	--
			2.0	50000	30.7	8.0	2.8	46	--	--
AUG 11, 71	1230	2	.5	33000	29.8	8.2	6.5	97	--	71
			2.1	33000	29.7	8.2	6.4	96	--	--
SEP 28, 71	1110	2	.3	28000	27.5	8.2	6.8	94	--	122
			1.5	30000	27.3	8.2	6.6	93	--	--
			2.4	31000	27.2	8.1	5.2	72	--	--
JUL 14, 71	1448	3	.3	47000	31.8	8.2	5.4	90	--	104
			.9	48000	31.6	8.2	5.6	93	--	--
			1.5	48000	30.9	8.2	5.6	92	--	--
			2.1	48000	30.8	8.1	5.6	92	--	--
SEP 28, 71	1105	3	.3	28000	27.5	8.2	6.8	94	--	94
			1.5	28000	27.5	8.2	6.4	89	--	--
			2.4	28000	27.6	8.1	5.7	79	--	--
				LINE 342						
JUL 14, 71	1518	1	.3	50000	31.8	8.2	6.2	102	--	122
			.9	52000	31.6	8.2	6.1	103	--	--
			1.8	52000	31.0	8.2	6.1	102	--	--
SEP 28, 71	1035	1	.3	34000	26.6	8.2	7.1	100	--	183
			1.5	35000	26.6	8.2	7.3	103	--	--
			2.7	39000	26.6	8.2	6.9	99	--	--
JUL 14, 71	1510	2	.5	50000	32.0	8.2	6.5	108	--	135
			.9	50000	31.6	8.2	5.6	93	--	--
			2.3	50000	31.0	8.2	7.0	115	--	--
AUG 11, 71	1200	2	.5	38000	29.9	8.2	6.9	105	--	107
			2.0	38000	29.8	8.2	6.9	105	--	--
SEP 28, 71	1045	2	.3	33000	27.0	8.2	6.9	97	--	165
			1.5	34000	26.9	8.2	6.8	96	--	--
			2.7	35000	26.9	8.1	6.0	85	--	--
JUL 14, 71	1500	3	.3	48000	31.7	8.2	5.4	90	--	137
			.9	49000	31.5	8.2	6.2	103	--	--
			1.8	49000	31.2	8.2	7.1	116	--	--
SEP 28, 71	1050	3	.3	31000	27.3	8.2	6.6	93	--	99
			1.5	32000	27.3	8.1	5.2	73	--	--
			2.4	33000	27.3	8.0	4.5	64	--	--
				LINE 354						
JUL 14, 71	1540	1	.3	57000	30.9	8.2	6.7	116	--	122
			.9	57000	30.8	8.2	6.7	116	--	--
			1.5	57000	30.7	8.2	6.1	105	--	--
			2.1	56000	30.6	8.2	6.6	112	--	--
AUG 11, 71	1125	1	.5	51000	29.2	8.2	5.7	90	--	97
			1.5	51000	29.2	8.2	5.9	94	--	--
			2.4	51000	29.2	8.2	5.9	94	--	--
SEP 28, 71	1020	1	.3	39000	26.8	8.2	6.8	97	--	188
			1.5	39000	26.8	8.2	6.9	99	--	--
			2.7	40000	26.8	8.1	6.2	90	--	--
JUL 14, 71	1549	2	.5	57000	31.1	8.2	6.3	109	--	--
			.9	57000	31.2	8.2	6.1	105	--	--
			1.8	57000	31.3	8.2	6.7	116	--	--
AUG 11, 71	1110	2	.5	51000	29.5	8.2	6.3	102	--	132

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

1971 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 354 CONTINUED					
AUG 11, 71	1110	2	2.1	51000	29.5	8.2	6.5	105	--	--
SEP 28, 71	1010	2	.3	38000	27.1	8.2	6.8	97	--	127
			1.8	39000	27.1	8.2	6.9	99	--	--
JUL 14, 71	1557	3	.5	57000	31.5	8.2	6.2	107	--	152
			.9	57000	31.5	8.2	6.4	110	--	--
			1.5	57000	31.7	8.2	6.6	116	--	--
AUG 11, 71	1045	3	.5	51000	29.5	8.2	6.0	97	--	71
			2.1	51000	29.6	8.2	6.2	100	--	--
SEP 28, 71	0950	3	.3	40000	27.0	8.2	5.8	84	--	86
			1.5	40000	27.0	8.2	5.8	84	--	--
			2.1	40000	26.9	8.2	5.7	83	--	--
JUL 14, 71	1604	4	.5	54000	31.5	8.2	5.4	93	--	178
			.9	56000	31.4	8.2	6.1	103	--	--
			1.8	57000	31.4	8.2	5.7	98	--	--
AUG 11, 71	0950	4	.5	49000	29.5	8.2	6.3	102	--	81
			1.8	49000	29.5	8.2	6.7	108	--	--
AUG 11, 71	1055	4	.5	51000	29.5	8.2	6.3	102	--	104
			1.5	51000	29.5	8.2	6.3	102	--	--
			2.4	51000	29.5	8.2	5.8	94	--	--
SEP 28, 71	0940	4	.3	38000	26.9	8.2	6.1	87	--	99
			1.5	39000	26.9	8.2	6.1	87	--	--
			2.7	39000	26.9	8.1	5.8	83	--	--
JUL 14, 71	1618	5	.5	53000	31.5	8.2	5.7	95	--	183
			.9	54000	31.4	8.2	5.4	92	--	--
			1.8	54000	31.5	8.2	5.6	97	--	--
AUG 11, 71	0945	5	.5	47000	29.4	8.2	6.3	100	--	89
			1.5	47000	29.4	8.2	6.3	100	--	--
			3.0	47000	29.4	8.2	6.5	103	--	--
SEP 28, 71	0930	5	.3	36000	27.1	8.2	6.2	87	--	119
			1.5	39000	27.0	8.2	6.1	87	--	--
			2.4	39000	27.0	8.1	6.0	86	--	--
			3.8	39000	26.9	8.1	5.9	84	--	--
					LINE 360					
JUL 14, 71	1702	3	.3	57000	31.6	8.2	6.6	116	--	76
			.9	57000	31.6	8.2	5.8	102	--	--
			1.5	57000	31.6	8.2	5.8	102	--	--
			3.0	57000	31.5	8.2	5.6	97	--	--
			4.6	57000	31.5	8.2	6.0	103	--	--
			7.0	57000	31.5	8.2	5.4	93	--	--
AUG 11, 71	1040	3	.3	48000	29.6	8.0	5.7	90	--	80
			.9	48000	29.6	8.0	5.5	87	--	--
			1.5	48000	29.5	8.0	5.3	84	--	--
			3.0	48000	29.5	8.0	5.6	89	--	--
			3.7	48000	29.7	8.1	5.7	90	--	--
AUG 11, 71	1025	3	.3	48000	29.7	8.1	5.8	92	--	65
			1.5	48000	29.7	8.0	6.0	95	--	--
			3.0	48000	29.7	8.0	5.8	92	--	--
			7.3	48000	29.7	8.0	5.8	92	--	--

TABLE 48--QUALITY OF WATER IN THE GUADALUPE ESTUARY,

1971 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-PHORUS ORTHO (P) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	TOTAL ORGANIC CARBON (MG/L)
						LINE 10						
APR 29, 71	1137	2	.3	24.0	.0	.12	.00	.03	.03	1.4	--	--
			4.0	24.0	.0	.03	.00	.02	.03	1.7	--	--
JUL 14, 71	1025	2	.3	24.0	.2	.00	.00	.26	.26	3.0	--	--
			4.0	25.0	.0	.05	.00	.30	.30	3.6	--	--
AUG 10, 71	1545	2	.3	20.0	.0	.00	.01	.33	.38	.4	--	--
			4.0	22.0	.0	.00	.02	.22	.24	.9	--	--
SEP 27, 71	1545	2	.3	29.0	.0	.08	.00	.04	.09	4.8	--	--
			4.3	32.0	.0	.11	.00	.09	.10	2.0	--	--
						LINE 50						
APR 29, 71	1017	2	.3	8.8	.0	.16	.00	.05	.05	3.0	--	--
			3.4	8.4	.0	.15	.00	.05	.05	2.0	--	--
						LINE 80						
APR 29, 71	0920	2	.3	5.3	.0	.10	.00	.08	.09	3.1	--	--
			3.0	5.1	.1	.21	.00	.13	.13	2.0	--	--
JUL 14, 71	0825	2	.3	2.6	.0	.03	.00	.18	.18	2.7	--	--
			4.0	2.8	.0	.03	.00	.21	.27	1.4	--	--
AUG 10, 71	1745	2	.3	9.1	.0	.00	.01	.30	.31	1.8	--	--
			3.4	8.6	.0	.03	.04	.33	.34	.6	--	--
SEP 27, 71	1350	2	.3	23.0	.2	.24	.01	.20	.20	2.7	--	--
			4.3	22.0	.1	.32	.01	.19	.36	2.5	--	--
						LINE 145						
APR 29, 71	1105	2	.3	12.0	2.3	.07	.01	.54	.63	.3	--	--
			3.2	12.0	2.2	.07	.01	.56	.56	.0	--	--
JUL 13, 71	1435	2	.3	15.0	.8	.02	.02	.62	.62	.6	--	--
			4.0	15.0	.6	.11	.02	.63	.64	1.2	--	--
AUG 10, 71	1000	2	3.0	9.6	.5	.02	.05	.34	.69	2.3	--	--
SEP 29, 71	1005	2	.3	23.0	.8	.10	.01	.37	.55	1.2	--	--
			3.4	24.0	.5	.12	.01	.36	.42	1.5	--	--
						LINE 170						
APR 29, 71	1020	2	.3	13.0	2.4	.08	.02	.62	.62	.0	--	--
			2.1	13.0	2.5	.07	.01	.60	.60	.4	--	--
						LINE 200						
APR 28, 71	1255	2	.3	11.0	1.4	.00	.01	.30	.30	2.3	--	--
			.9	12.0	1.2	.00	.01	.29	.29	2.3	--	--
			.3	11.0	1.4	.09	.01	.30	.30	2.3	--	--
			.9	12.0	1.2	.02	.01	.29	.29	2.3	--	--
AUG 10, 71	1205	2	.9	10.0	.0	.06	.10	.37	.38	.5	--	--
SEP 29, 71	1115	2	1.5	24.0	.6	.07	.02	.36	.36	1.2	--	--
						LINE 225						
APR 28, 71	1240	1	.3	3.9	.0	.04	.00	.34	.34	3.3	--	--

TABLE 48--QUALITY OF WATER IN THE GUADALUPE ESTUARY,

1971 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)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	TOTAL ORGANIC CARBON (MG/L)
						LINE 225 CONTINUED						
APR 28, 71	1240	1	.9	3.6	.1	.10	.00	.34	.42	2.9	--	--
JUL 13, 71	1025	1	.3	11.0	.0	.00	.00	.50	.50	3.6	--	--
			.9	8.8	.0	.04	.00	.42	.42	3.2	--	--
AUG 10, 71	1300	1	.9	13.0	.2	.03	.05	.46	.47	--	--	--
SEP 29, 71	1150	1	1.2	22.0	.1	.14	.01	.19	.19	1.6	--	--
APR 28, 71	1230	2	.3	1.9	.1	.12	.00	.28	.28	3.5	--	--
			.9	2.0	.1	.06	.00	.26	.31	2.8	--	--
JUL 13, 71	1005	2	.3	10.0	.0	.00	.00	.44	.44	4.0	--	--
			.9	6.6	.0	.00	.00	.41	.41	2.1	--	--
AUG 10, 71	1245	2	1.1	9.8	.4	.03	.04	.31	.31	--	--	--
						LINE 236						
AUG 10, 71	1435	2	1.1	8.4	.0	.02	.02	.33	.38	1.4	--	--
SEP 29, 71	1530	2	1.2	23.0	.6	.01	.00	.28	.52	1.2	--	--
SEP 30, 71	0930	2	.3	17.0	.2	.07	.00	.21	.32	1.6	--	--
			1.2	17.0	.2	.05	.00	.22	.22	1.8	--	--
SEP 30, 71	1530	2	1.2	20.0	.5	.09	.00	.25	.92	2.0	--	--
						LINE 243						
APR 28, 71	1035	2	.3	.6	.1	.18	.00	.08	.10	1.9	--	--
			3.0	1.2	.1	.19	.00	.10	.10	2.0	--	--
APR 28, 71	1110	5	.3	.0	.1	.09	.00	.16	.16	3.1	--	--
			.9	.4	.1	.16	.00	.16	.16	.2	--	--
JUL 13, 71	0825	5	.3	4.4	.0	.05	.00	.32	.32	1.3	--	--
			1.2	3.1	.0	.07	.00	.32	.32	1.6	--	--
AUG 10, 71	1330	5	1.1	11.0	.4	.08	.04	.42	.45	2.8	--	--
SEP 29, 71	1230	5	.3	26.0	.6	.07	.01	.33	.45	1.4	--	--
			1.2	28.0	.4	.09	.01	.35	.35	1.9	--	--
JUL 13, 71	0850	7	.3	2.0	.0	.06	.00	.33	.33	1.5	--	--
			1.1	2.6	.0	.07	.00	.32	.32	1.7	--	--
AUG 10, 71	1450	7	.5	9.4	.0	.00	.01	.30	.36	1.2	--	--
			1.1	8.2	.0	.09	.03	.32	.32	1.5	--	--
SEP 29, 71	1240	7	.3	25.0	.3	.11	.01	.35	.35	1.7	--	--
			1.2	26.0	.4	.15	.01	.33	.33	1.5	--	--
SEP 30, 71	1030	7	.3	7.3	.0	.17	.00	.28	.28	11000.0	--	--
APR 28, 71	1125	8	.3	.0	.1	.12	.00	.11	.11	.1	--	--
			1.1	.0	.1	.14	.00	.10	.11	2.2	--	--
APR 28, 71	1140	10	.3	.0	.1	.16	.00	.10	.12	2.1	--	--
			1.1	.0	.1	.13	.00	.10	.12	1.8	--	--
						LINE 254						
APR 28, 71	0845	2	.3	.0	.1	.17	.00	.16	.16	1.4	--	--
			2.4	.0	.1	.15	.00	.12	.12	1.1	--	--
JUL 13, 71	1605	2	.3	.0	.0	.00	.00	.20	.20	1.8	--	--

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

1971 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)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	TOTAL ORGANIC CARBON (MG/L)
						LINE 254 CONTINUED						
JUL 13, 71	1605	2	1.5	1.0	.0	.01	.00	.20	.20	1.2	--	--
AUG 10, 71	0900	2	.3	7.5	.0	.15	.01	.32	.33	--	--	--
			1.2	6.5	.0	.26	.01	.28	.29	--	--	--
SEP 30, 71	1115	2	.3	20.0	.2	.08	.02	.18	.20	1.9	--	--
			2.1	19.0	.2	.12	.02	.15	.17	1.8	--	--
						LINE 264						
APR 28, 71	1725	2	.5	.0	.1	.27	.00	.11	.11	3.3	--	--
			1.5	.0	.1	.27	.00	.11	.11	3.2	--	--
APR 28, 71	1650	4	.5	.0	.0	.08	.00	.12	.12	2.2	--	--
			2.4	.0	.1	.16	.00	.18	.18	2.1	--	--
JUL 13, 71	1505	4	.3	.0	.0	.02	.00	.19	.19	.4	--	--
			1.4	.5	.0	.05	.00	.18	.18	1.4	--	--
AUG 10, 71	0940	4	.3	5.8	.0	.22	.02	.26	.27	1.0	--	--
			2.6	5.6	.0	.21	.02	.27	.30	.9	--	--
SEP 30, 71	0900	4	.3	10.0	.3	.16	.01	.15	.62	1.5	--	--
			1.5	20.0	.3	.11	.01	.17	.19	1.4	--	--
						LINE 274						
JUL 13, 71	1348	2	.3	.0	.0	.04	.00	.14	.14	.6	--	--
			.9	.0	.0	.03	.00	.14	.14	.6	--	--
AUG 10, 71	1045	2	.3	4.2	.0	.01	.00	.21	.24	--	--	--
			.9	4.7	.0	.04	.01	.25	.29	--	--	--
SEP 29, 71	1320	2	.3	14.0	.0	.06	.00	.10	.14	1.5	--	--
			1.5	14.0	.0	.01	.00	.09	.10	1.7	--	--
JUL 13, 71	1430	5	.3	.0	.0	.04	.00	.17	.17	.9	--	--
			1.5	.0	.0	.03	.00	.21	.21	1.2	--	--
AUG 10, 71	1010	5	.3	4.7	.0	.19	.01	.18	.18	--	--	--
			1.5	5.2	.0	.13	.01	.20	.28	--	--	--
SEP 29, 71	1600	5	.3	19.0	.1	.07	.01	.20	.20	1.5	--	--
			1.8	20.0	.3	.02	.01	.19	.19	1.6	--	--
SEP 30, 71	0930	5	.3	18.0	.1	.10	.01	.16	.16	1.5	--	--
			1.5	18.0	.1	.12	.01	.16	.17	1.7	--	--
SEP 30, 71	1615	5	1.8	18.0	.1	.02	.02	.18	.18	1.7	--	--
						LINE 287						
AUG 10, 71	1130	3	.3	4.3	.0	.05	.01	.21	.25	.7	--	--
			1.2	4.0	.0	.01	.01	.21	.26	.5	--	--
SEP 29, 71	1110	3	.3	11.0	.0	.06	.00	.07	.07	1.7	--	--
			1.5	11.0	.0	.07	.00	.07	.08	1.9	--	--
APR 28, 71	0925	4	.5	.0	.0	.16	.00	.08	.08	.9	--	--
			1.7	.0	.1	.18	.00	.16	.16	1.0	--	--
JUL 13, 71	0829	4	.3	.0	.0	.05	.00	.17	.17	2.0	--	--
			1.8	.0	.0	.27	.00	.23	.23	2.3	--	--
APR 28, 71	1021	8	.5	.0	.1	.13	.00	.10	.10	1.8	--	--
			1.5	.0	.1	.20	.00	.12	.12	1.5	--	--

TABLE 48--QUALITY OF WATER IN THE GUADALUPE ESTUARY,

1971 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)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	TOTAL ORGANIC CARBON (MG/L)
						LINE 287 CONTINUED						
JUL 13, 71	0925	8	.3	.0	.0	.04	.00	.15	.15	2.5	--	--
			1.5	.0	.0	.13	.00	.14	.14	1.3	--	--
AUG 10, 71	1320	8	.5	4.4	.0	.02	.01	.15	.16	.8	--	--
			1.7	4.4	.0	.01	.00	.21	.22	.5	--	--
SEP 29, 71	1205	8	.3	16.0	.2	.12	.01	.13	.17	1.5	--	--
			1.5	15.0	.3	.01	.00	.13	.14	1.3	--	--
SEP 30, 71	1700	8	1.8	15.0	.0	.06	.02	.10	.14	1.9	--	--
						LINE 291						
APR 28, 71	1145	2	.5	.0	.0	.30	.00	.02	.02	1.4	--	--
			2.1	.0	.0	.08	.00	.02	.02	3.5	--	--
APR 28, 71	1202	4	.5	.0	.1	.08	.00	.07	.07	1.6	--	--
			2.0	.0	.1	.07	.00	.06	.06	1.4	--	--
						LINE 294						
APR 28, 71	1106	2	.5	.0	.0	.12	.00	.03	.03	1.1	--	--
			1.8	.0	.0	.28	.00	.08	.08	1.2	--	--
JUL 14, 71	1120	2	.3	.0	.0	.00	.00	.12	.12	.9	--	--
			1.8	.0	.0	.01	.00	.14	.14	.7	--	--
SEP 28, 71	1300	2	1.5	11.0	.0	.09	.00	.07	.09	2.0	--	--
APR 28, 71	0950	4	.3	.0	.0	.16	.00	.07	.07	1.5	--	--
			4.3	.0	.1	.15	.00	.07	.07	.9	--	--
						LINE 302						
APR 28, 71	1258	2	.5	.0	.1	.14	.00	.02	.02	.9	--	--
			1.8	.0	.0	.07	.00	.02	.02	1.3	--	--
JUL 14, 71	1312	2	.3	.0	.0	.03	.00	.12	.12	1.2	--	--
			1.7	.0	.0	.01	.00	.13	.13	1.1	--	--
SEP 28, 71	1310	2	2.1	10.0	.0	.08	.00	.04	.06	1.6	--	--
APR 28, 71	1240	4	.5	.0	.0	.10	.00	.06	.06	1.5	--	--
			2.0	.0	.1	.10	.00	.06	.06	1.4	--	--
						LINE 307						
APR 28, 71	1411	3	.5	.0	.1	.15	.00	.03	.03	.9	--	--
			2.0	.0	.1	.07	.00	.06	.06	1.0	--	--
JUL 14, 71	1350	3	.3	.0	.0	.03	.00	.09	.09	1.2	--	--
			1.8	.0	.1	.06	.00	.16	.16	1.2	--	--
AUG 11, 71	1410	3	.5	4.6	.0	.02	.02	.17	.18	.5	--	--
			2.1	4.4	.0	.00	.02	.20	.21	.4	--	--
SEP 28, 71	1215	3	2.1	7.9	.0	.13	.01	.04	.07	1.0	--	--
APR 28, 71	1517	7	.3	.0	.0	.25	.00	.06	.06	1.0	--	--
			5.2	.0	.1	.16	.00	.06	.06	1.2	--	--
						LINE 311						
JUL 14, 71	0855	4	.3	.0	.0	.02	.00	.15	.15	.9	--	--

TABLE 48--QUALITY OF WATER IN THE GUADALUPE ESTUARY,

1971 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)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	TOTAL ORGANIC CARBON (MG/L)
						LINE 311 CONTINUED						
JUL 14, 71	0855	4	1.1	.0	.0	.01	.00	.12	.12	1.5	--	--
AUG 11, 71	1500	4	.3	4.6	.0	.02	.00	.20	.26	--	--	--
			1.2	4.4	.0	.00	.01	.12	.18	--	--	--
SEP 28, 71	1150	4	1.5	10.0	.1	.13	.00	.05	.08	1.4	--	--
						LINE 314						
AUG 11, 71	1535	2	.9	2.4	.0	.00	.01	.11	.11	1.8	--	--
SEP 28, 71	1030	2	1.8	4.0	.0	.10	.00	.03	.13	1.3	--	--
JUL 14, 71	1000	3	.3	.0	.0	.00	.00	.06	.06	1.4	--	--
			1.2	.0	.0	.02	.00	.08	.08	1.3	--	--
						LINE 317						
SEP 28, 71	0935	2	4.3	1.2	.0	.07	.01	.01	.06	.8	--	--
						LINE 320						
AUG 11, 71	1430	2	.3	3.9	.0	.01	.01	.13	.17	--	--	--
			4.9	3.9	.0	.00	.01	.27	.30	--	--	--
						LINE 333						
JUL 14, 71	1433	2	.3	.0	.0	.07	.00	.08	.08	.4	--	--
			2.0	.0	.0	.02	.00	.12	.12	.9	--	--
AUG 11, 71	1230	2	.5	4.7	.0	.06	.01	.17	.18	.3	--	--
			2.1	4.5	.0	.01	.02	.14	.14	.7	--	--
SEP 28, 71	1110	2	2.4	6.2	.0	.18	.00	.03	.25	1.0	--	--
						LINE 354						
AUG 11, 71	1110	2	.5	2.1	.0	.00	.01	.06	.06	.6	--	--
			2.1	1.9	.0	.00	.01	.06	.08	.5	--	--
JUL 14, 71	1604	4	.5	.0	.0	.03	.00	.05	.05	.3	--	--
			1.8	.0	.0	.04	.00	.04	.04	.3	--	--
AUG 11, 71	1055	4	.5	2.0	.0	.00	.01	.18	.18	.4	--	--
			2.4	1.9	.0	.02	.00	.10	.10	.3	--	--
SEP 28, 71	0940	4	2.7	2.9	.0	.12	.00	.02	.07	1.4	--	--
						LINE 360						
JUL 14, 71	1702	3	.3	.0	.0	.04	.00	.04	.04	.2	--	--
			7.0	.0	.0	.04	.00	.04	.04	.3	--	--
AUG 11, 71	1025	3	.3	1.7	.0	.00	.01	.06	.09	--	--	--
			7.3	1.6	.0	.00	.01	.30	.33	--	--	--

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

1971 WATER YEAR

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (LAB)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG) (MG/L)	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 CONSTI-TUENTS (SUM OF CONSTI-TUENTS) (MG/L)
						LINE 10					
APR 29, 71	1137	2	.3	972	--	--	--	--	--	--	--
			4.0	981	100.0	8.3	140	304	110	160	692
JUL 14, 71	1025	2	.3	940	--	--	--	--	--	--	--
			4.0	1030	76.0	14.0	100	226	49	160	544
AUG 10, 71	1545	2	.3	986	76.0	12.0	110	224	72	160	565
			4.0	877	--	--	--	--	--	--	--
SEP 27, 71	1545	2	.3	799	--	--	--	--	--	--	--
			4.3	885	82.0	18.0	60	260	35	110	468
						LINE 50					
APR 29, 71	1017	2	.3	13800	--	--	--	--	--	--	--
			3.4	15500	--	--	--	--	--	--	--
						LINE 80					
APR 29, 71	0920	2	.3	23800	--	--	--	--	--	--	--
			3.0	25600	--	--	--	--	--	--	--
JUL 14, 71	0825	2	.3	24100	--	--	--	--	--	--	--
			4.0	27200	260.0	720.0	4800	192	56	9800	15700
AUG 10, 71	1745	2	.3	17600	--	--	--	--	--	--	--
			3.4	18000	180.0	400.0	3300	185	840	5900	751
SEP 27, 71	1350	2	.3	3600	59.0	74.0	630	157	280	990	2140
			4.3	3650	--	--	--	--	--	--	--
						LINE 145					
APR 29, 71	1105	2	.3	787	--	--	--	--	--	--	--
			3.2	778	86.0	16.0	35	207	58	82	403
JUL 13, 71	1435	2	.3	641	59.0	13.0	55	192	47	76	365
			4.0	644	64.0	9.8	54	198	43	74	362
AUG 10, 71	1000	2	3.0	362	42.0	6.6	19	138	20	25	194
SEP 29, 71	1005	2	.3	547	60.0	12.0	41	218	44	42	334
			3.4	519	60.0	12.0	38	220	37	42	326
						LINE 170					
APR 29, 71	1020	2	.3	796	--	--	--	--	--	--	--
			2.1	799	--	--	--	--	--	--	--
						LINE 200					
APR 28, 71	1255	2	.3	1080	--	--	--	--	--	--	--
			.9	1080	--	--	--	--	--	--	--
			.3	1080	--	--	--	--	--	--	--
			.9	1080	--	--	--	--	--	--	--
AUG 10, 71	1205	2	.9	373	--	--	--	--	--	--	--
SEP 29, 71	1115	2	1.5	660	--	--	--	--	--	--	--
						LINE 225					
APR 28, 71	1240	1	.3	6390	--	--	--	--	--	--	--

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

1971 WATER YEAR--CONTINUED

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (LAB)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM + POTASSIUM (NA+K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
					LINE 225 CONTINUED						
APR 28, 71	1240	1	.9	6160	--	--	--	--	--	--	--
JUL 13, 71	1025	1	.3	6690	--	--	--	--	--	--	--
			.9	17800	--	--	--	--	--	--	--
AUG 10, 71	1300	1	.9	928	--	--	--	--	--	--	--
SEP 29, 71	1150	1	1.2	420	--	--	--	--	--	--	--
APR 28, 71	1230	2	.3	8430	--	--	--	--	--	--	--
			.9	8530	--	--	--	--	--	--	--
JUL 13, 71	1005	2	.3	13300	--	--	--	--	--	--	--
			.9	22300	--	--	--	--	--	--	--
AUG 10, 71	1245	2	1.1	460	--	--	--	--	--	--	--
						LINE 236					
AUG 10, 71	1435	2	1.1	13700	--	--	--	--	--	--	--
SEP 29, 71	1530	2	1.2	1570	--	--	--	--	--	--	--
SEP 30, 71	0930	2	.3	2700	--	--	--	--	--	--	--
			1.2	2590	--	--	--	--	--	--	--
SEP 30, 71	1530	2	1.2	2420	--	--	--	--	--	--	--
						LINE 243					
APR 28, 71	1035	2	.3	35800	--	--	--	--	--	--	--
			3.0	33700	300.0	840.0	6500	209	1800	12000	21200
APR 28, 71	1110	5	.3	21800	--	--	--	--	--	--	--
			.9	22300	--	--	--	--	--	--	--
JUL 13, 71	0825	5	.3	27500	--	--	--	--	--	--	--
			1.2	36300	--	--	--	--	--	--	--
AUG 10, 71	1330	5	1.1	2700	--	--	--	--	--	--	--
SEP 29, 71	1230	5	.3	748	--	--	--	--	--	--	--
			1.2	599	61.0	12.0	42	205	35	61	343
JUL 13, 71	0850	7	.3	28800	--	--	--	--	--	--	--
			1.1	35600	--	--	--	--	--	--	--
AUG 10, 71	1450	7	.5	1640	--	--	--	--	--	--	--
			1.1	17200	--	--	--	--	--	--	--
SEP 29, 71	1240	7	.3	622	--	--	--	--	--	--	--
			1.2	603	--	--	--	--	--	--	--
SEP 30, 71	1030	7	.3	11100	--	--	--	--	--	--	--
APR 28, 71	1125	8	.3	29800	--	--	--	--	--	--	--
			1.1	29700	--	--	--	--	--	--	--
APR 28, 71	1140	10	.3	35800	--	--	--	--	--	--	--
			1.1	35800	--	--	--	--	--	--	--
						LINE 254					
APR 28, 71	0845	2	.3	37400	--	--	--	--	--	--	--
			2.4	39100	--	--	--	--	--	--	--
JUL 13, 71	1605	2	.3	41300	--	--	--	--	--	--	--

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

1971 WATER YEAR--CONTINUED

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (LAB)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM + POTASSIUM (NA+K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
				LINE 254 CONTINUED							
JUL 13, 71	1605	2	1.5	41900	--	--	--	--	--	--	--
AUG 10, 71	0900	2	.3	28800	--	--	--	--	--	--	--
			1.2	32700	--	--	--	--	--	--	--
SEP 30, 71	1115	2	.3	2930	--	--	--	--	--	--	--
			2.1	4140	--	--	--	--	--	--	--
				LINE 264							
APR 28, 71	1725	2	.5	38900	340.0	970.0	7600	284	1900	14000	24400
			1.5	39000	--	--	--	--	--	--	--
APR 28, 71	1650	4	.5	36500	--	--	--	--	--	--	--
			2.4	36500	320.0	950.0	7000	195	1800	13000	24900
JUL 13, 71	1505	4	.3	38800	--	--	--	--	--	--	--
			1.4	43400	--	--	--	--	--	--	--
AUG 10, 71	0940	4	.3	34400	--	--	--	--	--	--	--
			2.6	36800	300.0	890.0	6600	168	1700	12000	21700
SEP 30, 71	0900	4	.3	2170	--	--	--	--	--	--	--
			1.5	3070	52.0	56.0	480	160	120	820	1620
				LINE 274							
JUL 13, 71	1346	2	.3	44700	360.0	1200.0	8400	148	2200	15000	27700
			.9	44800	--	--	--	--	--	--	--
AUG 10, 71	1045	2	.3	44500	--	--	--	--	--	--	--
			.9	44400	--	--	--	--	--	--	--
SEP 29, 71	1320	2	.3	10700	--	--	--	--	--	--	--
			1.5	11000	100.0	240.0	1900	136	380	3400	6050
JUL 13, 71	1430	5	.3	41100	--	--	--	--	--	--	--
			1.5	42300	360.0	1100.0	8300	156	2200	15000	26800
AUG 10, 71	1010	5	.3	43500	--	--	--	--	--	--	--
			1.5	43900	--	--	--	--	--	--	--
SEP 29, 71	1600	5	.3	3520	--	--	--	--	--	--	--
			1.8	3520	--	--	--	--	--	--	--
SEP 30, 71	0930	5	.3	4900	--	--	--	--	--	--	--
			1.5	4830	--	--	--	--	--	--	--
SEP 30, 71	1615	5	1.8	5300	--	--	--	--	--	--	--
				LINE 287							
AUG 10, 71	1130	3	.3	44100	--	--	--	--	--	--	--
			1.2	44100	--	--	--	--	--	--	--
SEP 29, 71	1110	3	.3	9280	--	--	--	--	--	--	--
			1.5	16600	140.0	360.0	2800	126	590	5200	9200
APR 28, 71	0925	4	.5	40200	--	--	--	--	--	--	--
			1.7	42100	--	--	--	--	--	--	--
JUL 13, 71	0829	4	.3	43100	--	--	--	--	--	--	--
			1.8	43000	--	--	--	--	--	--	--
APR 28, 71	1021	8	.5	40800	--	--	--	--	--	--	--
			1.5	40900	--	--	--	--	--	--	--

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

1971 WATER YEAR--CONTINUED

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (LAB)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG) (MG/L)	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 287 CONTINUED					
JUL 13, 71	0925	8	.3	44100	--	--	--	--	--	--	--
			1.5	45900	--	--	--	--	--	--	--
AUG 10, 71	1320	8	.5	47000	--	--	--	--	--	--	--
			1.7	47000	--	--	--	--	--	--	--
SEP 29, 71	1205	8	.3	6610	--	--	--	--	--	--	--
			1.5	7000	--	--	--	--	--	--	--
SEP 30, 71	1700	8	1.8	9280	--	--	--	--	--	--	--
						LINE 291					
APR 28, 71	1145	2	.5	47800	--	--	--	--	--	--	--
			2.1	47900	--	--	--	--	--	--	--
APR 28, 71	1202	4	.5	43800	--	--	--	--	--	--	--
			2.0	44000	--	--	--	--	--	--	--
						LINE 294					
APR 28, 71	1106	2	.5	46400	--	--	--	--	--	--	--
			1.8	46700	--	--	--	--	--	--	--
JUL 14, 71	1120	2	.3	48200	--	--	--	--	--	--	--
			1.8	48300	400.0	1200.0	9200	152	2400	16000	29700
SEP 28, 71	1300	2	1.5	17600	--	--	--	--	--	--	--
APR 28, 71	0950	4	.3	44700	--	--	--	--	--	--	--
			4.3	45200	400.0	1200.0	8800	173	2300	16000	28600
						LINE 302					
APR 28, 71	1258	2	.5	48400	--	--	--	--	--	--	--
			1.8	48400	--	--	--	--	--	--	--
JUL 14, 71	1312	2	.3	46700	--	--	--	--	--	--	--
			1.7	46700	--	--	--	--	--	--	--
SEP 28, 71	1310	2	2.1	19900	--	--	--	--	--	--	--
APR 28, 71	1240	4	.5	44600	--	--	--	--	--	--	--
			2.0	47100	--	--	--	--	--	--	--
						LINE 307					
APR 28, 71	1411	3	.5	46300	--	--	--	--	--	--	--
			2.0	46300	--	--	--	--	--	--	--
JUL 14, 71	1350	3	.3	45500	--	--	--	--	--	--	--
			1.8	47500	380.0	1100.0	9600	157	2100	17000	30300
AUG 11, 71	1410	3	.5	45900	--	--	--	--	--	--	--
			2.1	46000	--	--	--	--	--	--	--
SEP 28, 71	1215	3	2.1	25500	--	--	--	--	--	--	--
APR 28, 71	1517	7	.3	44700	--	--	--	--	--	--	--
			5.2	45200	380.0	1200.0	8800	155	2200	16000	28400
						LINE 311					
JUL 14, 71	0855	4	.3	53100	--	--	--	--	--	--	--

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

1971 WATER YEAR--CONTINUED

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICROMHOS) (LAB)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (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 311 CONTINUED					
JUL 14, 71	0855	4	1.1	53100	--	--	--	--	--	--	--
AUG 11, 71	1500	4	.3	32200	--	--	--	--	--	--	--
			1.2	53300	--	--	--	--	--	--	--
SEP 28, 71	1150	4	1.5	20000	--	--	--	--	--	--	--
						LINE 314					
AUG 11, 71	1535	2	.9	54700	460.0	1400.0	11000	148	3000	20000	35900
SEP 28, 71	1030	2	1.8	38500	--	--	--	--	--	--	--
JUL 14, 71	1000	3	.3	56200	--	--	--	--	--	--	--
			1.2	56500	460.0	1400.0	12000	144	2800	21000	36900
						LINE 317					
SEP 28, 71	0935	2	4.3	43100	--	--	--	--	--	--	--
						LINE 320					
AUG 11, 71	1430	2	.3	51500	--	--	--	--	--	--	--
			4.9	54200	--	--	--	--	--	--	--
						LINE 333					
JUL 14, 71	1433	2	.3	46900	--	--	--	--	--	--	--
			2.0	50400	--	--	--	--	--	--	--
AUG 11, 71	1230	2	.5	46300	--	--	--	--	--	--	--
			2.1	46400	--	--	--	--	--	--	--
SEP 28, 71	1110	2	2.4	31800	--	--	--	--	--	--	--
						LINE 354					
AUG 11, 71	1110	2	.5	51400	--	--	--	--	--	--	--
			2.1	51600	--	--	--	--	--	--	--
JUL 14, 71	1604	4	.5	54900	--	--	--	--	--	--	--
			1.8	54400	--	--	--	--	--	--	--
AUG 11, 71	1055	4	.5	50800	--	--	--	--	--	--	--
			2.4	51100	420.0	1300.0	10000	144	2500	18000	33000
SEP 28, 71	0940	4	2.7	39600	--	--	--	--	--	--	--
						LINE 360					
JUL 14, 71	1702	3	.3	53600	--	--	--	--	--	--	--
			7.0	54800	440.0	1400.0	12000	150	2800	20000	36600
AUG 11, 71	1025	3	.3	52600	--	--	--	--	--	--	--
			7.3	52200	--	--	--	--	--	--	--

Table 4-D--Quality of water in the Guadalupe estuary, 1971 water year

Insecticide and herbicide analyses

(Whole water analyses in micrograms per liter; bottom deposits analyses in micrograms per kilogram, dry weight)

Date of Collection	Time	Type of Sample	Insecticides														Herbicides		
			Aldrin	DDD	DDE	DDT	Dieldrin	Endrin	Heptachlor	Heptachlor Epoxide	Lindane	Chlordane	Parathion	Methyl Parathion	Malathion	Diazinon	2,4-D	Silvex	2,4,5-T
									Line 80, Site 2, Victoria Channel										
1970																			
Nov. 20	1515	Water	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1525	Bottom deposits	.0	.8	.9	.0	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	--	--	--
									Line 243, Site 5, San Antonio Bay										
1971																			
Sept. 30	1040	Water	.00	.00	.00	.00	.00	.00	.00	.00	.00	.0	.00	.00	.00	.01	.08	.00	.03
									Line 254, Site 2, San Antonio Bay										
Sept. 30	1115	Water	.00	.00	.00	.00	.00	.00	.00	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00
									Line 274, Site 2, San Antonio Bay										
Sept. 29	1320	Water	.00	.00	.00	.00	.00	.00	.00	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00
									Line 287, Site 4, San Antonio Bay										
1970																			
Nov. 20	1443	Water	.00	.00	.00	.01	.00	.00	.00	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00
		Bottom deposits	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	b/	--	--	--
									Line 287, Site 8, San Antonio Bay										
Nov. 17	1505	Water	.00	.00	.00	.15	.00	.00	.00	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00
		Bottom deposits	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	b/	--	--	--
Nov. 20	1533	Water	.00	.00	.00	.01	.00	.00	.00	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00
		Bottom deposits	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	b/	--	--	--
1971																			
Sept. 29	1205	Water	.00	.00	.00	.00	.00	.00	.00	.00	.00	.0	.00	.00	.00	.01	.00	.00	.03
									Line 302, Site 2, San Antonio Bay										
Sept. 28	1310	Water	.00	.00	.00	.00	.00	.00	.00	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00
									Ayres Dugout										
1970																			
Nov. 16	1820	Water	.00	.00	.00	.00	.00	.00	.00	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00
Nov. 19	1440	Water	.00	.00	.00	.00	.00	.00	.00	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00
									Steamboat Pass										
Nov. 16	0155	Water	.00	.00	.00	.00	.00	.00	.00	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00
	1210	Water	.00	.00	.00	.00	.00	.00	.00	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00

See footnotes at end of table

Table 4-D--Quality of water in the Guadalupe estuary, 1971 water year

Insecticide and herbicide analyses - Continued

(Whole water analyses in micrograms per liter; bottom deposits analyses in micrograms per kilogram, dry weight)

Date of Collection	Time	Type of Sample	Insecticides														Herbicides		
			Aldrin	DDD	DDE	DDT	Dieldrin	Endrin	Heptachlor	Heptachlor Epoxide	Lindane	Chlordane	Parathion	Methyl Parathion	Malathion	Diazinon	2,4-D	Silvex	2,4,5-T
									Line 342, Site 2, Espiritu Santo Bay										
1970																			
Nov. 16	1450	Water	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
									Line 342, Site 3, Espiritu Santo Bay										
Nov. 20	1030	Water	.00	.00	.00	.07	.00	.00	.00	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00
		Bottom deposits	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	b/	--	--	--
									Saluria Bayou										
Nov. 16	2155	Water	.00	.00	.00	.00	.00	.00	.00	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00
Nov. 18	1215	Water	.00	.00	.00	.00	.00	.00	.00	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00

a/ 0 micrograms per liter polychlorinated biphenyl (PCB); detection limit 0.5 micrograms per liter.

b/ Undetermined due to interfering compounds.

Mission-Aransas Estuary

The Mission-Aransas estuary covers an area of about 160 square miles (410 square kilometers) and consists of the tidal parts of Mission River, Aransas River, Copano Creek and other tributaries, Mission Bay, Copano Bay, Aransas Bay, St. Charles Bay, Carlos Bay, part of Redfish Bay, parts of the Intracoastal Waterway, Lydia Ann Channel, and Aransas Pass (Figure 8) Water depth at mlw is less than 2 feet (0.6 meter) in Mission Bay, less than 8 feet (2.4 meters) in Copano Bay, less than 13 feet (4 meters) in Aransas Bay, less than 5 feet (1.5 meters) in St. Charles Bay, 4 feet (1.2 meters) or less in Carlos and Redfish Bays, about 15 feet (5 meters)

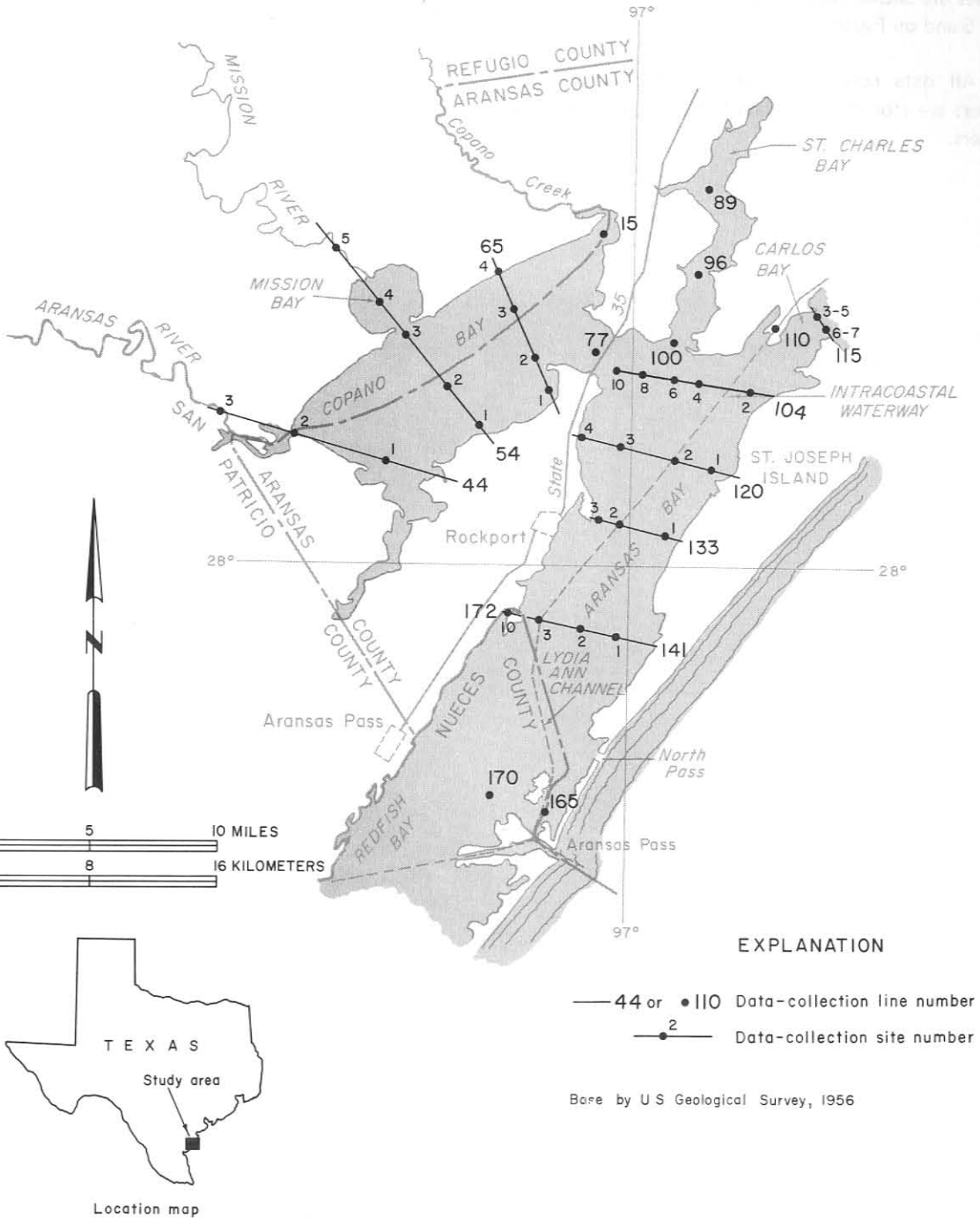


Figure 8.—Data-Collection Sites in the Mission-Aransas Estuary

in the Intracoastal Waterway, about 20 feet (6 meters) in the Lydia Ann Channel, and more than 40 feet (12 meters) in Aransas Pass.

Water-quality data (Table 5) were collected during June and September at most sites shown on Figure 8.

The changes in line numbers to facilitate storage in the Texas Water Oriented Data Bank and to provide opportunity to coordinate data-collection sites among all agencies are shown below. New line numbers are used in Table 5 and on Figure 8.

All data collected prior to the changes in line numbers are stored in the data bank under the new line numbers.

Mission-Aransas Estuary
Change in Line Numbers

OLD	NEW	OLD	NEW
1	15	Carlos Bay	115
4	44	12	120
5	54	13	133
6	65	14	141
7	77	14-site 4	172-site 10
8	89	15	170
9	96	16	165
10	100		
New line	104		
11	110		

TABLE 5A--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1971 WATER YEAR

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 15					
JUN 09, 71	1330	2	.3	42000	28.3	8.2	7.9	120	--	51
			1.8	42000	28.3	8.2	7.9	120	--	--
					LINE 44					
JUN 09, 71	1530	1	.3	38000	28.3	8.2	7.9	116	--	36
			1.1	38000	28.3	8.2	7.9	116	--	--
SEP 15, 71	1115	1	.5	3900	25.8	--	6.7	83	--	--
			1.5	3900	25.8	--	6.7	83	--	--
			3.0	3900	25.7	--	6.9	84	--	--
JUN 09, 71	1507	2	.5	36000	28.3	8.2	8.4	122	--	25
			1.5	36000	28.3	8.2	8.4	122	--	--
SEP 15, 71	1055	2	.5	430	26.0	--	4.7	57	--	5
			1.5	350	25.9	--	4.5	55	--	--
			2.4	290	25.7	--	4.5	54	--	--
					LINE 54					
JUN 09, 71	1410	1	.3	40000	28.3	8.1	8.6	128	--	81
			2.1	40000	28.3	8.1	8.4	125	--	--
JUN 09, 71	1423	2	.5	41000	28.3	8.2	8.2	122	--	38
			2.3	41000	28.3	8.2	8.2	122	--	--
JUN 09, 71	1435	3	.5	36000	28.3	8.1	8.1	117	--	25
			1.7	36000	28.3	8.1	8.2	119	--	--
SEP 15, 71	1025	3	.3	210	25.4	--	4.7	57	--	--
			1.5	210	25.4	--	4.7	57	--	--
			2.4	290	25.3	7.9	4.7	57	--	--
					LINE 65					
JUN 09, 71	1600	1	.3	41000	28.3	8.2	8.4	125	--	69
			2.0	41000	28.3	8.2	8.6	128	--	--
SEP 15, 71	0930	1	.3	2700	25.5	8.0	6.3	77	--	61
			1.8	3400	25.5	8.1	5.7	70	--	--
JUN 09, 71	1250	2	.5	41000	28.3	8.1	7.4	110	--	76
			1.5	41000	28.3	8.1	7.4	110	--	--
			2.6	41000	28.3	8.1	7.4	110	--	--
SEP 15, 71	0940	2	.3	2400	25.5	7.3	6.6	80	--	66
			1.5	2400	25.5	7.6	6.6	80	--	--
			2.4	6000	25.6	7.2	5.4	67	--	--
			3.2	12000	25.6	7.7	5.4	68	--	--
JUN 09, 71	1302	3	.5	41000	28.3	8.1	7.3	109	--	48
			1.5	41000	28.3	8.1	7.4	110	--	--
			2.3	41000	28.3	8.1	7.4	110	--	--
SEP 15, 71	0950	3	.3	2300	25.3	7.8	6.6	80	--	--
			1.5	2300	25.2	7.9	6.5	78	--	--
			3.0	3800	25.2	7.5	1.2	16	--	--
JUN 09, 71	1313	4	.5	42000	28.3	8.2	7.2	109	--	30
			1.7	42000	28.3	8.2	7.2	109	--	--
SEP 15, 71	1000	4	.3	3600	25.5	7.7	6.7	82	--	--

TABLE 5A--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1971 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 65 CONTINUED						
SEP 15, 71	1000	4	1.5	3600	25.5	7.7	6.6	83	--	--
			2.7	3600	25.4	7.9	6.8	83	--	--
				LINE 77						
JUN 08, 71	0831	2	.5	41000	26.8	8.2	5.9	86	--	36
			1.5	41000	26.8	8.1	5.9	86	--	--
			3.0	41000	26.7	8.1	5.9	86	--	--
JUN 09, 71	1235	2	.3	41000	28.3	8.1	7.0	104	--	66
			1.5	41000	28.3	8.0	7.0	104	--	--
			3.0	41000	28.3	8.0	5.9	88	--	--
JUN 09, 71	1613	2	.5	42000	28.3	8.1	7.7	117	--	66
			1.5	42000	28.3	8.1	8.2	124	--	--
			2.9	42000	28.3	8.1	7.5	114	--	--
SEP 15, 71	0910	2	.3	3700	24.8	7.8	6.6	80	--	66
			1.5	3700	24.9	7.9	6.5	78	--	--
			2.4	5500	25.6	7.5	5.2	64	--	--
			3.7	42000	24.6	8.0	3.0	42	--	--
				LINE 89						
JUN 08, 71	0934	2	.3	38000	26.9	8.2	6.0	86	--	41
			1.5	38000	27.0	8.2	7.0	91	--	--
				LINE 96						
JUN 08, 71	0911	2	.3	41000	27.0	8.2	5.9	86	--	36
			1.8	41000	27.0	8.2	6.1	88	--	--
			2.0	41000	27.1	7.5	.0	0	--	--
				LINE 100						
JUN 08, 71	0852	2	.3	42000	26.6	8.2	5.7	84	--	30
			1.5	42000	26.6	8.2	5.5	81	--	--
			3.0	42000	26.6	8.2	4.9	72	--	--
				LINE 110						
JUN 08, 71	1021	2	.3	43000	27.1	8.2	6.9	101	--	33
			1.5	43000	27.0	8.2	7.3	107	--	--
			3.0	43000	27.0	8.2	7.0	103	--	--
			4.1	42000	27.1	8.2	5.8	85	--	--
				LINE 120						
JUN 08, 71	1128	1	.5	42000	27.5	8.2	7.6	112	--	41
			1.5	42000	27.6	8.2	6.9	103	--	--
			3.0	42000	27.6	8.2	7.0	104	--	--
			4.3	42000	27.6	8.2	6.7	100	--	--
JUN 08, 71	1145	2	.5	42000	27.7	8.2	7.7	115	--	30
			1.2	42000	27.6	8.2	7.0	104	--	--
			2.1	42000	27.8	8.2	7.1	106	--	--
JUN 08, 71	1153	3	.5	42000	27.8	8.2	8.5	127	--	46
			1.5	43000	27.7	8.2	8.1	121	--	--
			2.9	42000	27.7	8.2	7.3	109	--	--
JUN 08, 71	1206	4	.5	42000	27.9	8.2	8.3	124	--	43
			1.8	42000	27.9	8.2	8.1	121	--	--

TABLE 5A--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1971 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 133					
JUN 08, 71	1451	1	.5	43000	27.7	8.3	8.7	130	--	188
			1.5	43000	27.8	8.3	8.0	119	--	--
			3.4	43000	27.9	8.3	7.4	110	--	--
JUN 08, 71	1439	2	.5	43000	27.9	8.3	8.1	121	--	84
			1.5	43000	27.9	8.3	8.2	122	--	--
			3.0	43000	28.0	8.3	7.4	110	--	--
			4.0	43000	27.9	8.2	7.4	110	--	--
JUN 08, 71	1429	3	.5	43000	28.4	8.3	8.5	129	--	64
			1.5	43000	28.4	8.3	7.5	114	--	--
					LINE 141					
JUN 08, 71	1512	1	.5	43000	27.9	8.3	8.8	131	--	137
			1.5	43000	28.0	8.3	8.8	131	--	--
			2.7	43000	27.9	8.2	7.4	110	--	--
JUN 08, 71	1524	2	.5	44000	27.7	8.3	8.2	124	--	170
			1.5	44000	27.9	8.3	8.3	126	--	--
			3.0	44000	28.0	8.2	7.9	120	--	--
JUN 08, 71	1534	3	.5	49000	27.9	8.3	8.2	126	--	122
			1.5	49000	27.9	8.3	7.9	122	--	--
			3.8	47000	28.2	8.3	7.9	120	--	--
OCT 14, 70	1530	4	.3	28000	26.3	8.3	9.1	123	--	81
			1.5	28000	26.2	8.3	9.0	122	--	--
			3.0	28000	26.0	8.3	8.7	118	--	--
			5.2	29000	25.8	8.2	8.0	108	--	--
JUN 08, 71	1554	4	.3	47000	28.4	8.7	9.9	152	--	163
			1.5	47000	28.2	8.7	9.9	150	--	--
			3.0	47000	28.0	8.7	8.3	126	--	--
			5.2	47000	28.3	8.7	7.2	111	--	--
					LINE 165					
JUN 08, 71	1707	2	.5	49000	27.5	8.3	8.2	124	--	183
			1.5	49000	27.5	8.3	8.0	121	--	--
			3.0	49000	27.6	8.3	7.9	122	--	--
			4.6	49000	27.7	8.3	7.6	117	--	--
			6.2	49000	27.8	8.3	7.7	118	--	--
SEP 14, 71	0955	2	.3	15000	25.8	8.0	6.8	87	--	104
			1.5	15000	25.8	7.9	6.9	88	--	--
			3.0	16000	25.8	7.9	7.1	91	--	--
			4.6	16000	25.8	8.0	7.1	91	--	--
			6.4	16000	25.8	8.0	7.1	91	--	--
					LINE 170					
JUN 08, 71	1650	2	.3	51000	28.6	8.5	8.2	128	--	79
			1.2	49000	28.5	8.5	8.4	131	--	--
SEP 14, 71	0940	2	.3	19000	25.4	7.8	6.0	77	--	114
			1.5	21000	25.5	7.8	5.8	75	--	--
			3.0	21000	25.6	7.8	5.7	74	--	--
			4.9	21000	25.6	7.6	5.4	70	--	--
SEP 14, 71	0930	5	.3	19000	25.5	7.8	6.3	81	--	114
			1.5	19000	25.6	7.3	6.3	81	--	--
			3.0	21000	25.6	7.0	6.3	82	--	--

TABLE 5A--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1971 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 170 CONTINUED										
SEP 14, 71	0930	5	5.2	24000	26.0	7.2	6.4	84	--	--
SEP 14, 71	0910	8	.3	17000	26.1	7.8	6.2	81	--	--
			1.5	19000	26.1	7.8	5.9	77	--	--
			3.4	21000	26.1	7.7	5.7	75	--	--
SEP 14, 71	0850	10	.3	22000	26.1	8.1	5.8	76	--	97
			1.5	22000	26.2	7.2	5.8	76	--	--
			2.4	23000	26.1	8.0	5.6	74	--	--
			3.0	24000	26.1	8.0	5.6	74	--	--
			4.6	28000	26.2	8.0	5.3	72	--	--
			5.5	28000	26.3	8.0	5.4	73	--	--

TABLE 58--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1971 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-PHORUS ORTHO (P) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	TOTAL ORGANIC CARBON (MG/L)
						LINE 15						
JUN 09, 71	1330	2	.3	4.1	.0	.04	.02	.04	.04	3.2	--	--
			1.8	4.0	.0	.02	.02	.05	.05	2.7	--	--
						LINE 44						
SEP 15, 71	1115	1	3.0	10.0	.2	.04	.07	.14	.19	.6	--	--
JUN 09, 71	1507	2	.5	6.9	.0	.03	.01	.03	.06	3.0	--	--
			1.5	7.0	.0	.04	.02	.09	.09	3.1	--	--
SEP 15, 71	1055	2	2.4	7.0	.2	.15	.08	.06	.08	.6	--	--
						LINE 54						
JUN 09, 71	1410	1	.3	5.3	.0	.04	.00	.03	.03	3.3	--	--
			2.1	5.0	.0	.05	.01	.03	.03	2.8	--	--
JUN 09, 71	1435	3	.5	5.7	.0	.05	.02	.07	.07	3.0	--	--
			1.7	6.0	.0	.05	.02	.09	.10	3.2	--	--
SEP 15, 71	1025	3	2.4	7.2	.3	.07	.03	.10	.10	.5	--	--
						LINE 77						
JUN 08, 71	0831	2	.5	7.6	.0	.03	.01	.02	.04	1.8	--	--
			3.0	9.3	.0	.05	.01	.10	.10	4.4	--	--
SEP 15, 71	0910	2	.3	6.1	.2	.12	.03	.07	.07	.6	--	--
			3.7	5.6	.0	.30	.04	.07	.08	1.0	--	--
						LINE 100						
JUN 08, 71	0852	2	.3	2.9	.0	.01	.01	.02	.05	3.8	--	--
			3.0	3.7	.0	.02	.01	.04	.05	2.0	--	--
						LINE 110						
JUN 08, 71	1021	2	.3	2.7	.0	.01	.02	.07	.07	2.3	--	--
			4.1	2.8	.0	.03	.02	.09	.09	2.3	--	--
						LINE 120						
JUN 08, 71	1128	1	.5	2.8	.0	.01	.01	.03	.03	2.5	--	--
			4.3	3.1	.0	.01	.02	.10	.17	2.0	--	--
JUN 08, 71	1153	3	.5	3.8	.0	.00	.01	.03	.03	2.9	--	--
			2.9	3.3	.0	.04	.02	.09	.09	1.8	--	--
						LINE 133						
JUN 08, 71	1451	1	.5	2.4	.0	.02	.01	.00	.01	2.7	--	--
			3.4	2.1	.0	.04	.01	.01	.02	2.5	--	--
JUN 08, 71	1429	3	.5	2.5	.0	.01	.02	.03	.03	3.8	--	--
			1.5	2.3	.0	.03	.01	.03	.03	2.5	--	--
						LINE 141						
JUN 08, 71	1512	1	.5	2.3	.0	.04	.01	.00	.00	3.1	--	--

TABLE 58--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1971 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)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	TOTAL ORGANIC CARBON (MG/L)
						LINE 141 CONTINUED						
JUN 08, 71	1512	1	2.7	2.6	.0	.04	.02	.03	.03	2.9	--	--
JUN 08, 71	1534	3	.5	1.6	.0	.01	.01	.02	.02	3.3	--	--
			3.8	1.7	.0	.01	.01	.01	.01	3.0	--	--
JUN 08, 71	1554	4	.3	1.1	.0	.02	.01	.02	.02	2.3	--	--
			5.2	1.5	.0	.05	.01	.02	.02	2.7	--	--
						LINE 165						
JUN 08, 71	1707	2	.5	.1	.0	.03	.01	.02	.02	2.5	--	--
			6.2	.3	.0	.02	.00	.02	.05	2.1	--	--
SEP 14, 71	0955	2	.3	5.8	.2	.15	.03	.05	.05	.5	--	--
			3.0	6.0	.2	.21	.03	.04	.05	1.1	--	--
			6.4	5.6	.2	.22	.03	.05	.05	.5	--	--

TABLE 5C--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1971 WATER YEAR

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (LAB)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM + POTASSIUM (NA+K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
						LINE 15					
JUN 09, 71	1330	2	.3	44000	--	--	--	--	--	--	--
			1.8	43700	360.0	1100.0	8600	148	2000	16000	27700
						LINE 44					
SEP 15, 71	1115	1	3.0	380	26.0	1.5	47	90	5	66	202
JUN 09, 71	1507	2	.5	36700	--	--	--	--	--	--	--
			1.5	36800	360.0	880.0	7200	134	1600	13000	23100
SEP 15, 71	1055	2	2.4	390	--	--	--	--	--	--	--
						LINE 54					
JUN 09, 71	1410	1	.3	40800	--	--	--	--	--	--	--
			2.1	41000	--	--	--	--	--	--	--
JUN 09, 71	1435	3	.5	37800	--	--	--	--	--	--	--
			1.7	38000	--	--	--	--	--	--	--
SEP 15, 71	1025	3	2.4	413	--	--	--	--	--	--	--
						LINE 77					
JUN 08, 71	0831	2	.5	38000	--	--	--	--	--	--	--
			3.0	40900	340.0	1200.0	8000	140	1900	15000	--
SEP 15, 71	0910	2	.3	3550	--	--	--	--	--	--	--
			3.7	43100	--	--	--	--	--	--	--
						LINE 100					
JUN 08, 71	0852	2	.3	44200	--	--	--	--	--	--	--
			3.0	42600	--	--	--	--	--	--	--
						LINE 110					
JUN 08, 71	1021	2	.3	44200	--	--	--	--	--	--	--
			4.1	44200	360.0	1100.0	8800	148	2100	16000	28300
						LINE 120					
JUN 08, 71	1128	1	.5	43300	--	--	--	--	--	--	--
			4.3	43300	--	--	--	--	--	--	--
JUN 08, 71	1153	3	.5	42800	--	--	--	--	--	--	--
			2.9	43600	--	--	--	--	--	--	--
						LINE 133					
JUN 08, 71	1451	1	.5	44700	--	--	--	--	--	--	--
			3.4	45300	--	--	--	--	--	--	--
JUN 08, 71	1429	3	.5	45200	--	--	--	--	--	--	--
			1.5	45000	--	--	--	--	--	--	--
						LINE 141					
JUN 08, 71	1512	1	.5	44900	--	--	--	--	--	--	--

TABLE 5C--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1971 WATER YEAR--CONTINUED

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (LAB)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM + POTASSIUM (NA+K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
					LINE 141 CONTINUED						
JUN 08, 71	1512	1	2.7	46100	--	--	--	--	--	--	--
JUN 08, 71	1534	3	.5	49100	--	--	--	--	--	--	--
			3.8	49000	--	--	--	--	--	--	--
JUN 08, 71	1554	4	.3	48300	--	--	--	--	--	--	--
			5.2	48400	--	--	--	--	--	--	--
					LINE 165						
JUN 08, 71	1707	2	.5	49900	--	--	--	--	--	--	--
			6.2	49800	390.0	1300.0	9800	144	2400	18000	31800
SEP 14, 71	0955	2	.3	15500	--	--	--	--	--	--	--
			3.0	16000	--	--	--	--	--	--	--
			6.4	16700	140.0	380.0	3000	70	530	5500	9550

Nueces Estuary

The Nueces estuary covers an area of about 200 square miles (520 square kilometers) and consists of the tidal parts of the Nueces River and other tributaries, Nueces Bay, Tule Lake Channel, Corpus Christi Bay, part of Redfish Bay, Corpus Christi Ship Channel, Aransas Pass, and parts of the Intracoastal Waterway (Figure 9). Water depth at mlw is less than 13 feet (4 meters) in Corpus Christi Bay; less than 3 feet (1 meter) in Nueces Bay; more than 40 feet (12 meters) in Aransas Pass, Corpus Christi Ship Channel, and Tule Lake Channel; and about 15 feet (5 meters) in the Intracoastal Waterway. A part of Redfish Bay is about 10 feet (3 meters) deep, but about one-fourth of it is only 1 foot (0.3 meter) deep (mlw).

Water-quality data (Table 6) were collected during October, May, July, August, and September at most sites shown on Figure 9.

The changes in line numbers to facilitate storage in the Texas Water Oriented Data Bank and to provide opportunity to coordinate data-collection sites among all agencies are shown below. New line numbers are used in Table 6 and on Figure 9.

All data collected prior to the changes in line numbers are stored in the data bank under the new line numbers.

Nueces Estuary Change in Line Numbers

OLD	NEW	OLD	NEW
1	13	13a	127
2	22	13a-site 1	131
3	38	14	142
4	47-site 4	14a	147
4a	47-site 2	15	159
5	53	16	168
6	64	Laguna Madre 1	170
7	71	Laguna Madre 2	183
8	83		
9	93	Gulf of Mexico 17-site 2	901-site 70
10	108		
11	118		
12	122		
12a	205		
13	200		

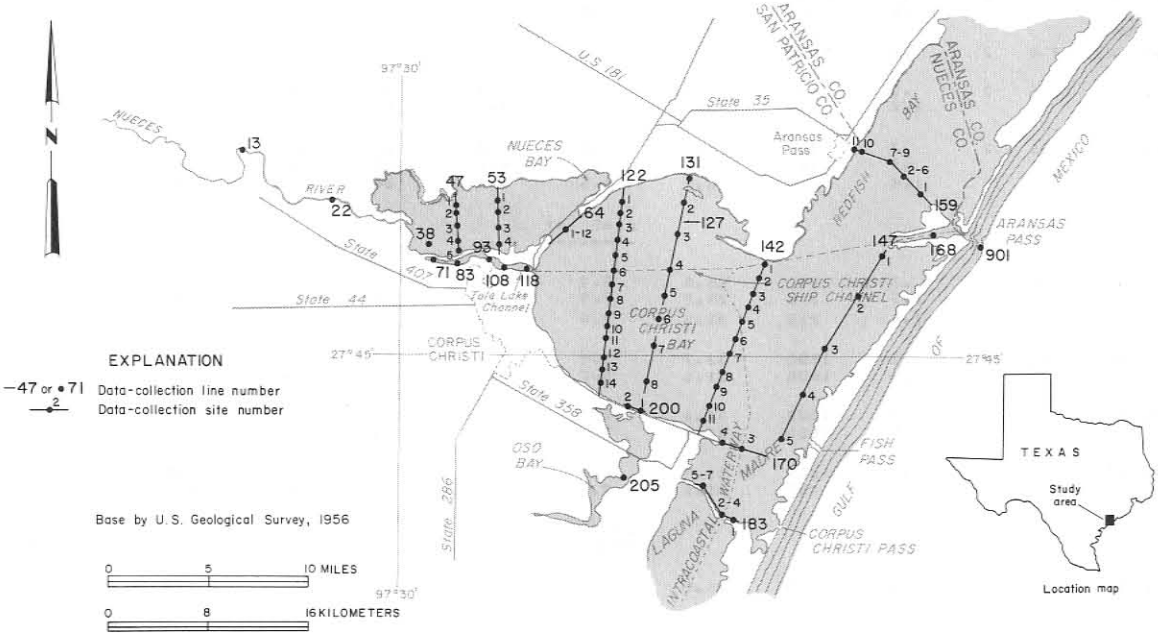


Figure 9.—Data-Collection Sites in the Nueces Estuary

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

1971 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 13					
OCT 12, 70	1545	2	.3	1400	27.3	--	7.8	98	--	53
			1.5	2300	26.1	--	5.7	70	--	--
			2.4	2700	26.3	--	4.3	53	--	--
			4.0	6400	27.1	7.4	1.8	23	--	--
MAY 05, 71	0835	2	.3	1900	25.4	8.4	7.8	95	--	58
			1.5	1900	25.4	8.4	7.7	94	--	--
			3.0	2100	25.3	8.3	7.7	94	--	--
JUL 19, 71	1135	2	.3	410	31.2	7.1	3.5	47	--	43
			1.5	410	30.6	7.1	3.5	47	--	--
			3.0	410	31.1	7.1	3.5	47	--	--
			4.6	400	31.1	7.1	3.5	47	--	--
			6.1	410	31.4	7.1	3.6	48	--	--
					LINE 22					
OCT 12, 70	1640	2	.0	5000	26.1	--	9.5	117	--	30
			1.5	5100	25.7	--	7.8	96	--	--
			2.4	11500	25.0	8.4	1.7	21	--	--
			.3	5000	26.1	--	9.5	117	--	30
			1.5	5100	25.7	--	7.8	96	--	--
			2.4	11500	25.0	8.4	1.7	21	--	--
MAY 05, 71	0915	2	.3	34000	25.1	8.7	5.4	73	--	33
			1.5	37000	25.2	8.5	4.4	59	--	--
			2.4	53000	25.7	8.1	.3	4	--	--
JUL 19, 71	1230	2	.3	410	30.9	7.2	4.0	53	--	51
			1.5	410	30.7	7.2	4.0	53	--	--
			3.0	410	30.9	7.2	4.1	55	--	--
					LINE 38					
OCT 12, 70	1700	2	.3	8000	26.4	--	15.0	188	--	24
			.8	9000	26.5	9.0	12.8	160	--	--
MAY 05, 71	0950	2	.5	54000	24.6	8.2	2.7	40	--	--
JUL 19, 71	1315	2	.3	560	32.6	7.3	4.6	63	--	30
			1.2	530	33.0	7.3	4.6	63	--	--
SEP 14, 71	1035	2	.3	220	25.9	7.5	5.6	68	--	10
			.9	220	25.9	7.6	5.6	68	--	--
			1.8	220	26.0	7.5	5.6	68	--	--
					LINE 47					
SEP 14, 71	1100	2	.3	210	25.8	7.9	5.8	71	--	13
			1.5	210	25.9	7.9	6.0	73	--	--
			2.4	210	25.8	7.9	6.2	76	--	--
JUN 20, 71	1045	3	.3	1500	31.7	7.9	7.7	104	--	30
			.6	1600	31.6	8.0	7.8	105	--	--
JUN 20, 71	1050	4	.3	1300	31.1	7.9	7.6	103	--	30
			1.5	1500	31.9	7.9	7.0	93	--	--
JUN 20, 71	1100	5	.3	1000	31.9	7.8	7.2	97	--	28
			.9	950	31.5	7.8	7.2	97	--	--
					LINE 53					
OCT 14, 70	1210	1	.3	38000	25.5	8.4	7.3	101	--	58

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

1971 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 53 CONTINUED						
OCT 14, 70	1210	1	1.2	40000	25.2	8.4	6.6	92	--	--
JUL 20, 71	1025	1	.3	3700	30.4	8.2	7.5	100	--	33
			.9	3700	30.9	8.2	7.2	97	--	--
AUG 23, 71	1628	1	.3	1230	30.4	8.3	7.2	95	--	18
			.9	1260	30.4	8.4	7.3	96	--	--
SEP 03, 71	0955	1	.3	1200	28.9	8.3	7.4	95	--	28
			.9	1000	28.8	8.3	7.6	97	--	--
SEP 14, 71	1215	1	.3	250	26.3	7.6	7.0	85	--	13
			.9	250	26.3	7.6	6.8	83	--	--
			1.5	250	26.3	7.7	7.0	85	--	--
OCT 14, 70	1215	2	.3	41000	26.5	8.5	7.8	111	--	56
			1.2	41000	25.2	8.4	6.7	93	--	--
JUL 20, 71	1015	2	.3	2500	29.5	8.1	7.2	95	--	33
			1.2	2500	28.8	8.1	6.7	87	--	--
AUG 23, 71	1613	2	.3	540	30.2	8.2	7.6	100	--	30
			1.2	530	30.3	8.2	7.7	101	--	--
SEP 03, 71	0940	2	.3	720	28.8	8.2	7.4	95	--	25
			.9	720	28.7	8.1	7.6	97	--	--
			1.5	720	28.7	8.2	7.9	101	--	--
SEP 14, 71	1200	2	.3	340	26.2	7.7	7.1	87	--	13
			.9	340	26.1	7.6	6.9	84	--	--
			1.8	340	26.1	7.7	7.1	87	--	--
OCT 14, 70	1240	3	.3	41000	27.6	8.5	7.7	113	--	--
			1.2	40000	27.2	8.4	6.7	97	--	--
JUL 20, 71	1005	3	.3	2200	29.3	8.2	7.2	95	--	--
			1.2	2200	29.3	8.1	6.8	89	--	--
AUG 23, 71	1600	3	.3	1500	30.1	8.3	7.8	103	--	30
			1.2	2800	30.2	8.3	7.4	99	--	--
SEP 03, 71	0945	3	.3	480	28.7	8.1	7.2	92	--	18
			.9	480	28.7	8.2	7.2	92	--	--
			1.5	480	28.7	8.2	7.3	94	--	--
SEP 14, 71	1140	3	.3	340	26.1	7.6	7.0	85	--	13
			.9	340	26.1	7.7	7.0	85	--	--
			1.5	340	26.1	7.7	7.2	88	--	--
OCT 14, 70	1245	4	.3	41000	27.2	8.5	8.0	116	--	61
			1.2	43000	26.7	8.4	6.8	100	--	--
JUL 20, 71	1000	4	.3	1300	29.8	8.3	7.3	96	--	--
			1.1	10000	30.1	8.1	5.9	80	--	--
AUG 23, 71	1545	4	.3	14000	30.8	8.2	7.9	110	--	25
			1.7	18000	31.3	8.2	8.0	113	--	--
SEP 03, 71	0930	4	.3	500	28.7	8.0	6.9	88	--	36
			.9	500	28.7	8.0	7.1	91	--	--
			1.5	640	28.7	8.1	7.2	92	--	--
SEP 14, 71	1135	4	.3	260	26.0	7.7	6.4	78	--	13
			.9	260	26.0	7.7	6.4	78	--	--
			1.5	340	26.0	7.6	6.6	80	--	--
OCT 14, 70	1305	5	.3	41000	27.9	8.5	8.2	121	--	48
			1.2	43000	27.7	8.4	7.1	106	--	--
JUL 20, 71	0950	5	.3	1900	29.3	8.3	7.7	105	--	--

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

1971 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 53 CONTINUED						
JUL 20, 71	0950	5	.8	22000	30.4	7.8	5.8	83	--	--
SEP 03, 71	0920	5	.3	520	28.6	8.2	7.3	94	--	28
			.6	600	28.6	8.1	7.2	92	--	--
			.9	9400	28.9	8.1	7.0	92	--	--
SEP 14, 71	1125	5	.3	380	25.8	7.8	6.5	79	--	10
			.9	380	25.8	7.7	6.6	80	--	--
			1.8	380	25.8	7.7	6.8	83	--	--
				LINE 64						
OCT 14, 70	0910	1	.3	43000	23.3	8.3	6.8	93	--	46
			1.5	43000	23.3	8.3	6.7	92	--	--
			2.4	43000	23.4	8.3	6.8	93	--	--
			3.7	43000	23.4	8.3	7.0	96	--	--
JUL 20, 71	0855	1	.3	10000	28.2	8.1	6.6	86	--	38
			.8	11000	28.1	8.1	6.8	88	--	--
AUG 23, 71	1730	1	.3	1700	31.4	8.5	7.8	104	--	18
			1.1	1900	31.4	8.7	7.9	107	--	--
SEP 03, 71	1030	1	.3	2500	28.9	8.3	7.5	97	--	23
			.9	2400	29.0	8.3	7.6	99	--	--
SEP 14, 71	1320	1	.3	2600	27.0	7.8	7.3	91	--	30
			1.2	2700	27.1	7.7	7.5	94	--	--
OCT 14, 70	0915	6	.3	43000	23.4	8.3	6.7	92	--	--
			1.5	43000	23.4	8.3	6.6	90	--	--
			3.0	43000	23.4	8.3	6.5	89	--	--
			4.6	43000	23.4	8.3	6.5	89	--	--
			6.7	43000	23.4	8.3	6.5	89	--	--
JUL 20, 71	0915	6	.3	21000	30.0	8.0	5.8	82	--	51
			.9	33000	30.6	7.8	1.6	24	--	--
			1.5	37000	30.2	7.8	1.6	24	--	--
			2.4	36000	29.6	7.8	1.5	22	--	--
SEP 03, 71	1045	6	.3	1200	29.0	8.3	7.5	96	--	28
			.9	1200	29.0	8.4	7.4	95	--	--
			1.5	7000	29.1	8.2	5.8	76	--	--
			2.1	14000	29.6	8.1	4.7	64	--	--
SEP 14, 71	1337	6	.3	650	27.0	8.1	7.1	88	--	18
			.9	990	27.0	8.0	7.2	89	--	--
			1.5	11000	27.0	7.9	7.2	91	--	--
			3.0	38000	27.1	7.8	6.7	96	--	--
OCT 14, 70	0930	9	.3	41000	23.2	8.3	5.7	77	--	46
			.9	46000	23.5	8.3	5.6	78	--	--
MAY 06, 71	1325	9	.5	51000	25.4	8.1	7.0	103	--	13
			1.5	51000	25.3	8.1	6.4	94	--	--
			3.0	51000	25.2	8.1	6.5	96	--	--
			4.9	51000	25.6	8.0	7.0	104	--	--
JUL 19, 71	1428	9	.5	33000	30.4	8.4	6.5	97	--	66
			.9	33000	30.4	8.4	6.2	92	--	--
			1.5	33000	30.4	8.4	6.3	94	--	--
			2.4	36000	30.2	8.2	4.3	65	--	--
			3.0	47000	30.5	8.1	1.6	26	--	--
			4.6	50000	30.6	8.1	1.3	21	--	--
JUL 20, 71	0825	9	.3	18000	28.5	8.1	6.2	84	--	61
			1.5	22000	28.8	8.1	5.7	79	--	--
			3.0	39000	29.4	7.9	2.4	36	--	--

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

1971 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 64 CONTINUED					
JUL 20, 71	0825	9	4.6	46000	29.2	7.8	3.1	48	--	--
AUG 23, 71	1700	9	.3	4500	30.9	8.5	7.5	101	--	33
			1.5	8500	30.4	8.2	5.5	74	--	--
			3.0	28000	30.6	8.1	.9	13	--	--
			4.9	39000	30.4	8.2	2.3	35	--	--
AUG 24, 71	1205	9	.3	2600	31.1	8.4	8.3	112	--	43
			.9	2700	30.8	8.3	7.6	103	--	--
			1.5	3600	30.7	8.3	7.1	96	--	--
			2.1	9900	30.3	8.1	5.4	73	--	--
			3.0	35000	31.6	8.1	1.9	30	--	--
			5.2	41000	32.1	8.1	2.4	38	--	--
AUG 27, 71	1035	9	.3	1700	31.1	8.1	6.6	88	--	25
			.9	4200	30.9	8.1	5.9	80	--	--
			1.5	23000	30.9	8.1	4.0	58	--	--
			2.1	34000	30.9	8.1	2.5	38	--	--
			3.0	42000	30.8	8.1	2.2	35	--	--
			4.6	45000	30.8	8.0	.7	11	--	--
SEP 03, 71	1100	9	.3	3900	29.0	8.4	7.3	95	--	30
			.9	3900	29.0	8.4	7.2	94	--	--
			1.5	4600	29.0	8.4	7.1	92	--	--
			2.1	12000	29.4	8.2	6.2	84	--	--
			3.0	18000	30.2	8.3	5.1	71	--	--
			4.6	19000	30.2	8.3	4.5	62	--	--
			5.5	19000	30.3	8.2	4.8	67	--	--
SEP 08, 71	1355	9	.6	31000	29.7	8.2	7.7	113	--	61
			1.5	33000	29.5	8.1	5.4	79	--	--
			3.0	35000	29.7	8.0	3.2	48	--	--
			4.6	45000	29.9	7.9	1.5	24	--	--
SEP 14, 71	1350	9	.3	1300	26.8	8.1	6.8	84	--	18
			1.5	6500	26.9	8.0	6.8	86	--	--
			3.7	38000	26.9	8.0	7.5	107	--	--
			5.2	38000	26.9	7.8	6.8	97	--	--
OCT 14, 70	0950	12	.3	43000	24.1	8.3	5.9	82	--	--
			.8	44000	24.1	8.3	5.7	80	--	--
JUL 20, 71	0800	12	.3	14000	28.0	8.1	6.1	80	--	56
			1.5	23000	28.7	7.9	4.6	64	--	--
			2.4	34000	29.1	7.9	3.6	52	--	--
			3.7	34000	28.8	7.9	3.7	54	--	--
AUG 23, 71	1800	12	.3	3400	31.1	8.4	7.1	96	--	30
			1.5	8900	30.9	8.2	6.0	82	--	--
SEP 03, 71	1115	12	.3	2700	29.4	8.3	7.5	99	--	30
			.9	2800	29.3	8.4	7.5	99	--	--
			1.5	3000	29.2	8.4	7.5	97	--	--
			2.1	3600	29.0	8.3	7.1	92	--	--
			3.4	14000	30.2	8.1	4.1	56	--	--
SEP 14, 71	1410	12	.3	2200	26.7	--	7.1	89	--	18
			.9	2100	26.7	--	7.1	89	--	--
			1.5	2400	26.7	7.9	7.1	89	--	--
			3.0	3200	26.7	7.9	7.0	88	--	--
					LINE 71					
OCT 14, 70	1100	2	.3	46000	27.6	7.6	1.9	29	--	147
			1.5	46000	27.5	7.6	1.6	24	--	--
			3.0	47000	27.3	7.5	.9	13	--	--
			4.6	47000	27.1	7.5	.4	6	--	--
MAY 06, 71	1435	2	.3	51000	26.7	7.7	4.8	73	--	119

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

1971 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 71 CONTINUED					
MAY 06, 71	1435	2	1.5	51000	26.7	7.7	4.7	71	--	--
			3.0	51000	26.5	7.6	4.0	61	--	--
			6.1	51000	26.4	7.6	4.0	60	--	--
			9.1	51000	26.4	7.6	3.9	58	--	--
			12.5	51000	26.3	7.6	3.1	46	--	--
					LINE 83					
OCT 14, 70	1120	2	.3	46000	26.5	7.7	7.7	113	--	91
			1.5	46000	26.4	7.7	7.3	107	--	--
			3.0	47000	26.2	7.4	3.0	44	--	--
			4.6	47000	26.2	7.4	2.2	32	--	--
			6.1	47000	26.4	7.4	1.6	24	--	--
			12.2	49000	26.5	7.4	.0	0	--	--
					LINE 93					
OCT 14, 70	1035	2	.3	47000	27.4	7.8	5.2	78	--	122
			1.5	47000	27.1	7.8	4.5	67	--	--
			3.0	47000	26.8	7.7	3.8	57	--	--
			4.6	46000	26.5	7.7	3.1	46	--	--
			6.1	47000	26.5	7.6	2.6	38	--	--
			13.4	49000	25.8	7.8	.0	0	--	--
MAY 06, 71	1510	2	.3	50000	26.8	7.9	6.4	97	--	127
			1.5	50000	26.7	7.9	6.0	91	--	--
			3.0	50000	26.4	7.8	5.5	82	--	--
			6.1	50000	26.3	7.7	4.0	60	--	--
			9.1	50000	26.0	7.6	3.3	49	--	--
			13.1	49000	25.6	7.9	3.8	57	--	--
SEP 14, 71	1530	2	.3	23000	27.4	--	8.6	116	--	99
			1.5	24000	27.2	--	8.3	111	--	--
			3.0	28000	27.0	--	5.4	74	--	--
			6.1	38000	26.8	--	4.7	67	--	--
			9.1	40000	26.7	--	5.1	74	--	--
			12.2	42000	26.8	--	4.5	66	--	--
					LINE 108					
OCT 14, 70	1025	2	.3	46000	26.1	8.2	7.8	115	--	122
			1.5	46000	26.0	8.1	6.0	88	--	--
			3.0	46000	26.0	8.1	5.1	75	--	--
			6.1	47000	25.9	8.0	3.9	57	--	--
			13.1	49000	25.3	8.0	1.2	18	--	--
SEP 14, 71	1515	2	.3	18000	27.3	--	8.6	115	--	91
			1.5	27000	27.2	--	6.6	90	--	--
			3.0	31000	27.1	--	5.1	71	--	--
			6.1	39000	26.8	--	6.9	99	--	--
			9.1	40000	26.6	--	5.8	84	--	--
			12.2	42000	26.6	--	4.5	66	--	--
					LINE 118					
OCT 14, 70	1005	2	.3	44000	25.0	8.3	8.5	121	--	102
			1.5	46000	25.0	8.2	5.6	80	--	--
			3.0	46000	25.0	8.1	4.9	70	--	--
			4.6	46000	25.0	8.1	4.7	67	--	--
			6.1	46000	24.9	8.1	4.6	66	--	--
			9.1	46000	24.8	8.1	4.4	63	--	--
			13.3	46000	24.7	8.1	3.8	54	--	--
MAY 06, 71	1340	2	.3	51000	25.4	8.0	6.5	96	--	84
			1.5	51000	25.4	8.0	6.6	97	--	--

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

1971 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 118 CONTINUED					
MAY 06, 71	1340	2	3.0	51000	25.4	8.0	6.6	97	--	--
			6.1	52000	25.3	8.0	6.1	91	--	--
			9.1	52000	25.3	8.1	6.2	92	--	--
			14.0	51000	25.3	8.1	6.5	96	--	--
SEP 14, 71	1445	2	.3	11000	27.1	--	8.1	103	--	84
			1.5	27000	27.2	--	5.6	77	--	--
			3.0	32000	27.0	--	4.9	68	--	--
			6.1	39000	26.7	--	6.6	94	--	--
			9.1	40000	26.6	--	5.7	83	--	--
			12.2	42000	26.6	--	5.2	76	--	--
					LINE 122					
OCT 13, 70	1155	2	.3	44000	23.7	8.3	7.8	108	--	79
			1.5	44000	23.3	8.3	8.4	117	--	--
MAY 06, 71	1300	2	.5	51000	25.1	8.1	6.7	98	--	24
			1.5	51000	25.1	8.1	6.7	98	--	--
			3.7	51000	25.0	8.1	6.4	94	--	--
JUL 19, 71	1302	2	.5	26000	30.1	8.4	7.6	109	--	112
			.9	26000	30.0	8.5	7.5	107	--	--
			1.5	45000	29.6	8.3	5.2	82	--	--
			2.4	54000	29.8	8.2	2.0	33	--	--
			3.4	54000	29.8	8.2	1.8	30	--	--
AUG 24, 71	1112	2	.3	11000	30.9	8.4	8.2	112	--	91
			.6	27000	30.9	8.3	7.0	10	--	--
			.9	33000	31.1	8.2	6.7	102	--	--
			1.5	36000	31.2	8.2	4.2	65	--	--
			3.7	47000	30.9	8.0	1.6	26	--	--
AUG 27, 71	1053	2	.3	33000	32.0	8.4	8.6	132	--	150
			.9	36000	31.7	8.4	8.8	138	--	--
			1.5	39000	31.4	8.4	8.3	128	--	--
			2.1	44000	31.1	8.2	5.7	92	--	--
			3.7	46000	31.0	7.9	1.3	21	--	--
SEP 03, 71	1035	2	.6	13000	30.0	8.4	6.9	95	--	76
			1.5	13000	30.0	8.4	6.9	95	--	--
			2.4	26000	29.9	8.4	5.8	83	--	--
			3.7	31000	29.9	8.2	4.7	69	--	--
SEP 08, 71	1415	2	.6	28000	30.7	8.2	7.1	104	--	91
			1.5	28000	30.6	8.2	7.3	107	--	--
			2.4	29000	30.4	8.2	7.4	107	--	--
			3.4	31000	29.8	8.1	6.1	90	--	--
SEP 14, 71	1420	2	.5	38000	27.2	8.1	9.2	131	--	112
			1.5	38000	27.2	8.1	9.0	129	--	--
			4.0	38000	27.2	8.0	7.8	111	--	--
OCT 13, 70	1145	4	.3	44000	23.6	8.3	8.2	114	--	86
			1.5	44000	23.5	8.3	7.7	107	--	--
			2.4	44000	23.5	8.3	6.5	90	--	--
MAY 06, 71	1245	4	.5	51000	25.0	8.1	6.7	98	--	30
			1.5	51000	24.9	8.1	6.7	98	--	--
			3.7	52000	24.9	8.1	6.8	101	--	--
JUL 19, 71	1317	4	.5	29000	29.9	8.4	7.5	109	--	94
			.9	33000	29.9	8.4	7.0	104	--	--
			1.5	53000	29.9	8.3	5.0	82	--	--
			2.4	53000	29.9	8.2	2.1	34	--	--
			3.8	53000	29.9	8.0	.3	5	--	--
AUG 24, 71	1049	4	.3	4500	30.9	8.8	8.2	111	--	71

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

1971 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 122 CONTINUED						
AUG 24, 71	1049	4	.6	27000	30.7	8.6	7.1	104	--	--
			.9	35000	30.6	8.6	6.6	102	--	--
			1.5	40000	30.7	8.5	5.9	92	--	--
			3.0	45000	30.8	8.3	2.1	34	--	--
			4.0	45000	30.7	8.3	.7	11	--	--
AUG 27, 71	1014	4	.3	14000	31.1	8.4	7.1	99	--	58
			.9	31000	31.4	8.4	7.2	107	--	--
			1.5	39000	31.1	8.5	7.4	114	--	--
			2.1	44000	31.0	8.4	6.5	105	--	--
			3.0	47000	30.5	8.2	1.6	26	--	--
			4.3	47000	30.5	8.0	.4	6	--	--
SEP 03, 71	1025	4	.6	16000	30.0	8.4	6.9	95	--	76
			1.5	16000	30.0	8.4	6.9	95	--	--
			2.4	24000	29.9	8.3	6.1	87	--	--
			3.7	31000	30.0	8.2	2.8	41	--	--
SEP 08, 71	1340	4	.6	44000	30.6	8.2	7.0	113	--	132
			1.5	45000	30.5	8.2	7.1	115	--	--
			3.0	45000	30.4	8.2	6.5	103	--	--
			3.7	46000	30.2	8.1	5.2	83	--	--
SEP 14, 71	1410	4	.5	33000	27.0	8.1	8.4	118	--	112
			1.5	33000	27.0	8.1	8.2	115	--	--
			3.0	35000	27.0	8.0	7.8	110	--	--
			4.9	38000	27.0	8.0	6.6	94	--	--
OCT 13, 70	1125	6	.3	46000	23.9	8.3	7.7	108	--	91
			1.5	46000	23.8	8.3	7.7	108	--	--
			3.0	46000	23.7	8.3	7.4	103	--	--
			4.6	46000	23.6	8.3	7.1	99	--	--
			6.1	46000	23.6	8.2	6.6	92	--	--
			11.3	46000	23.6	8.2	6.1	85	--	--
MAY 06, 71	1230	6	.5	52000	24.9	8.2	6.2	92	--	23
			1.5	53000	24.9	8.1	6.2	92	--	--
			3.0	53000	24.9	8.1	6.3	94	--	--
			6.1	53000	24.9	8.1	6.9	103	--	--
			9.1	53000	24.9	8.1	6.6	98	--	--
			10.7	53000	24.9	8.1	6.9	103	--	--
JUL 19, 71	1335	6	.5	39000	30.1	8.5	6.8	103	--	74
			1.5	52000	30.2	8.2	3.9	64	--	--
			3.0	57000	29.6	8.2	3.9	65	--	--
			6.1	62000	29.6	8.2	5.4	92	--	--
			9.1	62000	29.6	8.2	4.2	71	--	--
			12.3	61000	29.8	8.1	3.3	57	--	--
AUG 24, 71	1027	6	.3	5000	30.4	8.7	8.1	108	--	76
			.6	21000	30.6	8.6	7.3	104	--	--
			.9	36000	30.7	8.6	6.4	98	--	--
			1.5	42000	30.5	8.5	5.4	84	--	--
			3.0	45000	30.5	8.4	3.5	56	--	--
			6.1	53000	30.5	8.4	3.1	52	--	--
			9.1	56000	30.6	8.1	.0	0	--	--
			12.8	57000	30.4	8.1	.0	0	--	--
AUG 27, 71	0954	6	.3	4700	30.5	8.2	7.3	97	--	109
			.9	18000	31.2	8.3	6.9	97	--	--
			1.5	37000	30.8	8.2	3.2	49	--	--
			2.1	44000	30.7	8.4	4.5	73	--	--
			3.0	47000	30.3	8.1	.0	0	--	--
			6.1	53000	30.0	8.2	1.7	28	--	--
			9.1	53000	29.9	8.0	.0	0	--	--
			13.7	55000	29.6	7.7	.0	0	--	--
SEP 03, 71	1005	6	.6	21000	30.0	8.4	6.7	94	--	97
			1.5	22000	29.7	8.4	6.6	93	--	--

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

1971 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 122 CONTINUED										
SEP 03, 71	1005	6	3.0	42000	29.6	8.3	5.2	81	--	--
			4.6	49000	30.6	8.0	.4	7	--	--
			6.1	51000	30.5	8.0	.3	5	--	--
			9.1	51000	30.5	8.0	.2	3	--	--
			13.7	51000	30.5	7.9	.0	0	--	--
SEP 08, 71	1320	6	.6	45000	30.5	8.2	6.3	102	--	84
			1.5	45000	30.4	8.2	6.3	100	--	--
			3.0	45000	29.9	8.2	5.8	92	--	--
			4.6	47000	29.9	8.0	3.7	60	--	--
			7.6	47000	29.9	7.9	5.0	81	--	--
			10.7	47000	29.9	7.9	5.0	81	--	--
			13.4	47000	29.9	7.8	4.4	71	--	--
SEP 14, 71	1355	6	.5	10000	27.0	8.0	7.3	92	--	38
			1.5	26000	26.8	8.0	7.2	97	--	--
			3.0	33000	26.8	8.0	6.8	96	--	--
			4.6	38000	26.9	8.0	6.5	93	--	--
			6.1	38000	26.8	8.0	6.1	87	--	--
			9.1	38000	26.6	8.0	5.9	84	--	--
			14.3	40000	26.4	7.9	4.4	63	--	--
OCT 13, 70	1225	8	.3	46000	23.7	8.3	7.3	101	--	112
			1.5	44000	23.6	8.3	7.5	104	--	--
			2.4	44000	23.6	8.2	6.7	93	--	--
			4.0	44000	23.6	8.2	6.3	88	--	--
JUL 19, 71	1350	8	.5	52000	30.2	8.4	7.6	125	--	91
			.9	52000	30.2	8.4	7.6	125	--	--
			1.5	53000	29.8	8.3	6.9	113	--	--
			2.4	54000	29.6	8.2	3.9	64	--	--
			3.7	54000	29.8	8.2	2.4	40	--	--
AUG 27, 71	0943	8	.3	7400	30.3	8.1	7.4	100	--	74
			.6	7400	30.3	8.2	7.4	100	--	--
			.9	8900	30.5	8.2	7.0	95	--	--
			1.5	36000	30.6	8.2	3.1	48	--	--
			3.7	47000	30.2	8.1	.0	0	--	--
SEP 03, 71	0955	8	.5	26000	29.7	8.3	6.1	87	--	71
			1.5	27000	29.7	8.3	5.9	86	--	--
			3.7	28000	29.7	8.3	5.6	81	--	--
SEP 08, 71	1315	8	.6	27000	30.4	8.2	7.1	103	--	99
			1.5	27000	30.3	8.2	7.3	106	--	--
			3.0	27000	30.3	8.2	7.0	101	--	--
SEP 14, 71	1340	9	.5	15000	27.0	8.0	6.9	90	--	46
			1.5	22000	26.8	8.0	6.9	92	--	--
			3.0	31000	26.9	8.0	7.6	106	--	--
			4.6	38000	27.0	8.0	4.8	69	--	--
OCT 13, 70	1240	10	.3	46000	24.0	8.3	8.4	113	--	107
			1.5	46000	23.7	8.3	8.4	117	--	--
			2.7	46000	23.5	8.3	7.3	101	--	--
MAY 06, 71	1215	10	.5	53000	24.9	8.2	6.5	97	--	33
			1.5	53000	24.9	8.2	6.5	97	--	--
			4.0	54000	24.9	8.2	6.8	103	--	--
JUL 19, 71	1359	10	.5	53000	30.2	8.4	5.7	93	--	109
			.9	53000	30.0	8.4	6.4	105	--	--
			1.5	56000	29.9	8.4	6.3	105	--	--
			3.0	57000	29.6	8.2	4.4	73	--	--
			4.0	57000	29.8	8.2	3.4	58	--	--
AUG 24, 71	1140	10	.3	15000	30.9	8.3	8.0	111	--	119
			.9	38000	30.7	8.3	7.2	111	--	--
			1.5	44000	30.4	8.2	5.9	94	--	--

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

1971 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 122 CONTINUED						
AUG 24, 71	1140	10	3.7	47000	30.2	8.2	5.4	87	--	--
SEP 08, 71	1305	10	.6	27000	30.5	8.2	7.3	107	--	130
			1.5	27000	30.4	8.2	7.1	103	--	--
			3.0	27000	30.3	8.2	6.9	100	--	--
OCT 13, 70	1250	12	.3	44000	23.9	8.4	8.9	125	--	94
			1.5	44000	23.8	8.4	9.0	127	--	--
			2.4	44000	23.6	8.3	7.6	106	--	--
			4.0	44000	23.6	8.2	4.9	68	--	--
JUL 19, 71	1408	12	.5	54000	30.3	8.4	6.3	105	--	107
			.9	54000	30.3	8.4	6.2	103	--	--
			1.8	56000	30.2	8.4	5.5	92	--	--
AUG 27, 71	0930	12	.3	18000	30.7	8.4	7.0	99	--	111
			.9	20000	30.9	8.3	6.3	90	--	--
			1.5	33000	30.9	8.2	3.5	53	--	--
			3.0	47000	30.3	8.1	.2	32	--	--
SEP 03, 71	0945	12	.5	24000	29.8	8.4	6.4	91	--	91
			1.5	25000	29.8	8.3	6.1	87	--	--
			3.4	26000	29.6	8.3	5.5	79	--	--
SEP 08, 71	1235	12	.6	26000	30.4	8.2	7.1	101	--	97
			1.5	26000	29.9	8.2	7.2	103	--	--
			2.4	26000	29.8	8.2	7.6	109	--	--
			3.4	26000	29.7	8.2	6.9	99	--	--
SEP 14, 71	1330	12	.5	13000	26.9	8.0	7.4	95	--	74
			1.5	15000	26.8	7.9	6.8	88	--	--
			3.7	34000	26.7	7.9	4.8	68	--	--
OCT 13, 70	1300	14	.3	44000	24.4	8.4	9.3	131	--	86
			1.5	44000	24.2	8.4	9.3	131	--	--
			2.7	44000	23.9	8.4	8.8	124	--	--
MAY 06, 71	1205	14	.5	56000	24.9	8.2	6.4	97	--	30
			1.5	56000	24.9	8.2	6.5	98	--	--
			3.5	69000	24.9	8.1	6.3	103	--	--
				LINE 142						
OCT 13, 70	1050	1	.3	44000	24.4	8.2	7.5	106	--	84
			1.5	44000	24.4	8.2	7.4	104	--	--
			3.0	44000	24.0	8.2	7.4	104	--	--
			4.6	44000	23.4	8.2	7.3	101	--	--
			6.1	44000	23.6	8.2	7.0	97	--	--
			9.1	44000	23.6	8.2	6.8	94	--	--
			14.0	46000	23.8	8.2	6.7	94	--	--
MAY 06, 71	0820	1	.3	50000	24.7	8.2	6.3	91	--	71
			1.5	50000	24.7	8.2	6.2	90	--	--
			3.0	50000	24.8	8.2	6.1	90	--	--
			6.1	52000	24.9	8.2	5.6	84	--	--
			9.1	52000	24.9	8.1	5.7	85	--	--
			12.8	52000	24.9	8.1	6.5	97	--	--
MAY 06, 71	1620	1	.3	50000	25.8	8.2	7.3	109	--	53
			1.5	51000	25.6	8.2	6.8	101	--	--
			6.1	51000	25.5	8.1	6.6	97	--	--
			13.1	51000	25.6	8.1	6.6	98	--	--
JUL 19, 71	1157	1	.3	57000	29.5	8.2	5.3	88	--	152
			1.5	57000	29.3	8.2	5.3	88	--	--
			3.0	60000	29.2	8.2	4.8	79	--	--
			6.1	60000	29.4	8.2	4.9	82	--	--
			9.1	61000	29.4	8.2	4.8	81	--	--

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

1971 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 142 CONTINUED						
JUL 19, 71	1157	1	12.8	62000	29.4	8.2	4.4	74	--	--
AUG 24, 71	0930	1	.3	53000	29.5	8.4	5.7	92	--	109
			1.5	53000	29.5	8.4	5.5	89	--	--
			3.0	53000	29.4	8.4	5.5	89	--	--
			6.1	53000	29.4	8.4	5.0	81	--	--
			9.1	54000	29.7	8.2	3.0	49	--	--
			12.8	55000	30.1	8.0	.2	3	--	--
AUG 27, 71	0813	1	.3	39000	29.0	8.5	7.0	104	--	152
			1.5	47000	29.4	8.4	5.7	90	--	--
			3.0	50000	29.7	8.4	5.9	95	--	--
			6.1	53000	29.9	8.3	4.9	80	--	--
			9.1	53000	29.8	8.2	6.0	98	--	--
			12.2	53000	29.7	8.2	5.7	92	--	--
			14.3	53000	29.6	8.1	6.5	105	--	--
SEP 03, 71	0820	1	.3	42000	29.0	8.0	5.0	83	--	--
			1.5	42000	29.0	8.0	5.0	83	--	--
			3.0	45000	29.0	8.0	5.0	83	--	--
			4.6	49000	30.0	8.0	5.0	82	--	--
			6.1	53000	30.0	8.0	6.0	90	--	--
			9.1	53000	30.0	8.0	6.0	92	--	--
			13.7	53000	30.0	8.0	6.0	98	--	--
SEP 08, 71	1030	1	.3	39000	29.5	8.3	6.1	92	--	160
			1.5	42000	29.4	8.3	6.0	92	--	--
			3.0	46000	29.4	8.3	5.5	86	--	--
			4.6	46000	29.3	8.3	5.5	86	--	--
			7.6	51000	29.6	8.2	5.4	87	--	--
			10.7	51000	29.8	8.2	5.6	90	--	--
			13.7	51000	29.7	8.3	5.2	84	--	--
SEP 14, 71	1450	1	.3	31000	26.9	8.2	9.9	138	--	91
			1.5	31000	26.8	8.1	9.3	129	--	--
			3.0	35000	26.8	8.1	7.5	106	--	--
			4.6	35000	26.7	8.1	7.0	99	--	--
			9.1	39000	26.6	8.0	5.1	73	--	--
			14.0	41000	26.6	8.0	4.8	70	--	--
OCT 13, 70	0955	2	.3	44000	23.2	8.3	7.3	100	--	107
			1.5	44000	23.1	8.3	7.1	97	--	--
			3.4	46000	23.4	8.2	3.4	47	--	--
MAY 06, 71	0850	2	.5	50000	24.8	8.1	6.3	93	--	--
			1.5	51000	24.8	8.1	6.3	93	--	--
			3.0	52000	24.8	8.1	6.6	99	--	--
AUG 24, 71	0950	2	.3	50000	29.7	8.4	5.3	85	--	152
			1.5	50000	29.6	8.4	5.3	85	--	--
			3.7	48000	29.6	8.4	5.3	85	--	--
AUG 27, 71	0831	2	.3	32000	29.5	8.5	8.8	129	--	147
			.9	39000	29.8	8.3	8.4	127	--	--
			1.5	48000	30.2	8.5	7.6	123	--	--
			3.7	49000	29.9	8.4	78.0	126	--	--
SEP 08, 71	1110	2	.6	39000	29.5	8.2	5.6	85	--	157
			1.5	39000	29.4	8.2	5.6	84	--	--
			3.0	39000	29.2	8.3	5.3	79	--	--
			4.0	45000	29.5	8.2	3.5	8	--	--
SEP 14, 71	1125	2	.3	30000	26.2	8.0	7.6	104	--	107
			1.5	32000	26.3	8.0	7.3	100	--	--
			4.0	35000	26.3	8.0	6.8	94	--	--
SEP 03, 71	0840	3	.6	40000	29.3	8.4	5.8	88	--	91
			1.5	40000	29.3	8.4	5.9	89	--	--
			3.0	40000	29.3	8.4	5.9	89	--	--

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

1971 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 142 CONTINUED						
SEP 03, 71	0840	3	4.0	40000	29.3	8.4	6.0	91	--	--
OCT 13, 70	0940	4	.3	44000	23.1	8.2	6.6	90	--	91
			1.5	44000	23.1	8.2	6.5	89	--	--
			2.4	44000	23.1	8.2	6.3	86	--	--
			4.3	44000	23.1	8.2	6.3	86	--	--
MAY 06, 71	0905	4	.5	52000	24.7	8.2	6.3	93	--	28
			1.5	52000	24.7	8.2	6.4	94	--	--
			4.0	52000	24.8	8.1	6.7	100	--	--
JUL 19, 71	1525	4	.5	62000	30.1	8.3	4.8	83	--	114
			1.5	62000	29.8	8.3	4.9	84	--	--
			3.0	62000	29.6	8.3	4.4	75	--	--
			4.0	62000	29.5	8.2	3.8	64	--	--
SEP 08, 71	1130	4	.6	39000	29.6	8.3	6.0	91	--	142
			1.5	40000	29.6	8.3	6.0	92	--	--
			3.0	40000	29.4	8.3	5.8	88	--	--
			3.7	42000	29.3	8.3	5.8	89	--	--
SEP 14, 71	1135	4	.3	28000	26.3	8.0	7.3	99	--	112
			1.5	28000	26.3	8.0	7.3	99	--	--
			3.0	36000	26.3	8.0	6.3	88	--	--
			4.6	40000	26.0	7.9	4.5	64	--	--
SEP 03, 71	0850	5	.6	39000	29.5	8.4	5.9	89	--	122
			1.5	39000	29.5	8.4	5.9	89	--	--
			3.0	39000	29.4	8.4	6.1	91	--	--
			4.3	39000	29.4	8.3	5.7	85	--	--
OCT 13, 70	0920	6	.3	44000	23.2	8.1	5.8	79	--	86
			1.5	44000	23.2	8.2	5.8	79	--	--
			2.4	44000	23.2	8.2	5.8	79	--	--
			4.3	44000	23.1	8.2	5.8	79	--	--
MAY 06, 71	0915	6	.5	52000	24.7	8.2	6.3	93	--	76
			1.5	53000	24.7	8.2	6.3	93	--	--
			4.0	63000	24.9	8.3	6.4	100	--	--
AUG 27, 71	0853	6	.3	28000	29.7	8.4	7.9	114	--	228
			.9	29000	30.0	8.5	8.1	117	--	--
			1.5	41000	30.5	8.4	9.0	141	--	--
			3.0	53000	29.9	8.2	3.9	64	--	--
			4.3	53000	29.8	7.9	.0	0	--	--
SEP 03, 71	0900	6	.6	38000	29.4	8.4	5.5	82	--	81
			1.5	38000	29.4	8.4	5.6	84	--	--
			3.0	38000	29.4	8.4	5.6	84	--	--
			4.0	38000	29.4	8.4	5.7	85	--	--
SEP 08, 71	1145	6	.6	38000	29.6	8.3	6.6	100	--	178
			1.5	39000	29.6	8.3	6.7	102	--	--
			3.0	40000	29.6	8.3	6.4	98	--	--
			3.7	42000	29.5	8.3	6.3	98	--	--
SEP 14, 71	1145	6	.6	24000	26.4	8.0	8.1	107	--	91
			1.5	26000	26.3	8.0	7.3	97	--	--
			3.0	33000	26.3	8.0	6.9	96	--	--
			4.9	40000	26.0	8.0	4.4	63	--	--
OCT 13, 70	0910	8	.3	44000	23.2	8.3	6.2	85	--	76
			1.5	44000	23.2	8.3	6.2	85	--	--
			3.0	44000	23.2	8.3	6.2	85	--	--
			4.6	44000	23.1	8.2	6.1	84	--	--
MAY 06, 71	0930	8	.5	60000	24.7	8.2	6.1	92	--	48
			1.5	60000	24.8	8.2	6.1	94	--	--
			4.1	60000	24.8	8.3	6.1	94	--	--

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

1971 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 142 CONTINUED										
JUL 19, 71	1510	8	.5	62000	30.3	8.4	5.2	90	--	127
			1.5	64000	30.2	8.4	5.3	93	--	--
			3.0	64000	30.0	8.4	4.6	81	--	--
			4.1	57000	29.8	8.4	3.4	58	--	--
SEP 08, 71	1155	8	.6	39000	29.8	8.2	7.2	109	--	178
			1.5	39000	29.7	8.1	7.1	108	--	--
			3.0	40000	29.7	8.1	6.8	105	--	--
			4.0	40000	29.7	8.1	6.7	103	--	--
SEP 14, 71	1155	8	.5	21000	26.3	8.0	7.4	97	--	--
			1.5	22000	26.3	8.0	5.4	71	--	--
			3.0	26000	26.3	8.0	5.3	71	--	--
			3.0	39000	26.1	7.9	4.5	63	--	--
SEP 03, 71	0910	9	.6	39000	29.3	8.3	5.2	78	--	102
			1.5	39000	29.4	8.3	5.2	78	--	--
			3.0	39000	29.4	8.2	5.1	76	--	--
			4.3	42000	29.6	8.1	.8	12	--	--
OCT 13, 70	0850	10	.3	44000	22.9	8.4	7.3	100	--	61
			1.5	44000	22.9	8.4	7.2	99	--	--
			2.4	44000	22.8	8.4	7.2	99	--	--
			4.3	44000	22.8	8.3	7.2	99	--	--
MAY 06, 71	0940	10	.5	61000	24.9	8.3	5.5	86	--	76
			1.5	61000	24.9	8.3	5.6	88	--	--
			4.1	63000	25.0	8.3	6.0	94	--	--
AUG 27, 71	0903	10	.3	35000	29.7	8.5	7.8	116	--	198
			.9	37000	29.6	8.4	6.4	96	--	--
			1.5	47000	29.6	8.3	5.2	82	--	--
			3.0	52000	30.3	8.2	2.7	44	--	--
			4.3	61000	29.6	7.9	.0	0	--	--
SEP 08, 71	1205	10	.6	39000	29.7	7.7	7.3	111	--	178
			1.5	39000	29.6	7.8	7.2	109	--	--
			3.0	39000	29.5	8.2	7.1	108	--	--
			4.0	39000	29.7	8.2	6.9	105	--	--
SEP 14, 71	1205	10	.5	16000	26.3	8.0	7.8	100	--	102
			1.5	19000	26.3	8.0	7.5	97	--	--
			3.0	22000	26.3	8.0	7.3	96	--	--
			4.9	35000	26.4	7.9	5.6	78	--	--
SEP 03, 71	0920	11	.6	38000	29.3	8.3	5.5	82	--	152
			1.5	38000	29.3	8.3	5.4	81	--	--
			3.0	39000	29.4	8.3	5.3	79	--	--
			4.0	40000	29.4	8.3	5.1	77	--	--
LINE 159										
OCT 14, 70	1450	8	.3	31000	25.8	8.3	8.1	111	--	76
			1.5	31000	25.8	8.3	8.1	111	--	--
			2.7	31000	26.1	8.3	8.1	111	--	--
MAY 06, 71	1730	8	.3	44000	25.7	8.1	6.8	100	--	48
			1.5	44000	25.7	8.1	6.8	100	--	--
			2.6	45000	25.8	8.1	7.1	104	--	--
OCT 14, 70	1500	10	.3	32000	26.6	8.4	8.2	114	--	109
			2.1	41000	26.1	8.2	6.2	89	--	--
MAY 06, 71	1745	10	.3	46000	25.6	8.2	7.4	107	--	66
			1.5	46000	25.6	8.2	7.2	104	--	--
			3.0	46000	25.6	8.1	7.2	104	--	--
			5.2	46000	25.8	8.1	7.5	110	--	--
LINE 168										
MAY 06, 71	1650	2	.3	47000	25.3	8.2	7.0	101	--	89

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

1971 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 168 CONTINUED					
MAY 06, 71	1650	2	1.5	49000	25.4	8.2	7.0	103	--	--
			3.0	51000	25.4	8.2	6.4	94	--	--
			6.1	52000	25.5	8.1	5.8	88	--	--
			9.1	52000	25.6	8.1	5.8	88	--	--
			13.1	50000	25.7	8.1	6.1	91	--	--
JUL 19, 71	1600	2	.3	57000	29.4	8.3	5.5	92	--	124
			1.5	57000	29.3	8.3	5.2	87	--	--
			3.0	57000	29.2	8.3	5.0	82	--	--
			6.1	57000	29.0	8.3	4.8	79	--	--
			9.1	57000	28.9	8.3	4.8	79	--	--
			12.2	57000	28.9	8.2	4.7	77	--	--
			16.8	57000	28.9	8.3	5.1	84	--	--
SEP 14, 71	1020	2	.3	24000	26.0	7.3	7.1	93	--	102
			1.5	25000	26.0	7.4	7.0	93	--	--
			3.0	28000	26.0	7.4	6.7	91	--	--
			4.6	32000	28.1	7.4	6.4	88	--	--
			6.1	34000	26.2	7.6	6.2	86	--	--
			9.1	38000	26.3	7.8	5.9	83	--	--
			14.0	39000	26.3	8.3	5.9	83	--	--
					LINE 170					
OCT 13, 70	1400	3	.3	47000	25.1	8.4	7.9	114	--	86
			1.5	46000	24.6	8.4	7.9	113	--	--
			2.4	46000	24.5	8.4	7.7	110	--	--
			3.7	46000	24.5	8.4	7.6	109	--	--
MAY 06, 71	1005	3	.3	77000	24.4	8.1	4.5	76	--	76
			1.5	81000	24.5	8.1	4.3	75	--	--
			3.0	81000	24.6	8.1	4.3	75	--	--
			5.2	81000	24.6	8.1	4.6	81	--	--
SEP 14, 71	1225	3	.5	26000	26.3	8.1	7.6	101	--	91
			1.5	26000	26.3	8.1	7.3	97	--	--
			4.0	31000	26.3	8.0	6.3	86	--	--
OCT 13, 70	0835	4	.3	44000	22.6	8.4	6.3	86	--	61
			1.5	46000	22.4	8.3	6.3	85	--	--
					LINE 183					
MAY 06, 71	1030	5	.3	81000	24.5	8.1	4.3	75	--	86
			1.5	81000	24.5	8.1	4.1	72	--	--
			3.0	81000	24.4	8.1	4.2	74	--	--
			6.7	77000	24.4	8.1	4.9	83	--	--
					LINE 200					
OCT 13, 70	1325	1	.3	46000	24.5	8.3	9.0	127	--	69
			1.1	44000	24.5	8.3	8.9	125	--	--
SEP 14, 71	1310	1	.5	12000	26.5	8.0	7.7	99	--	89
			1.5	13000	26.5	8.0	7.6	97	--	--
			3.0	19000	26.4	8.0	6.0	78	--	--
			4.3	35000	26.3	7.9	3.1	43	--	--
OCT 13, 70	1340	2	.3	41000	24.3	9.0	9.9	136	--	43
			1.2	43000	24.0	8.4	8.7	121	--	--
SEP 14, 71	1300	2	.5	2200	26.6	7.9	7.1	89	--	15
			2.0	13000	26.4	8.0	6.9	87	--	--
					LINE 901					
JUL 19, 71	1630	2	.5	57000	28.5	8.2	4.6	74	--	165

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

1971 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 901 CONTINUED										
JUL 19, 71	1630	2	1.5	57000	28.4	8.2	4.6	74	--	--
			3.0	57000	28.1	8.2	4.3	69	--	--
			6.1	57000	28.3	8.2	3.9	63	--	--
			9.8	57000	28.5	8.2	4.0	64	--	--

TABLE 6B--QUALITY OF WATER IN THE NUECES ESTUARY,

1971 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-PHORUS ORTHO (P) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	TOTAL ORGANIC CARBON (MG/L)
						LINE 13						
OCT 12, 70	1545	2	4.0	24.0	.0	.72	.00	.15	.40	4.4	--	--
MAY 05, 71	0835	2	.3	20.0	.0	.10	.01	.10	.11	1.4	--	--
			3.0	20.0	.1	.10	.00	.18	.20	1.6	--	--
JUL 19, 71	1135	2	.3	21.0	.1	.16	.00	.54	.54	--	--	--
			6.1	21.0	.1	.17	.00	.56	.56	--	--	--
						LINE 22						
OCT 12, 70	1640	2	2.4	20.0	.0	.86	.20	.14	2.00	18.5	--	--
			2.4	--	.0	.86	.20	.14	2.00	8.5	--	--
MAY 05, 71	0915	2	2.4	3.3	.0	.08	.00	.00	.04	5.0	--	--
						LINE 38						
OCT 12, 70	1700	2	.8	20.0	.0	.16	.01	.50	.60	9.1	--	--
MAY 05, 71	0950	2	.5	2.4	.0	.03	.00	.04	.17	3.7	--	--
						LINE 53						
OCT 14, 70	1215	2	1.2	2.5	.0	.06	.00	.03	.07	3.8	--	--
SEP 14, 71	1200	2	1.8	13.0	.2	.19	.03	.15	.21	.5	--	--
OCT 14, 70	1245	4	1.2	3.0	.0	.06	.00	.03	.21	6.8	--	--
SEP 03, 71	0930	4	1.5	22.0	.1	.16	.00	.07	.09	--	--	--
SEP 14, 71	1135	4	1.5	13.0	.2	.14	.03	.15	.24	.9	--	--
						LINE 64						
JUL 20, 71	0855	1	.8	16.0	.0	.59	.00	.64	.64	--	--	--
OCT 14, 70	0930	9	.3	1.7	.0	.06	.00	.00	.05	3.0	--	--
			.9	2.5	.0	.00	.00	.00	.04	2.6	--	--
MAY 06, 71	1325	9	.5	1.6	.0	.07	.00	.00	.06	1.3	--	--
			4.9	1.9	.0	.07	.01	.04	.09	2.3	--	--
SEP 03, 71	1100	9	.3	29.0	.1	.00	.01	.08	.11	--	--	--
			5.5	9.8	.2	.14	.01	.06	.08	--	--	--
SEP 14, 71	1350	9	.3	4.8	.0	.22	.02	.06	.11	.8	--	--
			5.2	12.0	.2	.19	.02	.13	.19	1.0	--	--
JUL 20, 71	0800	12	3.7	8.7	.1	.60	.00	.56	.56	--	--	--
						LINE 71						
OCT 14, 70	1100	2	.3	2.7	.0	.70	.01	.12	.17	3.5	--	--
			4.6	4.1	.0	.72	.01	.12	.18	2.7	--	--
MAY 06, 71	1435	2	.3	.4	.0	.43	.01	.19	.19	3.0	--	--
			12.5	.5	.0	.52	.00	.19	.19	2.5	--	--
						LINE 93						
OCT 14, 70	1035	2	.3	3.4	.0	.68	.01	.08	.14	5.5	--	--

TABLE 6B--QUALITY OF WATER IN THE NUECES ESTUARY,

1971 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)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	TOTAL ORGANIC CARBON (MG/L)
					LINE 93 CONTINUED							
OCT 14, 70	1035	2	13.4	2.7	.0	.62	.00	.11	.17	2.6	--	--
MAY 06, 71	1510	2	.3	.5	.0	.47	.01	.15	.15	2.2	--	--
			13.1	.9	.0	.31	.00	.08	.08	1.7	--	--
SEP 14, 71	1530	2	.3	7.6	.1	.39	.04	.17	.18	2.1	--	--
			12.2	4.9	.0	.30	.01	.08	.09	1.0	--	--
					LINE 118							
OCT 14, 70	1005	2	.3	2.3	.0	.00	.00	.02	.03	3.7	--	--
			13.3	4.4	.1	.32	.01	.21	1.20	8.2	--	--
MAY 06, 71	1340	2	.3	.4	.0	.23	.01	.09	.09	1.8	--	--
			14.0	.9	.0	.06	.00	.00	.04	1.3	--	--
					LINE 122							
OCT 13, 70	1155	2	.3	1.0	.0	.06	.00	.00	.02	1.7	--	--
			1.5	.4	.0	.04	.00	.00	.05	2.3	--	--
MAY 06, 71	1300	2	.5	1.5	.0	.05	.00	.00	.04	1.2	--	--
			3.7	1.2	.0	.03	.00	.03	.06	1.0	--	--
OCT 13, 70	1125	6	.3	2.5	.0	.40	.00	.01	.01	2.1	--	--
			11.3	.4	.0	.02	.00	.02	.05	2.5	--	--
MAY 06, 71	1230	6	.5	.7	.0	.03	.00	.00	.04	1.3	--	--
			10.7	1.3	.0	.00	.00	.07	.07	1.3	--	--
JUL 19, 71	1335	6	.5	12.0	.0	.11	.00	.37	.37	3.0	--	--
			12.3	5.1	.1	.26	.00	.22	.31	2.3	--	--
SEP 03, 71	1005	6	.6	17.0	.0	.00	.00	.06	.08	--	--	--
			4.6	2.6	.0	.24	.00	.07	.07	--	--	--
			13.7	3.4	.0	.48	.00	.13	.13	--	--	--
MAY 06, 71	1215	10	.5	1.2	.0	.03	.00	.00	.05	1.4	--	--
			4.0	1.5	.0	.03	.00	.00	.09	1.9	--	--
OCT 13, 70	1300	14	.3	1.7	.0	.06	.00	.00	.02	2.7	--	--
			2.7	1.3	.0	.02	.00	.00	.04	3.2	--	--
MAY 06, 71	1205	14	.5	1.1	.0	.02	.00	.00	.08	1.4	--	--
			3.5	1.1	.0	.02	.00	.07	.08	1.2	--	--
					LINE 142							
OCT 13, 70	1050	1	.3	.5	.0	.00	.00	.00	.01	2.1	--	--
			14.0	3.0	.0	.02	.00	.00	.05	2.5	--	--
MAY 06, 71	0820	1	.3	1.7	.0	.03	.01	.02	.04	1.2	--	--
			12.8	2.1	.2	.11	.00	.00	.07	1.3	--	--
SEP 14, 71	1450	1	.3	7.0	.0	.05	.02	.08	.09	1.5	--	--
			4.6	6.7	.0	.12	.02	.08	.08	1.0	--	--
			14.0	3.8	.0	.20	.02	.06	.07	1.0	--	--
OCT 13, 70	0955	2	.3	2.2	.0	.04	.00	.00	.00	2.1	--	--
			3.4	2.6	.0	.06	.00	.01	.03	1.6	--	--
MAY 06, 71	0850	2	.5	2.1	.0	.00	.00	.04	.04	1.4	--	--
			3.0	2.5	.0	.02	.00	.05	.07	1.7	--	--
OCT 13, 70	0920	6	.3	2.6	.0	.04	.01	.02	.02	1.4	--	--
			4.3	2.5	.0	.06	.01	.00	.01	1.5	--	--

TABLE 68--QUALITY OF WATER IN THE NUECES ESTUARY,

1971 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)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	TOTAL ORGANIC CARBON (MG/L)
						LINE 142 CONTINUED						
MAY 06, 71	0915	6	.5	2.3	.0	.02	.00	.04	.04	1.2	--	--
			4.0	3.0	.0	.01	.00	.05	.08	1.6	--	--
SEP 03, 71	0900	6	.6	9.8	.0	.11	.00	.06	.06	--	--	--
			4.0	9.4	.0	.07	.00	.06	.06	--	--	--
SEP 14, 71	1145	6	.6	7.4	.1	.24	.03	.09	.10	.5	--	--
			3.0	7.0	.0	.27	.02	.08	.08	.5	--	--
			4.9	6.1	.0	.25	.02	.08	.08	.2	--	--
OCT 13, 70	0850	10	.3	1.9	.0	.00	.01	.01	.02	2.6	--	--
			4.3	1.8	.0	.00	.00	.00	.04	2.9	--	--
MAY 06, 71	0940	10	.5	1.8	.0	.00	.00	.02	.03	1.4	--	--
			4.1	2.4	.0	.05	.00	.03	.03	1.5	--	--
						LINE 159						
MAY 06, 71	1730	8	.3	3.1	.0	.00	.00	.00	.00	.9	--	--
			2.6	3.0	.0	.00	.00	.01	.03	1.3	--	--
OCT 14, 70	1500	10	.3	4.7	.0	.02	.00	.00	.01	1.4	--	--
			2.1	1.2	.0	.08	.00	.02	.04	2.2	--	--
MAY 06, 71	1745	10	.3	2.7	.0	.01	.00	.00	.00	1.2	--	--
			5.2	2.9	.0	.00	.00	.00	.00	1.3	--	--
						LINE 168						
MAY 06, 71	1650	2	.3	.5	.0	.00	.00	.00	.00	1.3	--	--
			13.1	1.0	.0	.00	.00	.05	.22	4.2	--	--
JUL 19, 71	1600	2	.3	1.4	.0	.15	.00	.04	.04	.8	--	--
			16.8	1.5	.0	.10	.00	.06	.10	1.6	--	--
SEP 14, 71	1020	2	.3	5.6	.1	.18	.03	.04	.07	.5	--	--
			4.6	5.7	.1	.15	.02	.04	.05	.7	--	--
			14.0	4.5	.0	.16	.02	.06	.07	1.1	--	--
						LINE 170						
MAY 06, 71	1005	3	.3	4.0	.0	.01	.00	.01	.02	1.5	--	--
			5.2	3.8	.0	.01	.00	.03	.11	3.0	--	--
SEP 14, 71	1225	3	.5	7.5	.1	.28	.03	.09	.10	.8	--	--
			4.0	7.1	.1	.26	.02	.10	.11	.6	--	--
						LINE 200						
OCT 13, 70	1340	2	1.2	2.2	.0	.02	.00	.04	.05	2.8	--	--

TABLE 6C--QUALITY OF WATER IN THE NUECES ESTUARY,

1971 WATER YEAR

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICROMHOS) (LAB)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (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 13					
OCT 12, 70	1545	2	4.0	7960	--	--	--	--	--	--	--
MAY 05, 71	0835	2	.3	1980	--	--	--	--	--	--	--
			3.0	2150	110.0	29.0	320	218	120	560	1280
JUL 19, 71	1135	2	.3	492	59.0	3.1	39	183	30	43	288
			6.1	492	58.0	3.7	40	183	30	44	289
						LINE 22					
OCT 12, 70	1640	2	2.4	8830	--	--	--	--	--	--	--
			2.4	8830	--	--	--	--	--	--	--
MAY 05, 71	0915	2	2.4	56100	720.0	1400.0	12000	130	2800	21000	37500
						LINE 38					
OCT 12, 70	1700	2	.8	9440	--	--	--	--	--	--	--
MAY 05, 71	0950	2	.5	56900	870.0	1300.0	12000	129	2700	21000	37700
						LINE 53					
OCT 14, 70	1215	2	1.2	44600	480.0	1200.0	8700	146	2200	16000	29000
SEP 14, 71	1200	2	1.8	378	44.0	3.7	27	151	14	32	210
OCT 14, 70	1245	4	1.2	44700	480.0	1000.0	9000	148	2100	16000	29000
SEP 03, 71	0930	4	1.5	10300	180.0	170.0	1900	170	530	3300	6210
SEP 14, 71	1135	4	1.5	447	--	--	--	--	--	--	--
						LINE 64					
JUL 20, 71	0855	1	.8	11200	160.0	250.0	1900	197	420	3400	6260
OCT 14, 70	0930	9	.3	45600	--	--	--	--	--	--	--
			.9	43300	--	--	--	--	--	--	--
MAY 06, 71	1325	9	.5	51700	450.0	1300.0	11000	147	2600	19000	34100
			4.9	52300	--	--	--	--	--	--	--
SEP 03, 71	1100	9	.3	4020	--	--	--	--	--	--	--
			5.5	20200	--	--	--	--	--	--	--
SEP 14, 71	1350	9	.3	1590	--	--	--	--	--	--	--
			5.2	39700	--	--	--	--	--	--	--
JUL 20, 71	0800	12	3.7	37900	360.0	970.0	7600	160	1800	14000	24700
						LINE 71					
OCT 14, 70	1100	2	.3	48700	420.0	1300.0	9900	140	2400	18000	32000
			4.6	48700	410.0	1500.0	8900	140	2400	17000	30000
MAY 06, 71	1435	2	.3	51700	450.0	1300.0	11000	154	2800	19000	34100
			12.5	51700	450.0	1300.0	11000	156	2600	19000	34100
						LINE 93					
OCT 14, 70	1035	2	.3	48400	--	--	--	--	--	--	--

TABLE 6C--QUALITY OF WATER IN THE NUECES ESTUARY,

1971 WATER YEAR--CONTINUED

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (LAB)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM + POTASSIUM (NA+K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
				LINE 93 CONTINUED							
OCT 14, 70	1035	2	13.4	48800	--	--	--	--	--	--	--
MAY 06, 71	1510	2	.3	51400	--	--	--	--	--	--	--
			13.1	52000	--	--	--	--	--	--	--
SEP 14, 71	1530	2	.3	23400	--	--	--	--	--	--	--
			12.2	42100	--	--	--	--	--	--	--
				LINE 118							
OCT 14, 70	1005	2	.3	46300	400.0	1100.0	9600	150	2300	17000	30000
			13.3	48500	440.0	1300.0	9300	310	2400	17000	31000
MAY 06, 71	1340	2	.3	51800	--	--	--	--	--	--	--
			14.0	53400	--	--	--	--	--	--	--
				LINE 122							
OCT 13, 70	1155	2	.3	47400	--	--	--	--	--	--	--
			1.5	47300	--	--	--	--	--	--	--
MAY 06, 71	1300	2	.5	51400	--	--	--	--	--	--	--
			3.7	51500	--	--	--	--	--	--	--
OCT 13, 70	1125	6	.3	47800	--	--	--	--	--	--	--
			11.3	48600	--	--	--	--	--	--	--
MAY 06, 71	1230	6	.5	52300	--	--	--	--	--	--	--
			10.7	52500	--	--	--	--	--	--	--
JUL 19, 71	1335	6	.5	42100	--	--	--	--	--	--	--
			12.3	67300	--	--	--	--	--	--	--
SEP 03, 71	1005	6	.6	22900	--	--	--	--	--	--	--
			4.6	49800	--	--	--	--	--	--	--
			13.7	53100	440.0	1300.0	11000	158	2800	19000	34600
MAY 06, 71	1215	10	.5	53400	--	--	--	--	--	--	--
			4.0	53300	--	--	--	--	--	--	--
OCT 13, 70	1300	14	.3	47900	--	--	--	--	--	--	--
			2.7	47700	--	--	--	--	--	--	--
MAY 06, 71	1205	14	.5	55200	--	--	--	--	--	--	--
			3.5	55200	--	--	--	--	--	--	--
				LINE 142							
OCT 13, 70	1050	1	.3	48600	380.0	1200.0	9500	160	2400	17000	31000
			14.0	49200	400.0	1300.0	10000	157	2500	18000	32000
MAY 06, 71	0820	1	.3	51200	420.0	1300.0	10000	156	2600	18000	33000
			12.8	52900	450.0	1400.0	11000	158	2600	19000	34700
SEP 14, 71	1450	1	.3	31700	--	--	--	--	--	--	--
			4.6	37000	--	--	--	--	--	--	--
			14.0	42900	--	--	--	--	--	--	--
OCT 13, 70	0955	2	.3	48800	--	--	--	--	--	--	--
			3.4	49400	--	--	--	--	--	--	--
MAY 06, 71	0850	2	.5	53400	--	--	--	--	--	--	--
			3.0	53800	--	--	--	--	--	--	--
OCT 13, 70	0920	6	.3	48900	380.0	1300.0	9200	156	2200	17000	30000
			4.3	49100	400.0	1500.0	9600	155	2500	18000	32000

TABLE 6C--QUALITY OF WATER IN THE NUECES ESTUARY,

1971 WATER YEAR--CONTINUED

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (LAB)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM + POTASSIUM (NA+K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
						LINE 142 CONTINUED					
MAY 06, 71	0915	6	.5	54100	--	--	--	--	--	--	--
			4.0	62600	--	--	--	--	--	--	--
SEP 03, 71	0900	6	.6	37300	--	--	--	--	--	--	--
			4.0	39000	360.0	900.0	8000	164	2000	14000	25300
SEP 14, 71	1145	6	.6	25300	--	--	--	--	--	--	--
			3.0	32500	--	--	--	--	--	--	--
			4.9	41800	--	--	--	--	--	--	--
OCT 13, 70	0850	10	.3	49100	--	--	--	--	--	--	--
MAY 06, 71	0940	10	.5	59600	--	--	--	--	--	--	--
			4.1	64100	--	--	--	--	--	--	--
						LINE 159					
MAY 06, 71	1730	8	.3	47200	--	--	--	--	--	--	--
			2.6	47200	--	--	--	--	--	--	--
OCT 14, 70	1500	10	.3	32900	260.0	810.0	6100	148	1500	11000	20000
			2.1	44100	340.0	1200.0	8200	157	2200	15000	27000
MAY 06, 71	1745	10	.3	47100	--	--	--	--	--	--	--
			5.2	47100	390.0	1200.0	9700	160	2500	17000	30800
						LINE 168					
MAY 06, 71	1650	2	.3	47700	--	--	--	--	--	--	--
			13.1	53700	--	--	--	--	--	--	--
JUL 19, 71	1600	2	.3	62500	--	--	--	--	--	--	--
			16.8	63100	--	--	--	--	--	--	--
SEP 14, 71	1020	2	.3	24300	210.0	580.0	4600	90	1000	8400	14900
			4.6	33500	--	--	--	--	--	--	--
			14.0	41000	350.0	980.0	8000	148	1900	14000	25700
						LINE 170					
MAY 06, 71	1005	3	.3	73000	--	--	--	--	--	--	--
			5.2	75200	750.0	2000.0	16000	192	4400	29000	52800
SEP 14, 71	1225	3	.5	26300	--	--	--	--	--	--	--
			4.0	32200	--	--	--	--	--	--	--
						LINE 200					
OCT 13, 70	1340	2	1.2	48200	400.0	1200.0	9500	157	2400	17000	31000

Table 6-D--Quality of water in the Nueces estuary, 1971 water year

Insecticide and herbicide analyses

(Whole water analyses in micrograms per liter; bottom deposits analyses in micrograms per kilogram, dry weight)

Date of Collection	Time	Type of Sample	Insecticides														Herbicides		
			Aldrin	DDD	DDE	DDT	Dieldrin	Endrin	Heptachlor	Heptachlor Epoxide	Lindane	Chlordane	Parathion	Methyl Parathion	Malathion	Diazinon	2,4-D	Silvex	2,4,5-T
									Line 13. Site 2. Nueces River										
1970																			
Oct. 12	1545	Bottom deposits																	
		0-3 inches	a/	0.4	1.4	0.0	0.0	0.0	a/	a/	a/	0.0	0.0	0.0	0.0	a/	--	--	--
		5-9 inches	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	--	--	--
									Line 53. Site 2. Nueces Bay										
Oct. 14	1215	Water	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	0.00
		Bottom deposits																	
		0-2 inches	a/	.0	1.1	.0	.0	.0	a/	a/	a/	.0	.0	.0	.0	a/	--	--	--
		3-7 inches	a/	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	--	--	--
		12-18 inches	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	--	--	--
									Line 53. Site 4. Nueces Bay										
Oct. 14	1245	Water	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.00	.00	.00
		Bottom deposits																	
		0-2 inches	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	a/	--	--	--
		2-5 inches	a/	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	--	--	--
		14-20 inches	a/	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	--	--	--
									Line 122. Site 2. Corpus Christi Bay										
Oct. 13	1155	Water	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.0	.00	.00	.00	.00	.00	.00

a/ Undetermined due to interfering compounds.

The Laguna Madre estuary covers an area of about 640 square miles (1,660 square kilometers) and consists of the tidal parts of the Arroyo Colorado and other tributaries, upper Laguna Madre, Baffin Bay, lower Laguna Madre, Brownsville Ship Channel, part of the Intracoastal Waterway, Port Mansfield Channel, and Brazos Santiago Pass (Figure 10). At mlw, upper and lower Laguna Madre and Baffin Bay are generally less than 4 feet (1.2 meters) deep, but in a few areas are as much as 10 feet (3 meters) deep. The Intracoastal Waterway, Port Mansfield Channel, and Arroyo Colorado are about 15 feet (5 meters) deep; the Brownsville Ship Channel is about 40 feet (12 meters) deep.

Water-quality data (Table 7) were collected in October at most sites shown on Figure 10.

The changes in line numbers to facilitate computer storage in the Texas Water Oriented Data Bank and to provide opportunity to coordinate data-collection sites among all agencies are shown below. New line numbers are used in Table 7 and on Figure 10.

All data collected prior to the changes in line numbers are stored in the data bank under the new line numbers.

Laguna Madre Estuary Change in Line Numbers

OLD	NEW	OLD	NEW
1	10	26	263
2	23	27	274
3	34	28	287
4	44	29	297
5	53	30	301
6	64	31	313
7	74	32	320
8	82	33	334
9	94	33a	342
10	107	34	343
11	119	34a	348
12	125	35	351
13	134	36	364
14	145	37	370
15	157	38	376
16	163	Gulf of Mexico	
17	175	39-site 2	902-site 95
18	188		
19	194		
20	203		
21	217		
22	223		
23	233		
24	247		
25	258		

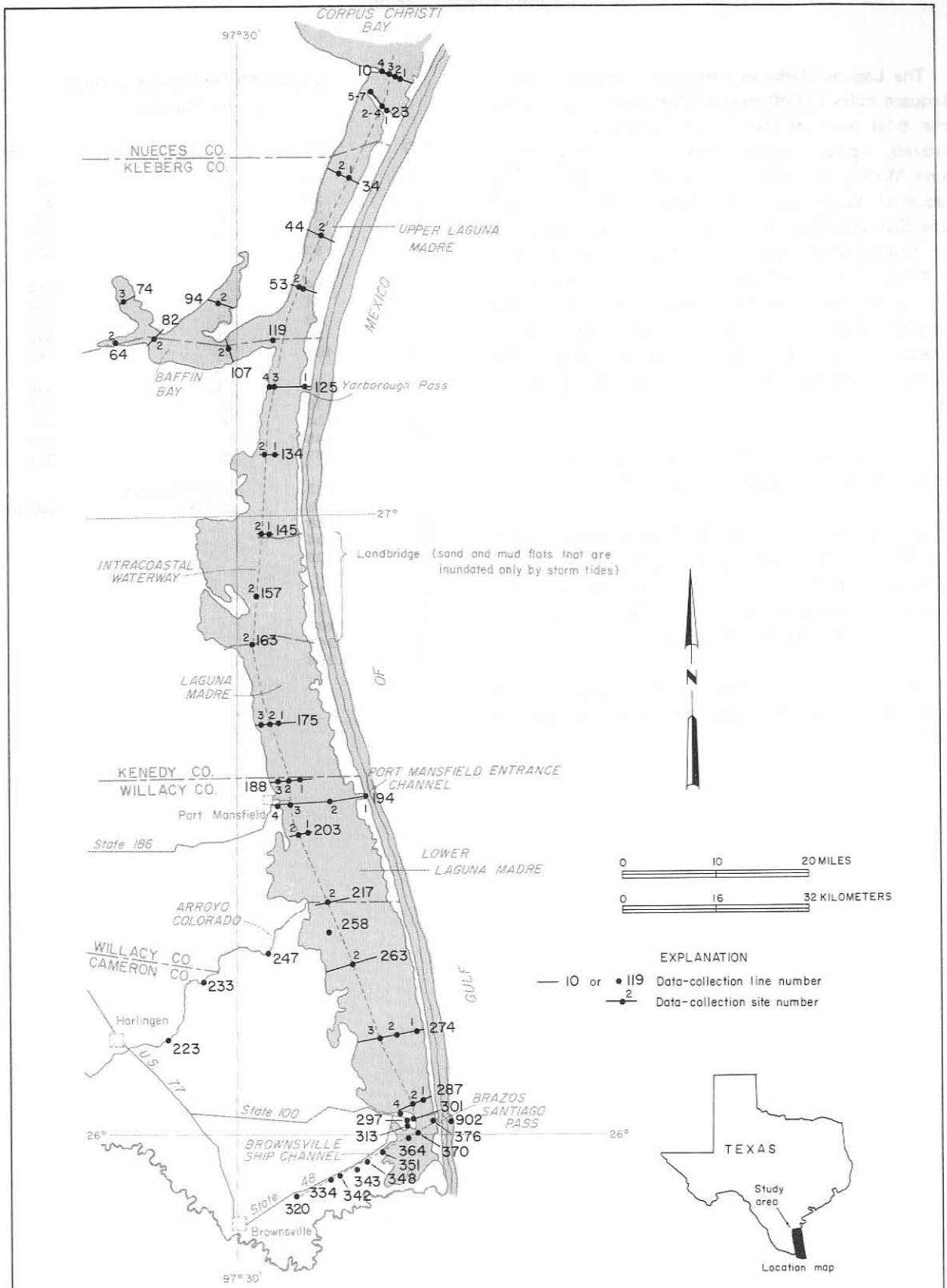


Figure 10

Data-Collection Sites in the Laguna Madre Estuary

TABLE 7A--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1971 WATER YEAR

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 10				
OCT 08, 70	1235	2	.3	49000	27.3	8.4	5.9	89	--	--
			1.5	49000	27.2	8.4	5.8	88	--	--
			3.7	48000	27.4	8.4	6.3	94	--	--
						LINE 23				
OCT 08, 70	1145	1	.3	50000	27.2	8.2	5.9	89	--	122
			2.4	50000	27.3	8.3	5.9	89	--	--
						LINE 34				
OCT 08, 70	1055	1	.3	56000	26.7	8.1	5.6	88	--	175
			1.5	56000	26.8	8.1	5.6	88	--	--
			3.0	56000	27.2	8.1	5.6	88	--	--
			4.6	53000	27.0	8.2	5.6	86	--	--
						LINE 134				
OCT 08, 70	0905	1	.3	43000	27.1	8.3	5.1	75	--	56
			1.7	42000	27.2	8.2	5.0	74	--	--
OCT 08, 70	0915	2	.3	43000	27.0	8.2	5.3	78	--	--
			1.5	43000	26.9	8.2	5.3	78	--	--
			3.0	43000	26.8	8.2	5.3	78	--	--
			4.3	43000	26.9	8.2	5.5	81	--	--
						LINE 145				
OCT 07, 70	1420	1	.3	38000	29.3	8.3	6.9	103	--	84
			1.8	46000	28.9	8.3	6.0	94	--	--
OCT 07, 70	1430	2	.3	41000	28.5	8.3	6.1	91	--	--
			1.5	41000	28.3	8.3	5.7	85	--	--
			3.0	41000	28.1	8.3	5.6	82	--	--
			5.2	41000	28.1	8.3	5.6	82	--	--
						LINE 157				
OCT 07, 70	1345	2	.3	41000	27.9	8.3	6.1	90	--	--
			1.5	42000	27.7	8.2	5.7	85	--	--
			3.0	45000	27.5	8.2	4.9	74	--	--
			4.9	43000	27.6	8.2	4.7	70	--	--
						LINE 163				
OCT 07, 70	1245	2	.3	41000	28.6	8.3	8.6	128	--	152
			.9	47000	28.4	8.3	7.0	108	--	--
			1.5	50000	28.1	8.2	6.8	105	--	--
			3.0	53000	28.2	8.2	5.9	92	--	--
			4.6	53000	27.4	8.2	5.2	80	--	--
			5.2	53000	27.5	8.2	5.2	81	--	--
						LINE 175				
OCT 07, 70	1205	1	.3	58000	27.9	8.0	7.5	121	--	122
			1.1	58000	27.9	8.0	7.6	123	--	--
OCT 07, 70	1120	2	.3	58000	27.2	8.1	5.9	94	--	140
			1.5	58000	27.1	8.1	5.9	94	--	--

TABLE 7A--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1971 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 175 CONTINUED					
OCT 07, 70	1120	2	3.4	58000	27.2	8.1	6.0	95	--	--
OCT 07, 70	1145	3	.3	58000	27.2	8.1	5.9	94	--	173
			1.5	58000	27.5	8.1	6.4	103	--	--
					LINE 188					
OCT 07, 70	1045	1	.3	49000	27.2	8.1	6.7	102	--	97
			.9	49000	27.4	8.1	7.2	109	--	--
OCT 07, 70	1015	2	.3	49000	26.6	8.1	6.7	102	--	163
			1.5	49000	26.7	8.1	6.5	98	--	--
			3.0	53000	26.8	8.0	5.5	85	--	--
OCT 07, 70	1030	3	.3	49000	27.0	7.9	4.8	73	--	109
			1.8	49000	26.9	7.9	4.3	65	--	--
					LINE 194					
OCT 07, 70	0905	1	.3	47000	26.9	8.0	6.2	93	--	58
			1.5	47000	26.9	8.0	6.2	93	--	--
			3.0	47000	26.9	8.0	6.2	93	--	--
			4.6	47000	26.8	8.0	6.4	96	--	--
OCT 07, 70	0940	2	.3	45000	27.2	8.1	5.2	78	--	137
			1.5	45000	27.2	8.1	5.2	78	--	--
			3.0	47000	27.1	8.1	5.0	75	--	--
			4.9	50000	26.7	8.1	5.1	77	--	--
OCT 07, 70	0955	3	.3	46000	26.7	8.2	6.4	96	--	--
			.9	46000	26.7	8.2	6.4	96	--	--
			1.5	53000	26.7	8.2	5.4	83	--	--
			2.3	53000	26.7	8.1	5.0	77	--	--
OCT 07, 70	1620	4	.3	41000	28.9	8.3	7.4	112	--	--
			1.5	47000	28.6	8.2	7.3	112	--	--
			3.0	54000	26.6	8.1	4.5	70	--	--
			4.0	54000	26.1	8.0	3.2	49	--	--
			4.9	54000	24.4	7.7	.0	0	--	--
					LINE 203					
OCT 06, 70	1510	2	.3	47000	28.0	8.8	7.3	111	--	81
			1.5	49000	27.2	8.8	6.5	98	--	--
			3.0	53000	26.3	8.8	5.2	79	--	--
			4.0	49000	26.7	8.7	5.1	77	--	--
					LINE 217					
OCT 06, 70	1430	2	.3	28000	30.7	9.1	10.7	157	--	53
			.9	28000	28.8	8.9	8.6	123	--	--
			1.5	36000	27.6	8.8	7.2	103	--	--
			2.1	47000	26.6	8.8	4.7	70	--	--
			3.0	47000	26.5	8.7	4.4	65	--	--
			4.0	47000	26.5	8.7	4.2	62	--	--
			4.9	42000	26.8	8.7	4.1	60	--	--
					LINE 223					
OCT 07, 70	0940	2	.3	1400	26.6	7.6	6.2	77	--	16
			1.5	1400	26.7	7.6	6.2	77	--	--
			3.0	1500	26.6	7.7	6.3	78	--	--
					LINE 233					
OCT 07, 70	1115	2	.3	2400	27.4	7.7	5.6	71	--	42

TABLE 7A--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1971 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 233 CONTINUED					
OCT 07, 70	1115	2	1.5	3300	27.2	7.8	5.7	71	--	--
			3.0	3200	27.1	7.7	5.3	66	--	--
			4.6	49000	26.7	7.4	.2	3	--	--
			6.1	50000	26.9	7.4	.5	8	--	--
					LINE 247					
OCT 07, 70	1145	2	.3	3800	28.0	7.6	5.2	67	--	--
			1.5	4000	27.7	7.7	5.8	73	--	--
			3.0	13000	26.3	7.5	3.5	44	--	--
			4.9	42000	24.9	7.8	2.5	35	--	--
					LINE 258					
OCT 07, 70	1215	2	.3	5000	28.4	7.9	6.0	77	--	66
			1.5	6000	28.1	8.0	5.8	75	--	--
			3.0	40000	28.1	8.2	4.7	69	--	--
			5.3	42000	27.8	8.1	4.2	63	--	--
					LINE 263					
OCT 06, 70	1400	2	.3	39000	28.0	8.9	7.8	115	--	53
			1.5	40000	27.9	8.8	7.7	113	--	--
			3.0	41000	27.5	8.8	6.6	97	--	--
			4.0	41000	26.7	8.7	5.0	72	--	--
					LINE 274					
OCT 06, 70	1240	1	.3	47000	27.4	8.6	6.5	97	--	91
			1.2	47000	27.4	8.6	6.5	97	--	--
OCT 06, 70	1210	2	.3	50000	26.9	8.5	6.6	100	--	69
			1.5	48000	26.7	8.5	6.6	98	--	--
OCT 06, 70	1140	3	.3	46000	26.7	8.5	6.2	93	--	58
			1.5	47000	26.4	8.5	5.8	85	--	--
			3.0	47000	26.4	8.5	5.7	84	--	--
			4.6	48000	26.6	8.3	6.3	94	--	--
					LINE 287					
OCT 06, 70	1100	1	.3	45000	26.6	8.5	6.0	90	--	104
			.9	34000	26.9	8.5	6.4	90	--	--
OCT 06, 70	1040	3	.3	46000	26.4	8.5	6.1	90	--	76
			1.5	46000	26.4	8.5	6.0	88	--	--
			3.0	46000	26.4	8.5	6.1	90	--	--
			4.0	45000	26.9	8.5	6.2	93	--	--
OCT 06, 70	0940	4	.3	45000	25.9	8.1	4.5	66	--	86
			1.5	43000	26.1	8.1	4.3	62	--	--
					LINE 297					
OCT 06, 70	0935	2	.3	46000	26.1	8.1	5.4	79	--	--
			1.5	46000	26.1	8.1	5.1	75	--	--
			2.4	46000	26.1	8.1	5.4	79	--	--
			3.8	46000	26.3	8.1	5.7	84	--	--
					LINE 301					
OCT 06, 70	1000	2	.3	46000	26.3	8.1	5.6	82	--	53

TABLE 7A--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1971 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 301 CONTINUED					
OCT 06, 70	1000	2	1.5	46000	26.3	8.1	5.7	84	--	--
			3.0	46000	26.3	8.1	5.8	85	--	--
			4.4	46000	26.3	8.1	5.8	85	--	--
						LINE 313				
OCT 06, 70	1025	2	.3	44000	26.8	8.1	6.0	90	--	99
			1.5	46000	26.8	8.1	6.0	90	--	--
			3.0	46000	26.8	8.1	6.0	90	--	--
			4.6	46000	26.9	8.1	5.7	85	--	--
			6.1	46000	26.9	8.1	5.9	88	--	--
			10.4	46000	26.7	8.1	6.0	90	--	--
						LINE 320				
OCT 06, 70	1245	2	.3	22000	28.6	7.9	6.4	89	--	119
			1.5	37000	27.1	7.8	4.7	66	--	--
			3.0	46000	27.3	7.8	3.5	52	--	--
			4.6	46000	27.3	7.8	2.8	42	--	--
			6.1	47000	27.5	7.8	2.9	43	--	--
			10.4	50000	27.9	7.7	2.6	40	--	--
						LINE 334				
OCT 06, 70	1225	2	.3	34000	28.2	7.8	5.4	78	--	76
			1.5	42000	27.4	7.8	4.3	63	--	--
			3.0	46000	27.1	7.8	4.0	60	--	--
			6.1	46000	26.9	8.1	4.7	70	--	--
			11.3	50000	27.3	7.7	3.2	48	--	--
						LINE 343				
OCT 06, 70	1215	2	.3	20000	28.7	7.8	4.0	56	--	30
			1.5	37000	28.1	7.8	4.6	67	--	--
			3.0	43000	27.6	7.9	4.0	60	--	--
			4.6	46000	27.4	8.1	5.1	76	--	--
			6.1	46000	27.5	8.1	4.8	73	--	--
			11.9	50000	27.7	7.7	3.9	60	--	--
						LINE 351				
OCT 06, 70	1135	2	.3	32000	28.1	7.8	4.1	59	--	58
			1.5	37000	27.4	7.8	4.6	66	--	--
			3.0	44000	27.1	7.8	5.2	78	--	--
			4.6	46000	27.0	8.1	5.2	78	--	--
			6.1	46000	27.1	8.1	5.2	78	--	--
			11.0	47000	26.7	8.1	4.0	60	--	--
			11.0	47000	26.7	8.1	4.0	60	--	--
						LINE 364				
OCT 06, 70	1110	2	.3	37000	27.1	7.9	5.4	76	--	61
			1.5	37000	26.9	7.9	5.4	76	--	--
			3.0	37000	26.8	8.0	5.3	75	--	--
			4.6	46000	27.1	8.2	5.9	88	--	--
			6.1	46000	27.0	8.2	5.3	79	--	--
			9.1	46000	26.9	8.2	5.4	81	--	--
			11.9	49000	26.4	8.0	3.8	57	--	--
						LINE 370				
OCT 06, 70	1045	2	.3	41000	27.3	8.0	6.2	90	--	75

TABLE 7A--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1971 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 370 CONTINUED						
OCT 06, 70	1045	2	1.5	44000	27.3	8.1	6.1	91	--	--
			3.0	46000	27.4	8.1	5.9	88	--	--
			6.1	46000	27.2	8.1	5.4	81	--	--
			9.1	47000	26.8	8.1	5.2	78	--	--
			12.5	47000	26.7	7.9	4.2	63	--	--
				LINE 376						
OCT 06, 70	1010	2	.3	45000	26.4	8.4	6.2	91	--	--
			1.5	45000	26.4	8.5	6.2	91	--	--
			3.0	46000	26.4	8.5	6.2	91	--	--
			6.1	46000	26.4	8.4	6.2	91	--	--
			10.4	46000	26.4	8.4	6.0	88	--	--

TABLE 7B--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1971 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-PHORUS ORTHO (P) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	TOTAL ORGANIC CARBON (MG/L)
						LINE 10						
OCT 08, 70	1235	2	.3	.9	.0	.00	.02	.01	.01	1.6	--	--
			3.7	1.2	.0	.00	.07	.01	.02	1.4	--	--
						LINE 34						
OCT 08, 70	1055	1	.3	1.1	.0	.02	.05	.01	.16	1.3	--	--
			4.6	1.3	.0	.02	.05	.01	.01	1.7	--	--
						LINE 157						
OCT 07, 70	1345	2	.3	2.3	.0	.00	.02	.00	.00	.7	--	--
			4.9	1.2	.0	.08	.07	.01	.01	.8	--	--
						LINE 175						
OCT 07, 70	1205	1	.3	.6	.0	.06	.04	.01	.01	.6	--	--
			1.1	.3	.0	.00	.04	.00	.03	1.0	--	--
OCT 07, 70	1120	2	.3	2.5	.0	.06	.12	.00	.01	.8	--	--
			3.4	2.5	.0	.10	.04	.02	.02	.9	--	--
OCT 07, 70	1145	3	.3	1.1	.0	.04	.05	.00	.01	.8	--	--
			1.5	1.6	.0	.02	.04	.00	.01	.7	--	--
						LINE 194						
OCT 07, 70	0905	1	.3	.8	.1	.02	.06	.02	.03	.2	--	--
			4.6	.0	.1	.04	.07	.02	.03	.2	--	--
OCT 07, 70	0955	3	.3	3.8	.0	.06	.09	.02	.03	.7	--	--
			2.3	1.3	.0	.04	.06	.00	.01	.9	--	--
OCT 07, 70	1620	4	.3	2.1	.0	.02	.06	.02	.03	2.3	--	--
			4.9	5.6	.1	.88	.06	.08	.10	5.8	--	--
						LINE 217						
OCT 06, 70	1430	2	.3	5.3	.1	.06	.07	.09	.10	2.7	--	--
						LINE 223						
OCT 07, 70	0940	2	.3	13.0	.6	.12	.11	.28	.30	2.0	--	--
			3.0	13.0	.6	.10	.14	.28	.32	2.1	--	--
						LINE 258						
OCT 07, 70	1215	2	.3	10.0	.3	.20	.06	.23	.27	1.8	--	--
			5.3	3.3	.1	.18	.01	.01	.04	1.0	--	--
						LINE 274						
OCT 06, 70	1240	1	.3	1.1	.0	.14	.06	.01	.01	.2	--	--
			1.2	4.8	.0	.10	.02	.00	.01	.9	--	--
OCT 06, 70	1210	2	.3	2.8	.0	.06	.14	.00	.01	.4	--	--
			1.5	1.5	.0	.00	.00	.00	.01	1.1	--	--
OCT 06, 70	1140	3	.3	1.4	.0	.02	.00	.00	.02	1.7	--	--

TABLE 78--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1971 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)	CHEMICAL OXYGEN DEMAND (COD) (MG/L)	TOTAL ORGANIC CARBON (MG/L)
						LINE 274 CONTINUED						
OCT 06, 70	1140	3	4.6	1.8	.1	.04	.00	.00	.02	.7	--	--
						LINE 297						
OCT 06, 70	0935	2	.3	1.5	.0	.08	.00	.01	.02	1.1	--	--
			3.8	2.4	.0	.10	.03	.02	.04	1.2	--	--
						LINE 320						
OCT 06, 70	1245	2	.3	7.9	.1	.10	.00	.13	.14	2.4	--	--
			10.4	4.3	.0	.38	.00	.05	.07	.5	--	--
						LINE 351						
OCT 06, 70	1135	2	.3	8.6	.1	.04	.02	.04	.06	1.9	--	--
			11.0	6.3	.0	.10	.00	.01	.03	.3	--	--
			11.0	6.3	.0	.10	.00	.01	.03	.3	--	--
						LINE 376						
OCT 06, 70	1010	2	.3	.6	.0	.00	.01	.05	.05	.3	--	--
			10.4	1.6	.0	.00	.01	.00	.02	.3	--	--

TABLE 7C--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1971 WATER YEAR

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (LAB)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG) (MG/L)	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 10					
OCT 08, 70	1235	2	.3	51200	--	--	--	--	--	--	--
			3.7	51500	--	--	--	--	--	--	--
						LINE 34					
OCT 08, 70	1055	1	.3	56900	--	--	--	--	--	--	--
			4.6	56500	--	--	--	--	--	--	--
						LINE 157					
OCT 07, 70	1345	2	.3	40700	--	--	--	--	--	--	--
			4.9	47700	400.0	1400.0	9200	120	2500	17000	31000
						LINE 175					
OCT 07, 70	1205	1	.3	57000	--	--	--	--	--	--	--
			1.1	56800	--	--	--	--	--	--	--
OCT 07, 70	1120	2	.3	58600	--	--	--	--	--	--	--
			3.4	59000	--	--	--	--	--	--	--
OCT 07, 70	1145	3	.3	34200	--	--	--	--	--	--	--
			1.5	54700	--	--	--	--	--	--	--
						LINE 194					
OCT 07, 70	0905	1	.3	49100	--	--	--	--	--	--	--
			4.6	49100	380.0	1300.0	9400	148	2500	17000	31000
OCT 07, 70	0955	3	.3	45400	--	--	--	--	--	--	--
			2.3	53700	--	--	--	--	--	--	--
OCT 07, 70	1620	4	.3	26300	--	--	--	--	--	--	--
			4.9	57000	--	--	--	--	--	--	--
						LINE 217					
OCT 06, 70	1430	2	.3	27800	--	--	--	--	--	--	--
						LINE 223					
OCT 07, 70	0940	2	.3	1800	--	--	--	--	--	--	--
			3.0	1430	87.0	47.0	140	157	200	260	830
						LINE 258					
OCT 07, 70	1215	2	.3	4990	--	--	--	--	--	--	--
			5.3	42700	--	--	--	--	--	--	--
						LINE 274					
OCT 06, 70	1240	1	.3	48000	--	--	--	--	--	--	--
			1.2	48500	--	--	--	--	--	--	--
OCT 06, 70	1210	2	.3	51600	--	--	--	--	--	--	--
			1.5	31900	--	--	--	--	--	--	--
OCT 06, 70	1140	3	.3	46800	380.0	1200.0	8900	147	2400	16000	29000

TABLE 7C--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1971 WATER YEAR--CONTINUED

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (LAB)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG) (MG/L)	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 274 CONTINUED						
OCT 06, 70	1140	3	4.6	49300	400.0	1200.0	9600	150	2600	17000	31000
					LINE 297						
OCT 06, 70	0935	2	.3	46000	--	--	--	--	--	--	--
			3.8	46400	--	--	--	--	--	--	--
					LINE 320						
OCT 06, 70	1245	2	.3	22700	230.0	660.0	4300	144	1200	8000	14000
			10.4	50600	390.0	1300.0	9500	172	2800	17000	31000
					LINE 351						
OCT 06, 70	1135	2	.3	26700	--	--	--	--	--	--	--
			11.0	31800	--	--	--	--	--	--	--
			11.0	31800	--	--	--	--	--	--	--
					LINE 376						
OCT 06, 70	1010	2	.3	31000	--	--	--	--	--	--	--
			10.4	46900	--	--	--	--	--	--	--

Table 7-D--Quality of water in Laguna Madre estuary, 1971 water year

Insecticide and herbicide analyses

(Whole water analyses in micrograms per liter; bottom deposits analyses in micrograms per kilogram, dry weight)

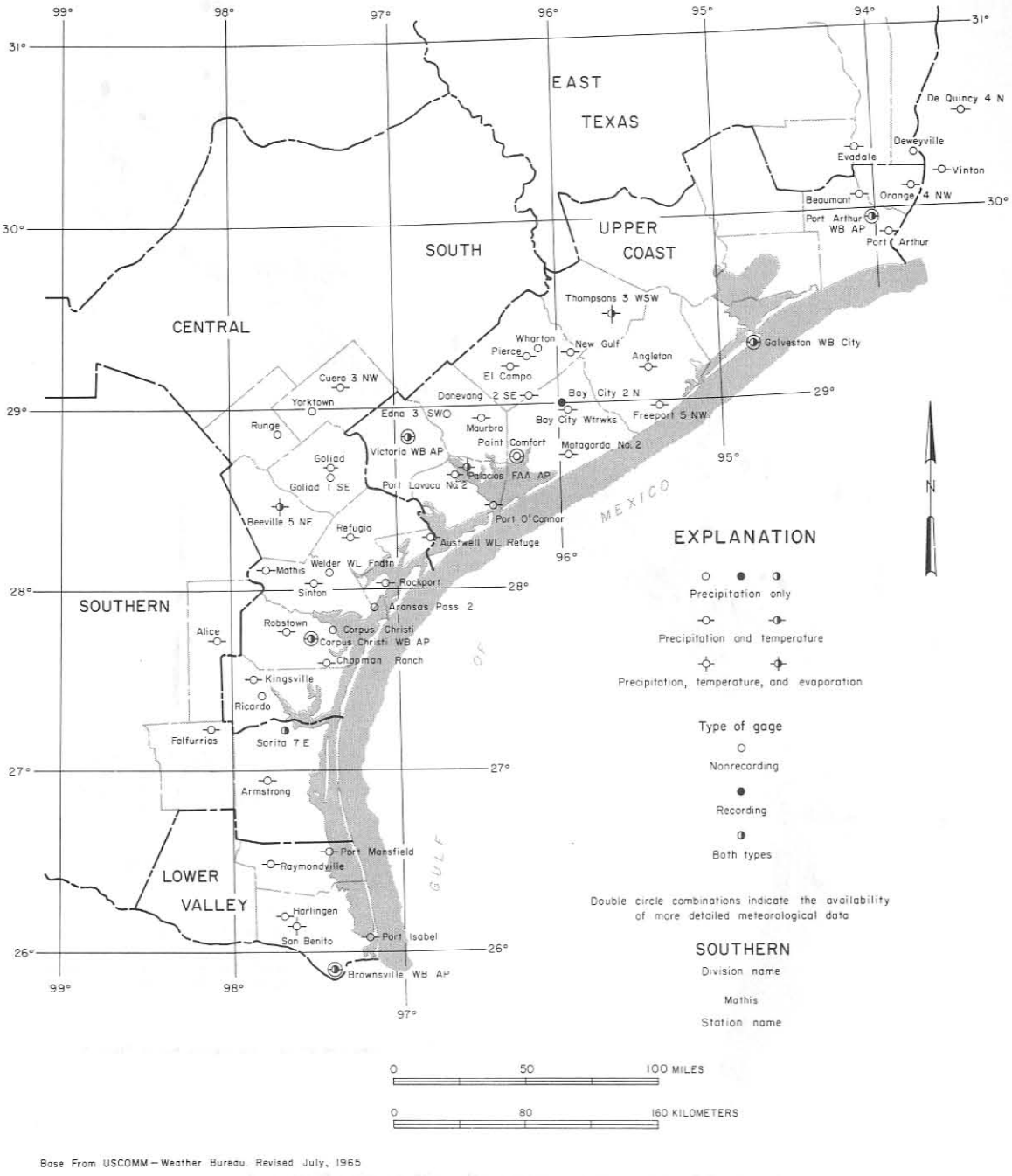
Date of Collection	Time	Type of Sample	Insecticides													Herbicides		
			Aldrin	DDD	DDE	DDT	Dieldrin	Endrin	Heptachlor	Heptachlor Epoxide	Lindane	Chlordane	Parathion	Methyl Parathion	Malathion	Diazinon	2,4-D	Silvex	2,4,5-T
								Line 223, Site 2, Arroyo Colorado										
1970																			
Oct. 7	0940	Water	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.00	0.00	0.01
		Bottom deposits																	
		0-2 inches	0.0	10	39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	a/	--	--	--
		4-7 inches	.0	10	86	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	a/	--	--	--
		9-11 inches	.0	20	150	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	a/	--	--	--
		13-16 inches	.0	3.8	28	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	a/	--	--	--
								Line 258, Site 2, Arroyo Colorado										
Oct. 7	1215	Water	--	--	--	--	--	--	--	--	--	--	--	--	--	--	.00	.00	.03
		Bottom deposits																	
		0-2 inches	.0	.0	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	a/	--	--	--

a/ Undetermined due to interfering compounds.

Climatological Records

The climate of a region plays a great role in estuarine water quality. The types of climatological data available for a 60-mile-(97-kilometer-) wide band along the Texas coast are shown on Figure 11.

Tabulation of daily precipitation, temperature, and other data are published monthly, and monthly summaries are published annually by the Environmental Science Services Administration (1972) in the series titled Climatological Data-Texas. For the period 1931-60, monthly and annual data are summarized in two U.S. Weather Bureau publications (1958,1965).



Base From USCOMM—Weather Bureau. Revised July, 1965

Figure 11.—Locations of Selected Climatological Stations

Streamflow and Water-Quality Records

Streams along the Texas coast lie in the flat coastal plain and are incised below sea level. Thus, changes in water stage within bays often are reflected many miles up tributary streams. Consequently, the farthest downstream sites at which continuous streamflow data can be determined are located many miles upstream from the principle estuarine water bodies. The location of sites[2] at which continuous streamflow and daily water-quality data are available are shown on Figure 12.

The streamflow data for these sites represent runoff reaching the coastal area, but do not describe all

[2] Station numbers greater than 400 are abbreviated from the U.S. Geological Survey numbering system. For example, two station numbers 08041500 and 08162650, in abbreviated form become 415 and 1626.5.

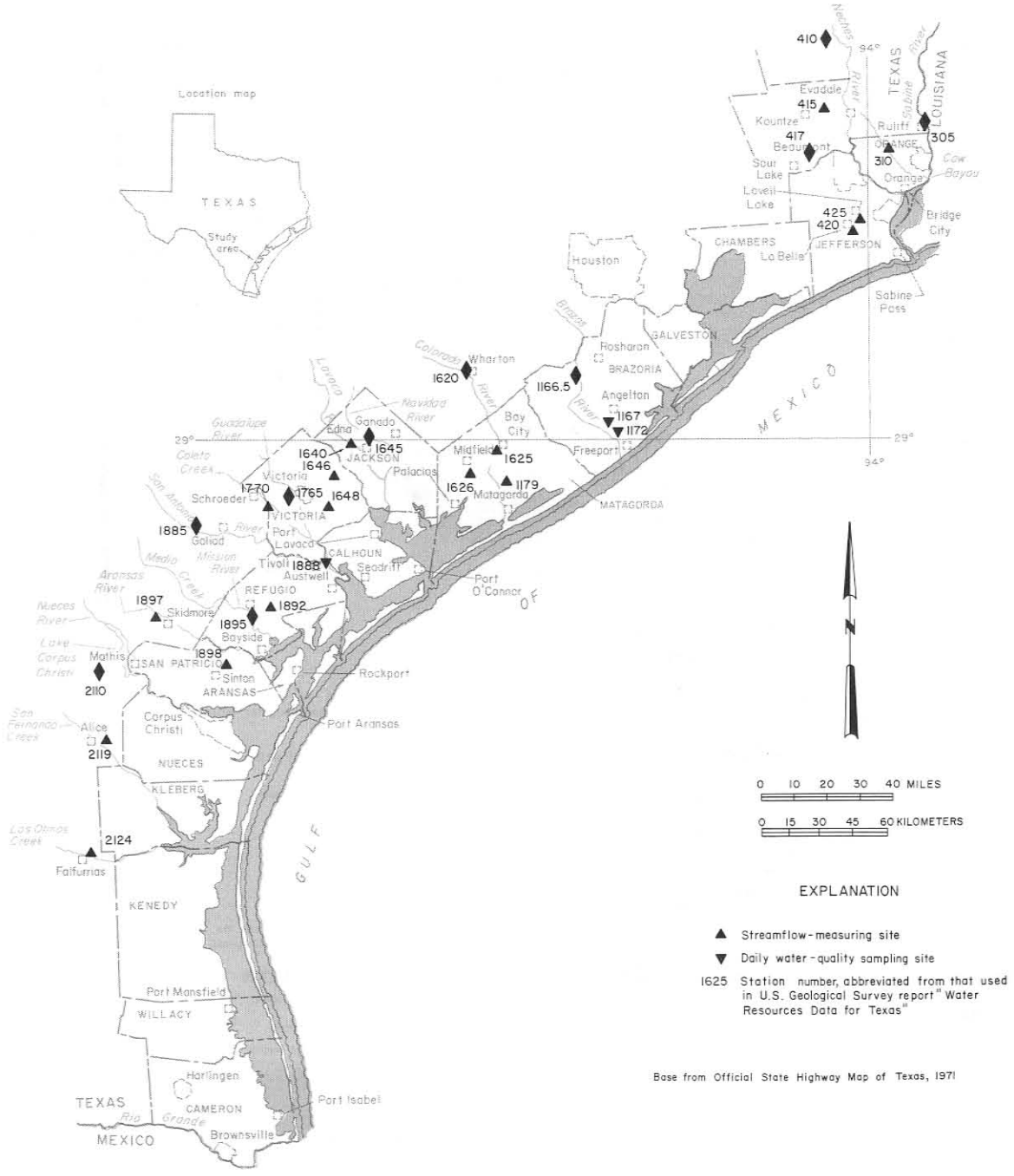


Figure 12.—Locations of Streamflow-Measuring Sites and Daily Water-Quality Data-Collection Sites

of the flow from streams that enter the estuaries. Intervening drainage, diversion for irrigation, return flows, and evapotranspiration may influence streamflow between the measuring sites and the estuaries.

Analyses of water collected daily at streamflow measuring sites show the effect of geology and cultural development on runoff from the drainage basins. At times, however, return flows, evapotranspiration, and lack of significant flow from upstream result in altered water quality between the data-collection site and the estuary.

Streamflow and chemical-quality data are published annually in the U.S. Geological Survey series Water Resources Data for Texas: Part 1. Surface-Water Records, and Part 2. Water-Quality Records.

Drainage areas from which unmeasured runoff enters the estuaries ranges from less than 100 square miles (259 square kilometers) on some estuaries to more than 10,000 square miles (25,900 square kilometers). Periodic measurements indicate that during some seasons unmeasured runoff that reaches the estuaries exceeds measured flow from the major tributaries.

To completely describe the quality and quantity of runoff from the entire area between continuous streamflow stations and the estuaries is not feasible; however, representative data are collected periodically at sites shown on Figure 13 and are published annually by the U.S. Geological Survey (1971,1971a).

Some of the sites are not sampled regularly and have no index number. These sites were numbered consecutively, from 1 through 29, for this report. The station names are listed below so the reader can identify them in the literature. The data from the 29 sites not previously published are listed in Table 8.

1. West Branch Mad Island Slough near Collegeport
2. Unnamed tributary to Oyster Lake near Collegeport
3. Unnamed tributary to Matagorda Bay near Collegeport
4. Willow Dam Slough near Collegeport
5. Johnsons Timber Slough near Collegeport
6. Lunis Creek near La Ward
7. Keller Creek near La Ward
8. Huisache Creek near Lolita
9. Mustang Creek near Ganado
10. Unnamed drainage ditch near Point Comfort
11. Arenosa Creek near Inez
12. Dry Creek near Inez
13. Casa Blanca Creek near Inez
14. Marcado Creek near Inez
15. Drain southeast of Swan Point near Seadrift
16. Drain northeast of Swan Point near Seadrift
17. Seadrift drain near Seadrift
18. Seadrift Creek at Seadrift
19. Drain near Seadrift
20. Schwing Bayou near Tivoli
21. Unnamed tributary at Highway 35 near Tivoli
22. Drain near Tivoli
23. Millers Creek at Tivoli
24. Drain at Highway 113 near Tivoli
25. Drain at FM 2040 near Austwell
26. Drain near Austwell
27. Unnamed tributary at FM 2040 near Austwell
28. Unnamed tributary near McDowell Point near Austwell
29. Oso Creek near Corpus Christi

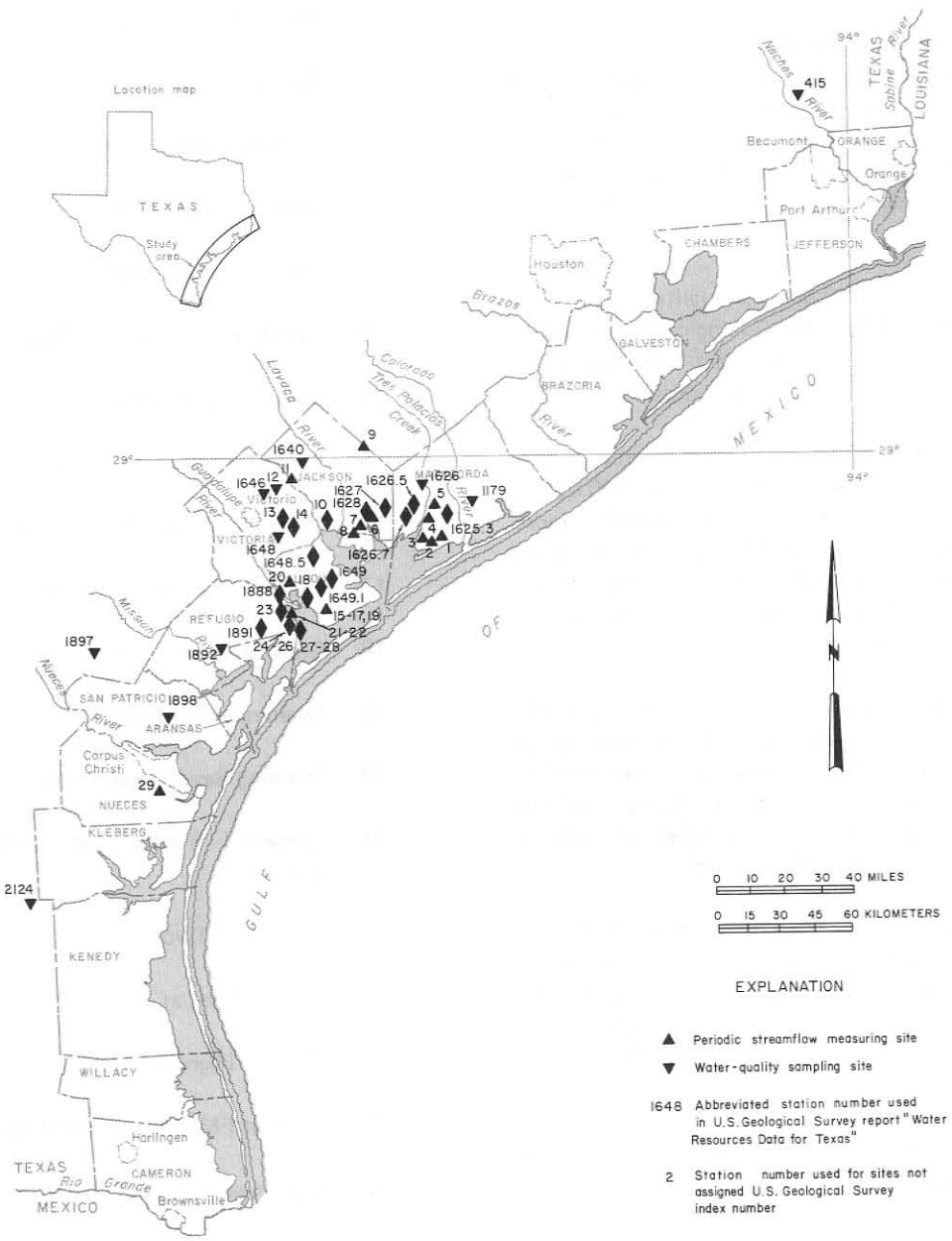


Figure 13

Locations of Selected Water-Quality and Streamflow Data-Collection Sites

Base from Official State Highway Map of Texas, 1971

TABLE 8A --NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS FOR SELECTED TRIBUTARIES, 1971 WATER YEAR

DATE	TIME	DISCHARGE (FT^3/S) 1/	SPECIFIC CONDUCTANCE (MICROMHOS) (FIELD)	TEMPERATURE (°C) (FIELD)	PH (UNITS) (FIELD)	DISSOLVED OXYGEN (MG/L) (FIELD)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND (MG/L)	CHEMICAL OXYGEN DEMAND (MG/L)	DISSOLVED SILICA (SIO_2) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DISSOLVED PHOSPHORUS ORTHO (P) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
TRIBUTARIES TO LAVACA-TRES PALACIOS ESTUARY															
1625.3 Little Robin Slough near Matagorda															
1971															
Feb. 25	1930	0.05	--	19	--	--	--	3.3	--	5.0	0.1	0.10	0.02	0.00	0.02
Mar. 4	1055	.05	--	11.5	--	--	--	3.4	26	9.5	.5	.24	.06	.03	.04
1626.7 Turtle Creek near Palacios															
1971															
Mar. 3	1635	.00	--	10	--	--	--	--	--	1.8	.2	.16	.02	.08	.16
10. Unnamed Drainage Ditch near Point Comfort															
1971															
Feb. 25	1645	.53	--	34.5	--	--	--	7.0	270	46	.0	15	.01	.40	.28
Mar. 4	0847	.38	--	30.5	--	--	--	--	--	44	.0	14	.01	.00	.46
13. Casa Blanca Creek near Inez															
1971															
Feb. 26	1035	.08	--	17	--	--	--	--	--	30	.1	.00	.01	.02	.02
Mar. 3	1203	.04	--	12.5	--	--	--	--	--	30	.0	.06	.00	.04	.04
14. Marcado Creek near Inez															
1971															
Feb. 26	0947	.07	--	18	--	--	--	--	--	22	.6	.10	.04	.13	.13
Mar. 3	1105	.05	--	10.5	--	--	--	--	--	22	.8	.29	.06	.61	.62
1649 East Coloma Creek near Port Lavaca															
1971															
Feb. 26	0855	5.05	--	17.5	--	--	--	--	--	20	2.7	.20	.07	.19	.19
Mar. 3	0850	.14	--	6	--	--	--	--	--	7.7	.1	.18	.01	.05	.07
1649.1 West Coloma Creek near Seadrift															
1971															
Feb. 26	0950	11.2	--	18	--	--	--	--	--	8.0	1.1	.20	.06	.19	.27
Mar. 3	0945	.13	--	7.5	--	--	--	--	--	7.1	.1	.13	.01	.08	.09
TRIBUTARIES TO GUADALUPE ESTUARY															
18. Seadrift Creek at Seadrift															
1970															
Nov. 12	0930	0.22	5,400	17.0	8.1	12.0	126	2.5	13	20	.1	.03	.01	.00	.01
Nov. 16	1300	.07	--	--	--	--	--	3.5	--	18	.2	.03	.01	.00	.02
Nov. 18	1530	.07	--	--	--	--	--	3.0	--	15	.0	.05	.00	.00	.01
23. Miller's Creek at Tivoli															
1970															
Nov. 12	1545	2/ .01	1,900	18.0	7.9	5.2	55	7.1	29	19	.1	.37	.01	.75	.75
Nov. 16	1445	2/ .03	--	--	--	--	--	4.8	--	32	.1	.92	.00	.48	.60
Nov. 18	1115	2/ .01	--	--	--	--	--	5.1	22	16	.1	.64	.01	.35	.45
27. Unnamed Tributary at FM 2040 near Austwell															
1970															
Nov. 12	1300	--	100	20.0	6.4	7.6	83	2.8	--	11	.0	.05	.00	.05	.05
Nov. 16	1545	.16	--	--	--	--	--	4.6	--	10	.2	.16	.00	.00	.06
28. Unnamed Tributary near McDowell Point near Austwell															
1970															
Nov. 18	0900	2/ .07	--	--	--	--	--	2.6	23	14	.4	.08	.00	.08	.10

1/ To convert water discharge in cubic feet per second (ft^3/s) to cubic meters per second (m^3/s) multiply by 0.02831.
2/ Estimated.

TABLE 8B --CHEMICAL ANALYSES OF WATER FROM SELECTED TRIBUTARIES, 1971 WATER YEAR

DATE	TIME	DISCHARGE (FT^3/S) 1/	SPECIFIC CONDUCTANCE (MICROMHOS) (FIELD)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM + POTASSIUM (NA+K) (MG/L)	BICARBONATE (HCO_3) (MG/L)	DISSOLVED SULFATE (SO_4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA,MG)	NONCARBONATE HARDNESS
TRIBUTARIES TO EAST MATAGORDA ESTUARY												
1625.3 Little Robin Slough near Matagorda												
1971												
Feb. 25	1930	0.05	1,880	91	45	240	296	25	480	1,030	410	170
Mar. 4	1055	.05	1,420	86	38	150	228	67	310	772	370	180
TRIBUTARIES TO LAVACA-TRES PALACIOS ESTUARY												
1626.7 Turtle Creek near Palacios												
1971												
Mar. 3	1635	.00	1,450	54	35	180	174	19	360	747	280	140
10. Unnamed Drainage Ditch near Point Comfort												
1971												
Feb. 25	1645	.53	82,700	500	310	21,000	856	400	33,000	55,500	2,500	1,800
Mar. 4	0847	.38	82,400	480	200	22,000	748	940	34,000	57,200	2,000	1,400
13. Casa Blanca Creek near Inez												
1971												
Feb. 26	1035	.08	1,100	93	23	120	442	37	140	659	330	0
Mar. 3	1203	.04	1,150	98	26	120	462	38	130	670	350	0
14. Marcado Creek near Inez												
1971												
Feb. 26	0947	.07	2,460	110	32	440	434	230	530	1,580	400	44
Mar. 3	1105	.05	1,630	71	26	250	392	110	280	952	280	0
1649 East Coloma Creek near Port Lavaca												
1971												
Feb. 26	0855	5.05	4,260	260	100	560	84	550	1,200	2,700	1,100	1,000
Mar. 3	0850	.14	7,620	420	190	970	165	730	2,200	4,560	1,800	1,700
1649.1 West Coloma Creek near Seadrift												
1971												
Feb. 26	0950	11.2	1,230	94	21	140	50	230	230	753	320	280
Mar. 3	0445	.13	7,580	530	150	920	158	670	2,200	4,570	1,900	1,800
TRIBUTARIES TO GUADALUPE ESTUARY												
18. Seadrift Creek at Seadrift												
1970												
Nov. 12	0930	.22	4,640	240	140	530	200	390	1,200	2,660	1,200	1,000
Nov. 16	1300	.07	6,670	300	230	680	246	520	1,700	3,590	1,700	1,500
Nov. 18	1530	.07	5,500	270	170	640	294	460	1,500	3,170	1,400	1,100
23. Miller's Creek at Tivoli												
1970												
Nov. 12	1545	2/ .01	1,820	40	7.8	350	440	44	340	1,020	130	0
Nov. 16	1445	2/ .03	1,880	38	5.6	340	380	52	340	984	100	0
27. Unnamed Tributary at FM 2040 near Austwell												
1970												
Nov. 12	1300	.16	190	7.5	7.4	10	44	1.6	24	184	49	13
Nov. 16	1545	2/ .07	197	8.5	3.4	22	42	10	25	104	35	1
Nov. 18	0900	2/ .16	364	24	7.3	34	92	8.0	55	189	90	15
28. Unnamed Tributary near McDowell Point near Austwell												
1970												
Nov. 18	115	2/ .01	1,900	37	2.3	360	420	50	340	1,020	100	0

1/ To convert water discharge in cubic feet per second (ft^3/s) to cubic meters per second (m^3/s) multiply by 0.02831
2/ Estimated.

TABLE 8C --ANALYSES FOR SELECTED IONS IN WATER FROM SELECTED TRIBUTARIES, 1971 WATER YEAR

(Results in micrograms per liter except as indicated)

DATE	TIME	DISCHARGE (FT^3/S) 1/	SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED BROMIDE (BR) (MG/L)	DISSOLVED IODIDE (I) (MG/L)	DISSOLVED ARSENIC (AS)	DISSOLVED BORON (B)	DISSOLVED COPPER (CU)	DISSOLVED IRON (FE)	DISSOLVED LEAD (PB)	DISSOLVED LITHIUM (LI)	DISSOLVED MANGANESE (MN)	DISSOLVED MERCURY (HG)	DISSOLVED STRONTIUM (SR)	DISSOLVED ZINC (ZN)
TRIBUTARIES TO LAVACA-TRES PALACIOS ESTUARY																
1625.30 Little Robin Slough near Matagorda																
1971																
Feb. 25	1930	0.05	1,880	0.4	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 4	1055	.05	1,420	.3	--	--	--	--	--	--	--	--	--	--	--	--
1626.7 Turtle Creek near Palacios																
1971																
Mar. 3	1635	.00	1,450	.3	--	--	--	--	--	--	--	--	--	--	--	--
10. Unnamed Drainage Ditch near Point Comfort																
1971																
Feb. 25	1645	.53	82,700	1.0	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 4	0847	.38	82,400	.9	--	--	--	--	--	--	--	--	--	--	--	--
13. Casa Blanca Creek near Inez																
1971																
Feb. 26	1035	.08	1,100	.5	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 3	1203	.04	1,150	.5	--	--	--	--	--	--	--	--	--	--	--	--
14. Marcado Creek near Inez																
1971																
Feb. 26	0947	.07	2,460	1.0	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 3	1105	.05	1,630	.7	--	--	--	--	--	--	--	--	--	--	--	--
1649 East Coloma Creek near Port Lavaca																
1971																
Feb. 26	0855	5.05	4,260	.3	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 3	0850	.14	7,620	.3	--	--	--	--	--	--	--	--	--	--	--	--
1649.1 West Coloma Creek near Seadrift																
1971																
Feb. 26	0950	11.2	1,230	.3	--	--	--	--	--	--	--	--	--	--	--	--
Mar. 3	0945	.13	7,580	.2	--	--	--	--	--	--	--	--	--	--	--	--
TRIBUTARIES TO GUADALUPE ESTUARY																
18. Seadrift Creek at Seadrift																
1970																
Nov. 12	0930	.22	4,640	.4	4.8	.83	<10	550	2	10	0	70	2,000	<0.5	2,800	28
Nov. 16	1300	.07	6,670	.4	8.8	.080	--	340	--	--	--	--	--	--	--	--
Nov. 18	1530	.07	5,500	.5	8.3	.080	<10	590	9	0	0	70	1,100	< .5	3,100	28
23. Miller's Creek at Tivoli																
1970																
Nov. 12	1545	2/ .01	1,820	2.3	1.5	.14	<10	1,100	3	90	0	40	130	<.5	380	26
Nov. 16	1445	2/ .03	1,880	2.4	3.8	.041	--	1,500	--	--	--	--	--	--	--	--
Nov. 18	1115	2/ .01	1,900	2.4	3.7	.042	<10	1,500	2	120	0	50	110	<.5	350	26
27. Unnamed Tributary at FM 2040 near Austwell																
1970																
Nov. 12	1300	.16	190	.0	.1	.017	10	30	14	900	0	0	0	.5	160	44
Nov. 16	1545	2/ .07	197	.0	7.8	--	--	--	--	--	--	--	--	--	--	--
28. Unnamed Tributary near McDowell Point near Austwell																
1970																
Nov. 18	0900	2/ .16	364	.1	2.5	.016	10	60	6	80	0	0	0	.5	160	26

1/ To convert water discharge in cubic feet per second (ft^3/s) to cubic meters per second (m^3/s) multiply by 0.02831.
2/ Estimated.

TABLE 8D .--INSECTICIDES AND HERBICIDES ANALYSES OF WATER AND BOTTOM DEPOSITS FROM SELECTED TRIBUTARIES, 1971 WATER YEAR

(Whole water analyses in micrograms per liter; bottom deposits analyses in micrograms per kilogram, dry weight)

DATE	DISCHARGE (ft^3/s) 1/	TYPE OF SAMPLE	INSECTICIDES														HERBICIDES		
			ALDRIN	DDD	DDE	DDT	DIEL-DRIN	ENDRIN	HEPTA-CHLOR	HEPTA-CHLOR EPOX-IDE	LIN-DANE	CHLOR-DANE	PARA-THION	METHYL PARA-THION	MALA-THION	DIA-ZINON	2,4-D	Silvex	2,4,5-T
TRIBUTARIES TO GUADALUPE ESTUARY																			
18. Seadrift Creek at Seadrift																			
1970 Nov. 16	.07	Water	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.07	0.01	0.01
		Bottom deposits	.0	.4	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	b	--	--	--
1888. Guadalupe River near Tivoli																			
1970 Nov. 16	796	Water	.00	.00	.00	.00	.00	.00	.00	.00	.00	.0	.00	.00	.00	.00	.00	.00	.01
		Bottom deposits	.0	5.8	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	b	--	--	--
23. Miller's Creek near Tivoli																			
1970 Nov. 16	.02	Water	.00	.00	.00	.00	.00	.00	.00	.00	.06	.0	.00	.00	.00	.00	.00	.00	.00
		Bottom deposits	.0	4.4	4.1	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	b	--	--	--
28. Unnamed Tributary near McDowell Point near Austwell																			
1970 Nov. 18	.16	Water	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.0	.00	.00	.00	.00	.00	.00
		Bottom deposits	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	b	--	--	--

1/ To convert water discharge in cubic feet per second (ft^3/s) to cubic meters per second (m^3/s) multiply by 0.02831.

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