

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

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY (SECCHI DISK) (CM)
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LINE 264 CONTINUED

APR 16, 74	1650	1	1.5 4.0	14000 16000	19.2 19.7	8.3 8.2	8.5 7.8	94 89	25. 50.	-- --
JUN 13, 74	1530	1	.3 1.8 3.4 4.1	10000 10000 10000 11000	28.0 28.0 28.0 28.0	8.0 8.1 8.0 8.0	9.3 8.8 7.8 7.8	120 114 101 101	60. 70. 90. 80.	19 -- -- --
OCT 10, 73	1305	2	.3 1.2	590 580	28.5 28.5	8.1 8.1	9.2 9.6	118 123	-- --	8 --
APR 16, 74	1630	2	.3 1.2	9200 12000	20.1 20.2	8.4 8.4	9.9 10.0	111 114	-- 15.	53 --
JUN 13, 74	1115	2	.3 1.7	5400 6500	28.5 28.0	8.5 8.3	10.4 7.8	136 101	40. 150.	25 --
OCT 10, 73	1335	3	.3 1.5	340 340	28.6 28.7	7.9 7.9	8.3 9.9	106 127	-- --	10 --
APR 16, 74	1620	3	.3 1.8	7800 11000	20.3 19.7	8.4 8.4	9.4 9.5	104 106	30. 30.	46 --
JUN 13, 74	1050	3	.3 1.8	5200 6700	28.5 28.0	8.6 8.4	10.2 8.0	134 103	45. 80.	28 --
OCT 10, 73	1340	4	.3 1.5	6000 6000	28.4 28.5	8.3 8.3	8.7 9.3	113 122	-- --	10 --
APR 16, 74	1600	4	.3 1.5	9800 9800	20.2 19.8	8.5 8.4	10.3 9.8	116 110	15. 20.	69 --
JUN 13, 74	1030	4	.3 1.7	5700 7000	28.5 28.0	8.6 8.5	10.4 7.6	136 98	40. 95.	31 --
OCT 10, 73	1350	5	.3 1.5	5500 5500	28.6 28.6	8.5 8.4	8.0 8.9	105 117	-- --	13 --
APR 16, 74	1555	5	.3 .9	6100 7000	19.6 19.3	8.4 8.3	10.4 9.6	114 104	70. 70.	28 --
JUN 13, 74	1015	5	.3 1.4	7500 10000	28.0 28.0	8.5 8.3	9.2 6.2	119 80	20. 20.	37 --

LINE 274

OCT 10, 73	1245	1	.3 1.5 3.4	1800 1800 1800	28.5 28.4 28.5	8.4 8.4 8.4	9.9 10.0 9.0	127 127 115	-- -- --	10 -- --
JUN 13, 74	0850	1	.3 1.8 3.7	11000 12000 12000	27.0 27.0 27.0	8.2 8.2 8.2	7.8 7.4 7.5	98 94 96	35. 50. 85.	31 -- --
OCT 10, 73	1235	2	.3 1.2	1600 1600	28.5 28.7	8.6 8.5	9.4 9.7	120 124	-- --	10 --
JUN 13, 74	0900	2	.3 1.2	11000 11000	27.5 27.5	8.2 8.2	7.4 7.6	94 97	40. 40.	36 --
OCT 10, 73	1225	3	.3 1.8	370 370	28.4 28.3	8.1 8.1	8.4 9.2	106 116	-- --	8 --
JUN 13, 74	0910	3	.3 1.8 2.6	10000 10000 10000	28.0 28.0 27.5	8.3 8.2 8.2	8.7 8.2 8.0	112 106 102	25. 45. 60.	36 -- --
OCT 10, 73	1215	4	.3	870	28.3	8.2	8.5	108	--	8

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

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICROHMS/CM)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
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LINE 274 CONTINUED

OCT 10, 73	1215	4	1.5	960	28.4	8.3	9.3	118	--	--
OCT 10, 73	1205	5	.3	2200	28.4	8.6	8.7	112	--	20
			1.5	2200	28.3	8.6	9.3	119	--	--
			3.7	2200	28.4	8.6	9.3	119	--	--
JUN 13, 74	0920	5	.3	7700	27.5	8.4	8.2	105	30.	41
			1.8	7700	26.5	8.3	7.6	95	35.	--
			3.4	9500	27.0	8.4	6.6	83	40.	--
			4.0	12000	26.5	7.9	4.1	52	75.	--
OCT 10, 73	1200	6	.3	2500	28.5	8.5	10.0	128	--	8
			1.2	2400	28.6	8.5	9.1	118	--	--
JUN 13, 74	0930	6	1.1	13000	27.5	8.1	6.5	84	10.	69

LINE 267

OCT 10, 73	0930	1	.3	1400	27.4	8.4	7.6	95	--	5
			1.5	1900	27.4	8.5	7.5	95	--	--
			3.4	2500	27.3	8.5	7.4	94	--	--
APR 16, 74	1910	1	.3	19000	19.7	8.2	7.1	81	40.	25
			1.5	19000	19.6	8.2	7.0	80	50.	--
			3.7	19000	19.5	8.2	6.9	78	70.	--
JUN 12, 74	1800	1	.3	12000	31.0	8.4	10.9	151	32.	--
			1.5	12000	31.0	8.4	11.3	152	40.	--
			3.0	14000	30.0	8.4	9.7	132	55.	--
			3.7	14000	30.0	8.4	8.9	121	70.	--
OCT 10, 73	0945	2	.3	900	27.5	7.2	7.6	95	--	8
			1.5	1200	27.5	7.2	7.8	98	--	--
APR 16, 74	1900	2	.3	15000	19.8	8.3	7.5	86	30.	39
			.9	16000	19.8	8.3	7.4	85	20.	--
JUN 12, 74	1810	2	.3	10000	29.5	8.4	10.8	144	50.	41
			1.2	11000	29.0	8.4	10.1	132	15.	--
OCT 10, 73	0955	3	.3	540	27.5	8.4	7.5	94	--	8
			1.5	540	27.5	8.3	7.6	95	--	--
APR 16, 74	1850	3	.3	16000	19.8	8.3	8.2	94	50.	28
			1.2	17000	19.6	8.3	7.8	89	40.	--
JUN 12, 74	1815	3	.3	10000	29.0	8.4	10.4	136	15.	33
			1.4	10000	28.5	8.3	9.4	123	40.	--
OCT 10, 73	1010	4	.3	1100	27.7	8.4	7.5	94	--	9
			1.8	1100	27.7	8.3	7.7	96	--	--
APR 16, 74	1840	4	.3	16000	19.6	8.3	8.3	94	15.	51
			1.5	16000	19.5	8.3	8.2	93	65.	--
JUN 12, 74	1830	4	.3	10000	29.0	8.4	9.8	128	20.	41
			1.5	10000	29.0	8.3	9.8	128	35.	--
OCT 10, 73	1030	5	.3	360	27.7	8.1	7.0	88	--	5
			1.8	420	27.7	8.1	6.8	85	--	--
APR 16, 74	1830	5	.3	17000	19.6	8.2	8.0	91	15.	51
			2.1	17000	19.6	8.2	7.8	89	50.	--
OCT 10, 73	1035	6	.3	450	27.8	8.1	7.4	94	--	8
			1.5	470	27.8	8.1	7.8	99	--	--
APR 16, 74	1815	6	.3	14000	19.4	8.3	7.9	89	10.	53

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

1974 WATER YEAR--CONTINUED

## FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS) (FIELD)	TEMPER- ATURE (DEG. C)	PH	DIS- SOLVED OXYGEN (MG/L)	PERCENT SATUR- ATION	TUR- BIDITY (JTU)	TRANS- PARENCY SECCHI DISK (CM)
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## LINE 287 CONTINUED

APR 16, 74	1815	6	1.2	15000	19.2	8.2	7.7	87	15.	--
OCT 10, 73	1045	7	.3 1.5	810 900	27.7 27.8	8.2 8.2	7.0 8.6	88 111	-- --	8 --
APR 16, 74	1805	7	.3 1.5	15000 15000	19.7 19.7	8.3 8.3	8.8 8.9	100 101	10. 15.	56 --
OCT 10, 73	1055	8	.3 2.1	1000 1000	27.7 27.6	8.3 8.3	7.6 7.0	95 88	-- --	8 --
APR 16, 74	1755	8	.3 1.5	15000 15000	19.8 19.8	8.3 8.3	9.3 9.3	107 107	10. 10.	51 --
JUN 12, 74	1900	8	.3 1.8	11000 12000	28.0 28.0	8.4 8.2	9.8 8.1	127 106	25. 80.	39 --
JUN 13, 74	1000	8	.3 2.1	12000 11000	28.0 27.5	8.4 8.3	8.6 8.3	113 107	25. 100.	38 --
OCT 10, 73	1115	9	.3 1.8	1800 2700	27.9 27.8	8.4 8.4	8.4 8.0	106 101	-- --	8 --
APR 16, 74	1750	9	.3 1.5	14000 14000	19.9 19.9	8.3 8.3	8.2 8.4	93 95	40. 25.	46 --
JUN 12, 74	1915	9	.3 1.4	12000 12000	29.0 29.0	8.4 8.4	10.9 10.9	145 145	30. 30.	36 --

## LINE 291

OCT 10, 73	1710	1	.3 1.5	7700 7700	28.3 28.5	-- --	7.4 7.2	96 95	79. 89.	25 --
APR 17, 74	1140	1	.5 1.8	30000 28000	19.5 19.7	8.1 8.0	8.0 8.6	96 102	15. 15.	81 --
JUN 12, 74	1745	1	.3 1.8	-- --	29.4 29.3	8.3 8.3	-- --	-- --	30. 40.	64 --
OCT 10, 73	1200	2	.5 2.1	7500 7500	28.1 28.1	-- --	7.0 7.0	91 91	105. 125.	20 --
APR 17, 74	1130	2	.5 2.1	27000 27000	19.4 19.8	8.3 8.2	8.5 7.7	101 93	10. 90.	81 --
JUN 12, 74	1755	2	.3 1.8	-- --	29.2 29.2	8.4 8.3	-- --	-- --	10. 20.	74 --
OCT 10, 73	1150	3	.5 2.1	3200 3200	28.0 28.0	-- --	7.0 7.0	90 90	182. 183.	18 --
APR 17, 74	1120	3	.5 2.0	23000 23000	19.5 19.7	8.2 8.1	8.8 8.3	102 97	30. 35.	46 --
JUN 12, 74	1800	3	.3 1.8	-- --	28.7 28.8	8.5 8.3	-- --	-- --	50. 160.	51 --
OCT 10, 73	1140	4	.5 2.1	1700 1700	27.8 27.9	-- --	7.0 7.1	89 90	280. 260.	15 --
APR 17, 74	1115	4	.5 2.0	22000 22000	19.9 19.9	8.2 8.0	8.3 8.3	98 98	10. 20.	72 --
JUN 12, 74	1810	4	.3 1.8 3.7	-- -- --	28.6 28.6 28.5	8.3 8.3 8.1	-- -- --	-- -- --	50. 70. 275.	25 -- --

## LINE 294

OCT 10, 73	1220	1	.5	3400	28.2	--	7.1	91	135.	20
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TABLE 6A--QUALITY OF WATER IN THE GUADALUPE ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
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LINE 294 CONTINUED

OCT 10, 73	1220	1	2.1	3400	28.3	--	7.1	91	140.	--
APR 17, 74	1150	1	.5 2.0	27000 26000	19.9 20.0	8.2 8.1	7.9 8.7	95 104	35. 40.	46 --
JUN 12, 74	1735	1	.3 1.8	-- --	29.3 29.2	8.3 8.3	-- --	-- --	10. 20.	56 --
OCT 10, 73	1230	2	.5 2.3	4100 4100	28.3 28.4	-- --	7.1 6.9	91 88	130. 170.	20 --
APR 17, 74	1205	2	.5 2.1	24000 24000	19.9 20.0	8.3 8.2	8.8 8.1	104 95	25. 40.	46 --
JUN 12, 74	1730	2	.3 1.8	-- 21000	29.1 29.5	8.3 8.3	-- 8.7	-- 123	0. 20.	71 --
OCT 10, 73	1240	3	.5 2.0	6500 6500	28.4 28.6	-- --	7.1 7.1	92 93	130. 148.	22 --
APR 17, 74	1210	3	.5 1.7	20000 20000	20.0 20.0	8.3 8.1	9.3 9.4	108 109	10. 15.	69 --
JUN 12, 74	1715	3	.3 1.8	-- --	29.7 29.7	8.3 8.3	-- --	-- --	0. 40.	65 --
OCT 10, 73	1250	4	.5 1.5 3.0 5.2	8700 8700 12000 11000	28.4 28.4 28.1 28.0	-- -- -- --	7.2 7.1 6.9 6.6	94 92 91 86	110. 88. 50. 75.	25 -- -- --
JUN 12, 74	1700	4	.3 1.5 2.7 4.0	-- -- -- --	30.1 29.7 29.4 30.0	8.3 8.3 8.2 8.1	-- -- -- --	-- -- -- --	40. 50. 150. 100.	48 -- -- --

LINE 302

OCT 10, 73	1055	1	.5 2.0	9700 9500	28.2 28.2	-- --	7.2 7.2	94 94	32. 135.	41 --
APR 17, 74	1035	1	.5 1.7	32000 32000	19.1 19.2	8.1 8.1	7.6 7.4	90 88	0. 0.	114 --
JUN 12, 74	1915	1	.3 1.5	-- --	28.6 28.3	8.3 8.4	-- --	-- --	30. 35.	48 --
JUN 13, 74	1035	1	.3 1.2	-- --	27.8 27.9	8.2 8.2	-- --	-- --	30. 30.	43 --
OCT 10, 73	1105	2	.5 1.8	9700 9600	27.9 28.1	-- --	7.1 7.1	92 92	90. 95.	28 --
APR 17, 74	1040	2	.5 1.8	32000 32000	19.0 19.0	8.0 8.1	7.8 7.1	93 85	5. 105.	107 --
JUN 12, 74	1900	2	.3 1.5	-- --	28.8 28.3	8.3 8.3	-- --	-- --	20. 30.	53 --
OCT 10, 73	1110	3	.5 2.0	9700 9700	28.0 28.2	-- --	7.0 7.0	91 91	130. 290.	23 --
APR 17, 74	1050	3	.5 2.0	27000 27000	19.0 19.0	8.0 7.9	7.7 8.1	91 95	10. 10.	93 --
JUN 12, 74	1850	3	.3 1.8	-- --	28.8 28.5	8.3 8.4	-- --	-- --	30. 30.	48 --
OCT 10, 73	1120	4	.5	2200	28.1	--	7.0	90	140.	20



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

1974 WATER YEAR--CONTINUED

## FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS) (FIELD)	TEMPER- ATURE (DEG. C)	PH	DIS- SOLVED OXYGEN (MG/L)	PERCENT SATUR- ATION	TUR- BIDITY (JTU)	TRANSP- ARENCY SECCHI DISK (CM)
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## LINE 302 CONTINUED

OCT 10, 73	1120	4	2.0	2600	28.1	--	7.0	90	220.	--
APR 17, 74	1100	4	.5 2.0	23000 23000	19.1 19.1	8.1 8.0	9.3 8.9	107 102	5. 10.	113 --
JUN 12, 74	1840	4	.3 1.5	-- --	28.9 28.7	8.3 8.3	-- --	-- --	60. 30.	36 --

## LINE 307

OCT 10, 73	1030	1	.5 2.0	8100 9200	27.8 27.6	-- --	7.1 7.0	92 90	50. 52.	31 --
APR 17, 74	1015	1	.5 1.8	41000 40000	18.8 18.8	8.1 7.6	6.8 7.1	85 89	5. 5.	107 --
JUN 13, 74	1020	1	.3 1.8	-- --	27.8 27.8	8.2 8.3	-- --	-- --	40. 40.	69 --
OCT 09, 73	1855	3	.5 2.0	3300 3200	28.1 28.0	8.9 8.9	9.9 15.3	127 196	112. 103.	33 --
OCT 10, 73	1015	3	.5 2.1	700 700	27.7 27.6	-- --	7.1 7.1	89 89	290. 330.	11 --
APR 16, 74	1850	3	.5 1.8	37000 37000	19.8 19.8	8.2 7.9	13.1 13.2	164 165	5. 15.	81 --
APR 17, 74	1005	3	.5 2.0	40000 40000	18.6 18.7	8.2 7.9	7.5 6.8	93 84	20. 25.	77 --
JUN 13, 74	1015	3	.3 1.8	-- --	27.9 27.8	8.3 8.3	-- --	-- --	25. 10.	51 --
OCT 10, 73	1005	5	.5 1.8	3900 3800	27.7 27.6	-- --	6.1 6.0	77 76	190. 200.	20 --
APR 17, 74	0955	5	.5 2.0	37000 35000	18.5 18.4	8.1 8.0	7.2 7.2	88 87	15. 15.	99 --
JUN 13, 74	1005	5	.3 1.8	-- --	27.8 27.9	8.2 8.2	-- --	-- --	50. 60.	24 --
OCT 10, 73	0945	7	.5 1.5 3.0 4.0	1000 1200 2000 1900	27.3 27.4 27.4 27.5	-- -- -- --	6.3 6.3 6.0 5.9	79 79 76 75	270. 240. 170. 220.	13 -- -- --
APR 17, 74	0940	7	.3 1.5 3.0 4.3	25000 27000 27000 28000	18.1 18.1 18.0 17.9	8.3 8.3 8.2 8.0	6.8 6.9 7.1 5.9	78 80 83 69	10. 15. 30. 25.	75 -- -- --
JUN 13, 74	0950	7	.3 2.1 4.3	-- -- --	27.8 27.9 27.9	8.3 8.2 8.0	-- -- --	-- -- --	35. 35. 170.	29 -- --

## LINE 311

APR 17, 74	1330	1	.3 2.3	25000 25000	22.8 24.0	8.1 8.1	7.9 7.4	99 95	90. 90.	25 --
JUN 12, 74	1550	1	.3 1.2	-- --	30.5 30.5	8.2 8.1	-- --	-- --	10. 20.	56 --
JUN 12, 74	1540	4	.3 1.2	-- --	30.4 30.2	8.2 8.2	-- --	-- --	10. 10.	50 --

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

1974 WATER YEAR--CONTINUED

## FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS) (FIELD)	TEMPER- ATURE (DEG. C)	PH	DIS- SOLVED OXYGEN (MG/L)	PERCENT SATUR- ATION	TUR- BIDITY (JTU)	TRAN- SPARENCY SECCHI DISK (CM)	
LINE 311 CONTINUED											
APR 17, 74	1520	5	.5 1.4	22000 22000	21.0 21.0	8.2	8.9	107	60.	37	
						8.2	8.9	107	65.	--	
JUN 12, 74	1530	5	.3 1.2	-- --	29.8 30.1	8.1	--	--	30.	42	
						8.2	--	--	20.	--	
LINE 314											
OCT 10, 73	1335	1	.5 1.4	27000 26000	28.9 29.0	--	7.7 7.9	110 111	31. 65.	61 --	
APR 17, 74	1345	1	.5 1.4	25000 40000	21.3 21.9	8.2	8.3 7.0	101 92	35. 80.	83 --	
JUN 12, 74	1600	1	.3 1.2	-- --	30.3 30.7	8.1	--	--	0. 10.	74 --	
OCT 10, 73	1340	2	.5 1.5	20000 33000	28.9 28.5	--	8.1 6.3	112 93	30. 65.	56 --	
OCT 10, 73	1345	3	.5 .9 1.2 1.5	14000 11000 11000 33000	29.0 28.9 28.9 28.2	--	8.5 8.2 8.1 6.3	113 108 107 91	80. 96. 87. 80.	28 -- -- --	
APR 17, 74	1415	3	.5 1.4	24000 24000	21.0 21.1	8.2	9.3 8.6	112 104	100. 180.	20 --	
JUN 12, 74	1610	3	.3 1.2	31000 33000	29.5 30.1	8.1	7.6 7.5	112 112	20. 60.	38 --	
OCT 10, 73	1410	4	.5 1.7	15000 15000	28.8 28.9	--	7.6 7.4	103 100	170. 360.	18 --	
APR 17, 74	1510	4	.5 1.2	27000 27000	20.8 20.9	8.1	8.3 7.9	102 98	60. 65.	27 --	
JUN 12, 74	1615	4	.3 1.2	-- --	29.8 29.7	8.2	--	--	10. 20.	72 --	
						8.2	--	--	20.	--	
LINE 317											
APR 17, 74	1400	2	.3 1.5 2.9	28000 30000 39000	21.0 21.0 20.9	8.1	8.6 8.4 6.7	106 105 87	10. 15. 75.	81 -- --	
JUN 12, 74	1630	2	.3 2.4	-- --	29.7 29.8	8.1	--	--	0. 10.	51 --	
						8.2	--	--	10.	--	
LINE 333											
OCT 09, 73	1840	1	.5 2.4	9000 10000	28.2 28.2	8.8	10.5 9.9	136 129	25. 30.	50 --	
APR 16, 74	1845	1	.5 2.1	44000 44000	19.5 19.5	8.5	14.5 12.7	186 163	5. 10.	108 --	
JUN 13, 74	1050	1	.3 1.8	-- --	28.0 27.9	8.2	--	--	10. 10.	79 --	
OCT 09, 73	1830	2	.5 1.5 2.6	5200 5400 5600	28.2 28.2 28.2	8.8	10.6 9.6 10.2	138 125 132	59. 51. 72.	41 -- --	
APR 16, 74	1835	2	.5 2.1	41000 41000	20.0 20.0	8.3	11.9 11.5	151 143	25. 25.	57 --	

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

1974 WATER YEAR--CONTINUED

## FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS (FIELD))	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
LINE 333 CONTINUED										
JUN 13, 74	1100	2	.3 2.1	-- --	28.1 28.0	8.2 8.0	-- --	-- --	15. 40.	79 --
OCT 09, 73	1825	3	.5 2.1	5000 5500	28.3 28.2	8.8 8.8	9.5 10.1	122 131	45. 48.	33 --
APR 16, 74	1830	3	.5 1.8	38000 39000	20.1 20.1	8.4 8.2	12.1 11.7	143 148	15. 25.	81 --
JUN 13, 74	1105	3	.3 1.8	-- --	28.2 28.3	8.3 8.3	-- --	-- --	20. 20.	61 --
LINE 342										
OCT 09, 73	1755	1	.3 1.5 2.7	14000 15000 18000	28.4 28.3 28.3	8.7 8.7 8.7	11.1 11.5 10.5	146 153 142	5. 5. 50.	83 -- --
APR 16, 74	1755	1	.3 1.5 2.7	44000 44000 44000	20.1 20.1 20.2	8.3 8.2 8.0	11.2 10.7 9.1	145 139 118	0. 5. 20.	135 -- --
JUN 13, 74	1130	1	.3 2.4	-- --	28.3 28.3	8.2 7.8	-- --	-- --	25. 50.	112 --
OCT 09, 73	1805	2	.5 1.5 2.6	8000 8000 8300	28.3 28.3 28.3	8.8 8.8 8.8	11.1 10.1 10.2	144 131 132	30. 30. 47.	41 -- --
APR 16, 74	1805	2	.3 1.5 2.4	39000 39000 41000	20.1 20.1 20.1	8.3 8.3 8.1	10.9 11.1 9.9	138 141 125	0. 10. 20.	112 -- --
JUN 13, 74	1120	2	.3 2.1	-- --	28.4 28.5	8.2 8.0	-- --	-- --	30. 20.	93 --
OCT 09, 73	1815	3	.5 2.1	8400 8400	28.4 28.4	8.7 8.7	11.2 12.4	145 161	38. 59.	42 --
APR 16, 74	1815	3	.5 2.3	38000 38000	20.2 20.4	8.3 8.3	12.4 12.8	157 164	10. 70.	107 --
JUN 13, 74	1115	3	.3 1.8	-- --	28.6 28.9	8.2 8.3	-- --	-- --	10. 20.	65 --
LINE 354										
OCT 09, 73	1735	1	.3 1.5 2.7	22000 23000 23000	28.6 28.6 28.6	8.5 8.5 8.5	9.4 9.6 11.0	131 133 153	6. 4. 21.	86 -- --
APR 16, 74	1740	1	.3 2.3	44000 44000	19.8 20.0	8.2 8.2	10.4 9.3	135 121	5. 5.	155 --
JUN 13, 74	1145	1	.3 2.1	-- --	28.3 28.5	8.1 8.1	-- --	-- --	10. 15.	124 --
OCT 09, 73	1730	2	.5 2.1	18000 18000	28.4 28.5	8.7 8.7	9.5 9.7	128 131	3. 4.	89 --
APR 16, 74	1730	2	.3 2.3	44000 44000	20.0 20.6	8.1 8.1	9.7 9.3	126 122	10. 25.	-- --
JUN 13, 74	1150	2	.3 1.8	-- --	28.4 28.5	8.1 8.2	-- --	-- --	35. 30.	138 --
OCT 09, 73	1720	3	.5	16000	28.5	8.7	9.5	128	9.	86

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

1974 WATER YEAR--CONTINUED

## FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
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## LINE 354 CONTINUED

OCT 09, 73	1720	3	2.0	26000	28.4	8.5	7.7	107	20.	--
APR 16, 74	1720	3	.3	44000	20.7	8.2	9.3	122	20.	65
			2.0	44000	21.0	8.2	8.4	112	10.	--
JUN 13, 74	1155	3	.3	--	28.7	8.2	--	--	15.	122
			.9	--	28.7	8.2	--	--	20.	--
OCT 09, 73	1705	4	.5	16000	28.4	8.7	11.0	147	3.	104
			1.5	17000	28.4	8.7	9.9	134	4.	--
			2.4	28000	28.3	8.6	5.4	76	33.	--
APR 16, 74	1710	4	.3	44000	20.4	8.1	8.3	109	5.	75
			1.5	44000	20.4	8.1	8.3	109	5.	--
			2.4	44000	21.0	8.1	7.8	104	5.	--
JUN 13, 74	1200	4	.3	23500	28.8	8.2	8.0	114	30.	112
			2.1	28400	28.9	8.1	7.2	100	60.	--
OCT 09, 73	1655	5	.5	15000	28.4	8.6	10.6	141	20.	67
			1.5	16000	28.4	8.6	9.9	132	16.	--
			3.7	16000	28.4	8.6	11.0	147	--	--
APR 16, 74	1700	5	.3	44000	20.8	8.1	9.5	127	5.	112
			1.5	44000	21.0	8.0	9.3	124	5.	--
			3.0	41000	22.1	7.9	8.6	113	25.	--
JUN 13, 74	1215	5	.3	--	29.0	8.2	--	--	10.	104
			1.8	--	29.1	8.0	--	--	25.	--

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

1974 WATER YEAR

## NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (MG/L)
LINE 80 -----												
OCT 09, 73	1440	2	.3 3.7	12.0 12.0	.10 .20	.03 .05	.01 .01	.06 .07	.10 .15	1.1 .8	0 0	2.5 8.0
APR 16, 74	1400	2	.3 3.7	8.4 7.7	.00 .01	.05 .12	.01 .01	-- --	.12 .13	5.0 3.8	-- --	4.5 1.0
JUN 13, 74	1450	2	.3 3.8	-- --	.00 .01	-- .17	.00 .00	-- --	.19 .06	3.3 2.1	-- --	-- --
LINE 145 -----												
OCT 09, 73	1635	2	.3 3.4	16.0 15.0	1.00 1.00	.02 .02	.00 .00	.20 .20	.50 .49	.8 .7	0 --	6.5 --
APR 16, 74	1150	2	.3	19.0	1.80	.06	.01	--	.34	1.6	--	--
LINE 170 -----												
OCT 09, 73	1735	2	.3 3.4	16.0 16.0	1.00 1.00	.01 .04	.00 .00	.20 .19	.46 .51	.7 .9	-- --	-- --
APR 16, 74	1240	2	.3 2.4	19.0 17.0	1.80 1.80	.07 .06	.01 .01	-- --	.37 .38	1.1 1.5	-- --	-- --
JUN 13, 74	1330	2	.3 3.5	-- --	1.20 --	.08 --	.01 --	-- --	.14 --	1.2 2.1	-- --	-- --
LINE 200 -----												
OCT 09, 73	1520	2	.3	13.0	.30	.07	.01	.15	.24	.7	--	--
APR 16, 74	1315	2	.3 .9	18.0 8.5	1.80 --	.07 --	.01 --	-- --	.35 --	.7 2.5	-- --	-- --
JUN 13, 74	1410	2	.3	--	1.30	.02	.01	--	.21	1.0	--	--
LINE 243 -----												
JUN 13, 74	1515	2	.3	--	1.20	.08	.01	--	.15	--	--	--
OCT 10, 73	1520	5	.3 1.5	14.0 14.0	.20 .30	.03 .03	.01 .01	.13 .12	.27 .29	.6 .7	0 0	-- --
APR 16, 74	1430	5	.3 1.2	12.0 8.5	.99 .47	.04 .21	.01 .01	-- --	.30 .23	2.6 2.5	-- --	-- --
JUN 13, 74	1230	5	.3 1.5	-- --	1.00 1.10	.10 .04	.00 .01	-- --	.29 .23	1.5 .9	-- --	-- --
LINE 264 -----												
OCT 10, 73	1305	2	.3	14.0	.20	.06	.01	.06	.24	.5	0	15.0
APR 16, 74	1630	2	.3 1.2	9.4 7.4	.33 .11	.05 .05	.01 .00	-- --	.17 .12	4.0 2.8	-- --	2.0 --
JUN 13, 74	1115	2	.3 1.7	9.3 --	.11 .11	.15 .14	.00 .00	-- --	.08 .11	2.5 1.4	-- --	-- --
OCT 10, 73	1340	4	.3 1.5	10.0 10.0	.00 .00	.02 .04	.00 .00	.07 .07	.20 .23	.5 .6	-- 0	-- --

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

1974 WATER YEAR--CONTINUED

## NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED SILICA (SI02) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS ORTHO (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (MG/L)
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## LINE 264 CONTINUED

APR 16, 74	1600	4	.3 1.5	7.6 6.6	.03 .01	.05 .06	.01 .00	-- --	.13 .13	5.3 4.4	-- --	-- --
JUN 13, 74	1030	4	.3 1.7	-- --	.00 .00	.11 .08	.00 .00	-- --	.24 .17	-- 2.1	-- --	-- --

## LINE 287

JUN 12, 74	1810	2	.3	--	.05	.05	.00	--	.09	--	--	--
OCT 10, 73	0955	3	.3 1.5	11.0 10.0	.30 .07	.04 .03	.01 .01	.04 .04	.15 .14	.9 .8	0 0	-- --
APR 16, 74	1850	3	.3 1.2	5.1 5.3	.00 .00	.00 .00	.00 .00	-- --	.15 .11	1.9 2.6	-- --	-- 3.0
JUN 12, 74	1815	3	.3 1.4	-- --	.03 .05	.03 .10	.01 .00	-- --	.07 .09	1.8 1.7	-- --	-- --
OCT 10, 73	1055	8	.3 2.1	11.0 10.0	.10 .20	.08 .06	.03 .03	.10 .09	.35 .72	.6 .8	0 0	-- 26.0
APR 16, 74	1755	8	.3 1.5	5.8 5.8	.00 .01	.02 .02	.00 .00	-- --	.10 .12	2.9 3.2	-- --	1.0 1.0
JUN 12, 74	1900	8	.3 1.8	-- --	.01 .05	.01 .05	.01 .00	-- --	.09 .09	1.6 1.3	-- --	-- --

## LINE 294

OCT 10, 73	1230	2	.5 2.3	10.0 10.0	.00 .00	.50 .27	.00 .00	.06 .06	.18 .23	1.3 .6	-- --	-- --
APR 17, 74	1205	2	.5 2.1	5.0 5.0	.00 .00	.01 .04	.01 .01	-- --	.09 .11	2.6 2.4	-- --	-- --
JUN 12, 74	1730	2	1.8	--	.01	.01	.00	--	.06	1.7	--	5.9

## LINE 307

OCT 10, 73	1015	3	.5 2.1	11.0 11.0	.10 .08	.21 .12	.01 .04	.08 .06	.26 .36	.2 .6	-- --	-- --
APR 17, 74	1005	3	.5 2.0	1.7 2.0	.00 .01	.03 .02	.01 .00	-- --	.20 .10	2.2 2.1	-- --	-- --
JUN 13, 74	1015	3	.3 1.8	-- --	.00 .00	.00 .02	.00 .00	-- --	.07 .07	1.9 2.1	-- --	6.7 6.1

## LINE 314

OCT 10, 73	1345	3	.5 1.5	9.7 2.4	.00 .00	.50 .51	.00 .00	.05 .03	.07 .10	1.3 1.0	0 0	12.0 5.5
APR 17, 74	1415	3	.5 1.4	5.5 5.6	.00 .00	.02 .04	.01 .02	-- --	.20 .20	1.8 3.2	-- --	-- --
JUN 12, 74	1610	3	.3 1.2	-- --	.01 .00	.05 .05	.00 .00	-- --	.04 .05	2.3 2.5	-- --	6.9 4.8

## LINE 354

OCT 09, 73	1705	4	.5 2.4	7.2 4.1	.00 .00	.02 .03	.00 .00	.03 .03	.06 .06	.9 1.0	0 0	4.0 3.0
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TABLE 68--QUALITY OF WATER IN THE GUADALUPE ESTUARY,

1974 WATER YEAR--CONTINUED

NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL AMMONIA (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS ORTHO (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (MG/L)
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LINE 354 CONTINUED

APR 16, 74	1710	4	.3 2.4	.0 .0	.01 .00	.03 .04	.01 .01	-- --	.19 .20	2.5 2.2	-- --	-- --
JUN 13, 74	1200	4	.3 2.1	-- --	.00 .00	.02 .01	.01 .00	-- --	.06 .04	1.0 1.5	-- --	21.0 5.4

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

1974 WATER YEAR

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICROMHOS) (LAB)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG)	DISSOLVED SODIUM + POTASSIUM (NA+K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (SUM OF IONS) (MG/L)
LINE 80											
OCT 09, 73	1440	2	.3	511	--	--	--	--	--	--	--
			3.7	1440	--	--	--	--	--	--	--
LINE 145											
OCT 09, 73	1635	2	.3	634	--	--	--	--	--	--	--
			3.4	632	--	--	--	--	--	--	--
APR 16, 74	1150	2	.3	868	96.0	19.0	62	250	73	120	509
LINE 170											
OCT 09, 73	1735	2	.3	647	--	--	--	--	--	--	--
			3.4	646	--	--	--	--	--	--	--
APR 16, 74	1240	2	2.4	647	--	--	--	--	--	--	--
JUN 13, 74	1330	2	.3	382	--	--	--	--	--	--	--
LINE 200											
OCT 09, 73	1520	2	.3	404	--	--	--	--	--	--	--
JUN 13, 74	1410	2	.3	505	--	--	--	--	--	--	--
LINE 243											
OCT 10, 73	1520	5	.3	431	--	--	--	--	--	--	--
			1.5	514	--	--	--	--	--	--	--
LINE 264											
OCT 10, 73	1305	2	.3	578	50.0	7.3	54	160	26	80	312
APR 16, 74	1630	2	.3	9960	130.0	220.0	1800	251	480	3100	5950
JUN 13, 74	1115	2	.3	--	90.0	100.0	1000	202	250	1700	3290
OCT 10, 73	1340	4	.3	6110	70.0	120.0	1000	188	270	1800	3400
			1.5	6250	--	--	--	--	--	--	--
APR 16, 74	1600	4	.3	10000	140.0	190.0	2000	240	480	3200	6130
LINE 287											
OCT 10, 73	0955	3	.3	580	--	--	--	--	--	--	--
			1.5	579	--	--	--	--	--	--	--
JUN 12, 74	1815	3	1.4	11900	--	--	--	--	--	--	--
OCT 10, 73	1055	8	.3	1110	--	--	--	--	--	--	--
			2.1	1110	--	--	--	--	--	--	--
JUN 12, 74	1900	8	.3	11500	--	--	--	--	--	--	--
LINE 294											
OCT 10, 73	1230	2	.5	4790	--	--	--	--	--	--	--
			2.3	5340	--	--	--	--	--	--	--



TABLE 8C--QUALITY OF WATER IN THE GUADALUPE ESTUARY,

1974 WATER YEAR--CONTINUED

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO- MHOS) (LAB)	CALCIUM (CA) (MG/L)	MAGNE- SIUM (MG)	POTAS- SIUM (NA+K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLORIDE (CL) (MG/L)	DIS- SOLVED SODIUM (SUM OF CONSTI- TUENTS) (MG/L)
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LINE 294 CONTINUED

JUN 12, 74	1730	2	1.8	21300	--	--	--	--	--	--	--
LINE 307 -----											
UCT 10, 73	1015	3	.5 2.1	831 800	--	--	--	--	--	--	--
LINE 314 -----											
UCT 10, 73	1345	3	.5 1.5	13700 33900	130.0 --	310.0 --	2700 --	181 --	670 --	4800 --	8690 --
APR 17, 74	1415	3	.5	--	210.0	540.0	4700	193	1100	8100	14900
JUN 12, 74	1610	3	.3 1.2	31400 32600	--	--	--	--	--	--	--
LINE 354 -----											
UCT 09, 73	1705	4	.5 2.4	16500 27500	150.0 --	390.0 --	3200 --	176 --	770 --	5700 --	10300 --
APR 16, 74	1710	4	.3	--	310.0	980.0	8900	141	2000	15000	27400
JUN 13, 74	1200	4	2.1	28400	--	--	--	--	--	--	--

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

1974 WATER YEAR

SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED ALUMI- NUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	BOTTOM DEPOSIT ARSENIC (AS) (UG/GM)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	BOTTOM DEPOSIT CADMIUM (CD) (UG/GM)	DIS- SOLVED FLUORIDE (F) (MG/L)
LINE 145 -----											
OCT 09, 73	1635	2	.3	--	2	--	--	0	--	--	--
LINE 200 -----											
OCT 09, 73	1520	2	.3 1.2	-- --	9 --	-- --	-- 3	0 --	-- --	-- 0	-- --
LINE 264 -----											
OCT 10, 73	1305	2	.3 1.2	-- --	0 --	-- --	-- 3	0 --	-- --	-- 0	.3 --
OCT 10, 73	1340	4	.3	--	--	--	--	--	--	--	.4
LINE 287 -----											
OCT 10, 73	1055	8	.3	--	2	--	--	0	--	--	--
OCT 10, 73	1115	9	1.8	--	--	--	0	--	--	0	--
LINE 314 -----											
OCT 10, 73	1345	3	.5	--	8	--	--	0	--	--	.5
LINE 354 -----											
OCT 09, 73	1705	4	.5	--	7	--	--	0	--	--	.5

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

1974 WATER YEAR--CONTINUED

SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED CHROMIUM (CR) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	BOTTOM DEPOSIT COBALT (CO) (UG/GM)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	BOTTOM DEPOSIT COPPER (CU) (UG/GM)
LINE 145 -----											
OCT 09, 73	1635	2	.3	--	--	0	--	--	6	--	--
LINE 200 -----											
OCT 09, 73	1520	2	.3 1.2	-- --	-- --	0 --	-- --	-- 6	6 --	-- --	-- 8
LINE 264 -----											
OCT 10, 73	1305	2	.3 1.2	-- --	-- --	0 --	-- --	-- 7	4 --	-- --	-- 7
LINE 287 -----											
OCT 10, 73	1055	8	.3	--	--	0	--	--	3	--	--
OCT 10, 73	1115	9	1.8	--	--	--	--	0	--	--	0
LINE 314 -----											
OCT 10, 73	1345	3	.5	--	--	0	--	--	6	--	--
LINE 354 -----											
OCT 09, 73	1705	4	.5	--	--	0	--	--	5	--	--

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

1974 WATER YEAR--CONTINUED

## SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED CYANIDE (CN) (MG/L)	BOTTOM DEPOSIT CYANIDE (CN) (UG/GM)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL IRON (FE) (UG/L)	BOTTOM DEPOSIT IRON (FE) (UG/GM)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	BOTTOM DEPOSIT LEAD (PB) (UG/GM)
LINE 145 -----											
OCT 09, 73	1635	2	.3	--	--	40	--	--	0	--	--
LINE 200 -----											
OCT 09, 73	1520	2	.3 1.2	-- --	-- --	50 --	-- --	-- 13000	1 --	-- --	-- 11
LINE 264 -----											
OCT 10, 73	1305	2	.3 1.2	-- --	-- --	30 --	-- --	-- 1200	1 --	-- --	-- 13
LINE 287 -----											
OCT 10, 73	1055	8	.3	--	--	40	--	--	2	--	--
OCT 10, 73	1115	9	1.8	--	--	--	--	820	--	--	2
LINE 314 -----											
OCT 10, 73	1345	3	.5	--	--	30	--	--	1	--	--
LINE 354 -----											
OCT 09, 73	1705	4	.5	--	--	30	--	--	0	--	--

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

1974 WATER YEAR--CONTINUED

## SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED LITH- IUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	BOTTOM DEPOSITI MAN- GANESE (MN) (UG/GM)	DIS- SOLVED MER- CURY (HG) (UG/L)	TOTAL MER- CURY (HG) (UG/L)	BOTTOM DEPOSITI MER- CURY (HG) (UG/GM)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)
LINE 145 -----												
OCT 09, 73	1635	2	.3	10	38	--	--	.0	--	--	3	530
LINE 200 -----												
OCT 09, 73	1520	2	.3 1.2	10 --	25 --	--	-- 220	.0 --	-- --	-- .0	3 --	250 --
LINE 264 -----												
OCT 10, 73	1305	2	.3 1.2	0 --	0 --	--	-- 140	.1 --	-- --	-- .0	5 --	300 --
LINE 287 -----												
OCT 10, 73	1055	8	.3	20	0	--	--	.2	--	--	1	350
OCT 10, 73	1115	9	1.8	--	--	--	32	--	--	.0	--	--
LINE 314 -----												
OCT 10, 73	1345	3	.5	40	0	--	--	.0	--	--	0	2100
LINE 354 -----												
OCT 09, 73	1705	4	.5	50	0	--	--	.0	--	--	0	2400

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

1974 WATER YEAR--CONTINUED

## SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED ZINC (/N) (UG/L)	TOTAL ZINC (/N) (UG/L)	BOTTOM DEPOSIT ZINC (/N) (UG/GH)
LINE 145 -----						
OCT 09, 73	1635	2	.3	40	--	--
LINE 200 -----						
OCT 09, 73	1520	2	.3 1.2	40 --	-- --	-- 44
LINE 264 -----						
OCT 10, 73	1305	2	.3 1.2	30 --	-- --	-- 40
LINE 287 -----						
OCT 10, 73	1055	8	.3	10	--	--
OCT 10, 73	1115	9	1.8	--	--	3
LINE 314 -----						
OCT 10, 73	1345	3	.5	40	--	--
LINE 354 -----						
OCT 09, 73	1705	9	.5	40	--	--

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

1974 WATER YEAR

## INSECTICIDE AND HERBICIDE ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL	BOTTOM	TOTAL	BOTTOM	TOTAL	BOTTOM	TOTAL	BOTTOM	
				ALDRIN (UG/L)	ALDRIN (UG/KG)	CHLOR- DANE (UG/L)	CHLOR- DANE (UG/KG)	DDD (UG/L)	DDD (UG/KG)	DDE (UG/L)	DDE (UG/KG)	
LINE 145 -----												
OCT 09, 73	1635	2	.3	.00	--	.0	--	.00	--	.00	--	
LINE 200 -----												
OCT 09, 73	1520	2	.3	.00	--	.0	--	.00	--	.00	--	
			1.2	--	.0	--	.0	--	.0	--	.9	
LINE 264 -----												
OCT 10, 73	1305	2	.3	.00	--	.0	--	.00	--	.00	--	
			1.2	--	.0	--	.0	--	.0	--	.0	
LINE 287 -----												
OCT 10, 73	1055	8	.3	.00	--	.0	--	.00	--	.00	--	
OCT 10, 73	1115	9	1.8	--	.0	--	.0	--	.0	--	.0	
LINE 314 -----												
OCT 10, 73	1345	3	1.5	--	.0	--	.0	--	.0	--	.0	
LINE 354 -----												
OCT 09, 73	1720	3	2.0	--	.0	--	.0	--	.5	--	.0	

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

1974 WATER YEAR--CONTINUED

## INSECTICIDE AND HERBICIDE ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL DDT (UG/L)	BOTTOM DEPOSIT DDT (UG/KG)	TOTAL DIEL- DRIN (UG/L)	BOTTOM DEPOSIT DIEL- DRIN (UG/KG)	TOTAL ENDRIN (UG/L)	BOTTOM DEPOSIT ENDRIN (UG/KG)	TOTAL HEPTA- CHLOR (UG/L)	BOTTOM DEPOSIT HEPTA- CHLOR (UG/KG)
LINE 145 -----											
OCT 09, 73	1635	2	.3	.00	--	.00	--	.00	--	.00	--
LINE 200 -----											
OCT 09, 73	1520	2	.3 1.2	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0
LINE 264 -----											
OCT 10, 73	1305	2	.3 1.2	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0
LINE 267 -----											
OCT 10, 73	1055	8	.3	.00	--	.00	--	.00	--	.00	--
OCT 10, 73	1115	9	1.8	--	.0	--	.0	--	.0	--	.0
LINE 314 -----											
OCT 10, 73	1345	3	1.5	--	.0	--	.0	--	.0	--	.0
LINE 354 -----											
OCT 09, 73	1720	3	2.0	--	.0	--	.0	--	.0	--	.0



TABLE 8F--QUALITY OF WATER IN THE GUADALUPE ESTUARY,

1974 WATER YEAR--CONTINUED

INSECTICIDE AND HERBICIDE ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL	BOTTOM	TOTAL	BOTTOM	TOTAL	TOTAL	TOTAL	TOTAL	
				HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE (UG/KG)		DEPOSIT LINDANE (UG/L)	DEPOSIT LINDANE (UG/KG)	PARATHION (UG/L)	METHYL PARATHION (UG/L)	MALATHION (UG/L)	DIAZINON (UG/L)
LINE 145												
OCT 09, 73	1635	2	.3	.00	--	.00	--	.00	.00	.00	.02	
LINE 200												
OCT 09, 73	1520	2	.3	.00	--	.00	--	.00	.00	.00	.03	
			1.2	--	.0	--	.0	--	--	--	--	
LINE 264												
OCT 10, 73	1305	2	.3	.00	--	.00	--	.00	.00	.00	.01	
			1.2	--	.0	--	--	--	--	--	--	
LINE 287												
OCT 10, 73	1055	8	.3	.00	--	.00	--	.00	.00	.00	.01	
OCT 10, 73	1115	9	1.8	--	.0	--	--	--	--	--	--	
LINE 307												
JUN 13, 74	1020	1	.3	--	--	.00	--	--	--	--	--	
LINE 314												
OCT 10, 73	1345	3	1.5	--	.0	--	--	--	--	--	--	
LINE 354												
OCT 09, 73	1720	3	2.0	--	.0	--	--	--	--	--	--	

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

1974 WATER YEAR--CONTINUED

## INSECTICIDE AND HERBICIDE ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL		BOTTOM DEPOSIT		TOTAL		BOTTOM DEPOSIT		TOTAL		BOTTOM DEPOSIT	
				PCB (UG/L)	PCB (UG/KG)	2,4-D (UG/L)	2,4-D (UG/KG)	2,4,5-T (UG/L)	2,4,5-T (UG/KG)	SILVEX (UG/L)	SILVEX (UG/KG)				
LINE 145 -----															
OCT 09, 73	1635	2	.3	.0	--	.00	--	.01	--	.00	--				
LINE 200 -----															
OCT 09, 73	1520	2	.3 1.2	.0 --	-- .0	.02 --	-- --	.03 --	-- --	.00 --	-- --				
LINE 243 -----															
OCT 10, 73	1520	5	.3	--	--	.00	--	.02	--	.00	--				
LINE 264 -----															
OCT 10, 73	1305	2	.3 1.2	.0 --	-- .0	.03 --	-- --	.01 --	-- --	.00 --	-- --				
LINE 267 -----															
OCT 10, 73	1055	8	.3	.0	--	.00	--	.02	--	.00	--				
OCT 10, 73	1115	9	1.8	--	.0	--	--	--	--	--	--				
LINE 307 -----															
JUN 13, 74	1020	1	.3	--	--	.07	--	--	--	--	--				
LINE 314 -----															
OCT 10, 73	1345	3	.5 1.5	-- --	-- .0	.00 --	-- --	.00 --	-- --	.00 --	-- --				
LINE 354 -----															
OCT 09, 73	1720	3	.5 2.0	-- --	-- .0	.00 --	-- --	.00 --	-- --	.00 --	-- --				

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

1974 WATER YEAR

## BACTERIOLOGICAL AND CHLOROPHYLL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	IMMEDIATE CULTURE (COLIFORMS PER 100 ML)	FECAL COLIFORMS (COLIFORMS PER 100 ML)	STREPTOCOCCI (STREPTOCOCCI PER 100 ML)	TOXICOLOGICAL (TOXICOLOGICAL PER 100 ML)	CHLOROPHYLL A (CHLOROPHYLL A (UG/L))
LINE 80								
OCT 09, 73	1440	2	.3	70	44	74	--	
APR 16, 74	1400	2	.3	42	16	--	--	
JUN 13, 74	1450	2	.3	130	120	15	--	
LINE 145								
OCT 09, 73	1635	2	.3	450	400	900	--	
APR 16, 74	1150	2	.3	50	28	24	--	
LINE 200								
OCT 09, 73	1520	2	.3	190	110	150	--	
APR 16, 74	1315	2	.3	35	12	--	--	
JUN 13, 74	1410	2	.3	140	100	37	--	
LINE 264								
OCT 10, 73	1305	2	.3	19	12	48	--	
APR 16, 74	1630	2	.3	8	2	1	--	
JUN 13, 74	1115	2	.3	8	3	1	--	
OCT 10, 73	1340	4	.3	6	2	58	--	
APR 16, 74	1600	4	.3	6	1	--	--	
JUN 13, 74	1030	4	.3	1	1	2	--	
LINE 267								
OCT 10, 73	1655	8	.3	15	8	56	--	
APR 16, 74	1755	8	.3	4	1	1	--	
JUN 12, 74	1900	8	.3	1	1	1	--	
LINE 314								
OCT 10, 73	1345	3	.5	3	1	2	--	
APR 17, 74	1415	3	.5	3	1	21	1.90	
JUN 12, 74	1610	3	.3	1	1	3	--	
LINE 354								
OCT 09, 73	1705	4	.5	6	1	6	--	
APR 16, 74	1710	4	.3	7	1	--	.10	
JUN 13, 74	1200	4	.3	4	1	1	--	



## Mission-Aransas Estuary

The Mission-Aransas estuary covers an area of about 160 square miles (410 km<sup>2</sup>) 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 m) in Mission Bay, less than 8 feet (2.4 m) in

Copano Bay, less than 13 feet (4.0 m) in Aransas Bay, less than 5 feet (1.5 m) in St. Charles Bay, 4 feet (1.2 m) or less in Carlos and Redfish Bays, about 15 feet (4.6 m) in the Intracoastal Waterway, about 20 feet (6.1 m) in the Lydia Ann Channel, and more than 40 feet (12.2 m) in Aransas Pass.

Water-quality data (Table 7) were collected during October 1973 and April, May, and June 1974.

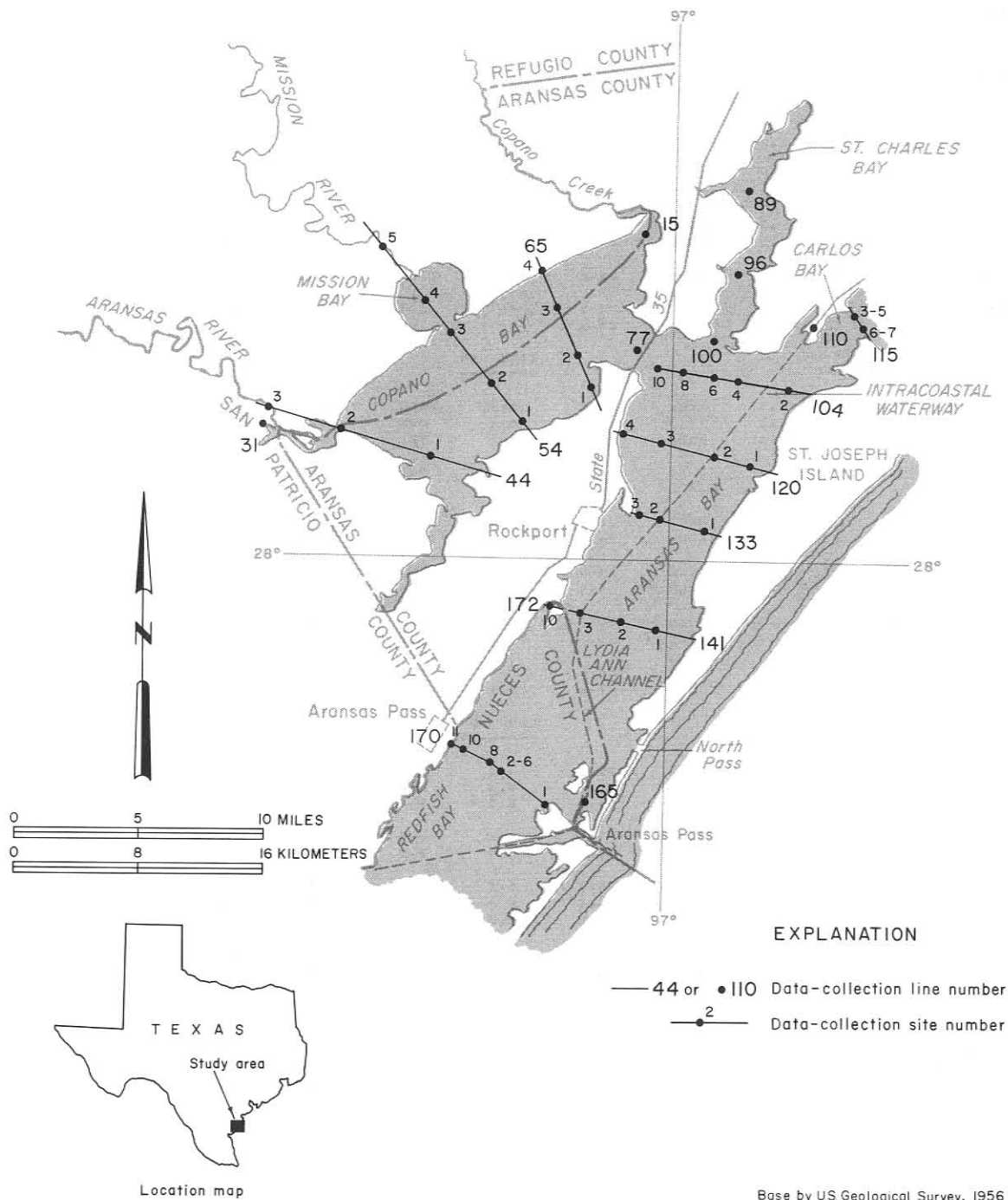


Figure 8.—Data-Collection Sites in the Mission-Aransas Estuary

TABLE 7A--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,  
1974 WATER YEAR

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
LINE 15										
OCT 15, 73	1630	2	.3	2100	25.1	7.4	5.7	69	--	34
			.9	9700	25.0	8.0	6.2	76	--	--
			1.8	12000	25.1	7.9	6.1	75	--	--
APR 17, 74	1650	2	.3	16000	21.8	8.5	8.4	100	25.	57
			1.5	16000	21.7	8.5	8.2	96	20.	--
JUN 12, 74	1310	2	.3	19000	30.0	8.3	8.2	113	0.	74
			1.2	19000	29.0	8.2	8.1	111	15.	--
LINE 31										
APR 17, 74	1455	2	.3	12000	24.8	8.6	8.3	102	50.	27
			1.5	12000	24.9	8.6	8.1	100	50.	--
APR 18, 74	1335	2	.3	5900	23.5	8.8	11.5	136	55.	--
JUN 12, 74	1000	2	.3	570	25.5	--	3.4	40	250.	8
			1.1	620	25.5	--	3.5	42	250.	--
LINE 44										
OCT 15, 73	1750	1	.3	5900	24.7	8.4	10.0	120	--	43
			1.5	7900	24.5	8.2	9.4	115	--	--
			2.4	8500	24.5	8.1	9.1	111	--	--
APR 17, 74	1335	1	.3	16000	21.8	8.4	9.7	115	35.	38
			2.1	16000	21.7	8.4	9.6	114	35.	--
JUN 12, 74	1135	1	.3	18000	28.0	8.1	7.5	101	0.	75
			1.2	18000	28.0	8.0	7.4	100	10.	--
OCT 15, 73	1805	2	.3	150	24.4	7.6	5.5	65	--	8
			1.8	150	24.5	7.7	6.0	71	--	--
APR 17, 74	1300	2	.3	14000	26.3	8.3	8.9	113	60.	30
			.9	14000	25.6	8.3	8.9	111	60.	--
JUN 12, 74	1045	2	.3	4200	28.0	8.4	6.6	84	30.	30
			1.1	14000	27.5	8.1	6.7	87	20.	--
LINE 54										
OCT 15, 73	1705	1	.3	3300	25.2	8.2	9.5	114	--	32
			1.5	5300	25.2	8.3	9.6	117	--	--
			2.4	9000	25.0	8.1	9.2	112	--	--
APR 17, 74	1400	1	.3	17000	23.5	8.4	7.4	91	40.	28
			1.8	17000	23.6	8.4	7.3	90	40.	--
MAY 31, 74	0845	1	.3	15000	26.9	8.2	6.8	88	20.	86
			1.5	16000	26.9	8.2	6.8	88	25.	--
			2.4	16000	27.0	8.0	6.4	83	30.	--
JUN 12, 74	1150	1	.3	18000	28.0	8.1	8.1	109	0.	105
			1.5	18000	28.0	8.1	8.1	109	0.	--
			2.0	18000	27.5	8.0	6.5	87	15.	--
OCT 15, 73	1720	2	.3	1200	24.6	8.1	8.0	95	--	18
			1.5	6000	24.7	8.1	7.8	95	--	--
			2.4	7900	24.8	8.0	7.8	95	--	--
APR 17, 74	1420	2	.3	14000	23.0	8.5	6.8	81	20.	41

TABLE 7A--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY (SECCHI DISK) (CM)
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LINE 54 CONTINUED

APR 17, 74	1420	2	2.1	14000	23.1	8.5	6.7	80	30.	--
MAY 31, 74	0900	2	.3	15000	27.0	8.1	7.5	97	10.	58
			1.5	16000	27.0	8.1	7.0	91	10.	--
			2.1	17000	26.9	8.2	6.7	86	10.	--
JUN 12, 74	1205	2	.3	17000	29.0	8.3	9.0	123	0.	96
			1.5	17000	29.0	8.3	9.0	123	0.	--
			2.1	18000	28.5	8.2	8.6	116	180.	--
OCT 15, 73	1730	3	.3	150	24.4	7.4	5.4	64	--	24
			1.2	490	24.3	7.5	5.8	68	--	--
			2.1	2500	24.4	7.8	5.5	65	--	--
APR 17, 74	1430	3	.3	14000	22.6	8.5	7.8	93	50.	30
			1.8	14000	22.6	8.5	7.7	92	60.	--
JUN 12, 74	1220	3	.3	11000	29.0	8.4	8.4	110	15.	48
			1.2	13000	28.0	8.3	7.7	101	50.	--

LINE 65

OCT 15, 73	1540	1	.3	6000	25.2	8.3	9.5	116	--	44
			2.1	8700	24.7	8.0	8.8	107	--	--
APR 17, 74	1605	1	.3	19000	22.5	8.4	9.4	113	10.	61
			1.8	19000	22.7	8.4	9.3	113	10.	--
JUN 12, 74	1340	1	.3	18000	29.0	8.2	9.5	130	0.	93
			1.8	18000	28.0	8.2	8.9	120	10.	--
OCT 15, 73	1550	2	.3	1500	24.8	8.0	8.8	105	--	30
			.9	1700	24.7	7.9	8.7	104	--	--
			1.5	3000	24.5	8.0	8.9	106	--	--
			1.8	5000	24.0	8.1	9.0	107	--	--
APR 17, 74	1615	2	.3	18000	21.8	8.4	7.8	94	20.	64
			1.5	18000	21.7	8.4	7.7	93	15.	--
MAY 31, 74	0915	2	.3	17000	27.3	8.0	7.0	92	15.	86
			1.5	17000	27.4	8.1	6.5	86	10.	--
			2.1	17000	27.3	8.0	5.9	78	45.	--
JUN 12, 74	1330	2	.3	18000	29.0	8.2	8.5	116	0.	91
			1.5	18000	28.5	8.2	8.4	113	0.	--
			2.0	18000	29.5	8.1	7.3	101	10.	--
OCT 15, 73	1600	3	.3	1200	24.7	7.9	7.9	94	--	23
			1.5	1400	24.4	7.9	8.2	96	--	--
			2.4	3500	24.8	7.8	6.5	78	--	--
APR 17, 74	1625	3	.3	15000	21.6	8.5	8.3	99	10.	69
			1.8	15000	21.5	8.5	8.2	96	10.	--
JUN 12, 74	1255	3	.3	19000	29.5	8.3	8.9	123	0.	105
			1.5	21000	29.0	8.3	8.9	122	0.	--
			2.1	21000	28.5	8.2	8.4	116	20.	--
OCT 15, 73	1610	4	.3	2600	24.7	8.0	8.2	99	--	33
			1.5	2600	24.6	7.9	8.3	100	--	--
			2.4	3200	24.7	7.8	7.2	87	--	--
APR 17, 74	1635	4	.3	15000	21.4	8.6	8.3	98	15.	62
			1.8	15000	21.3	8.5	8.2	95	10.	--
JUN 12, 74	1240	4	.3	16000	29.0	8.4	9.0	121	0.	75
			1.4	19000	28.5	8.1	7.0	94	25.	--

LINE 77

OCT 15, 73	1525	2	.3	2500	25.0	8.0	8.5	102	--	41
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TABLE 7A--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1974 WATER YEAR--CONTINUED

## FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS) (FIELD)	TEMPER- ATURE (DEG. C)	PH	DIS- SOLVED OXYGEN (MG/L)	PERCENT SATUR- ATION	TUR- BIDITY (JTU)	TRANS- PARENCY SECCHI DISK (CM)
LINE 77 CONTINUED										
UCT 15, 73	1525	2	1.5 3.8	2600 6700	24.9 25.3	8.0 7.9	8.7 8.7	105 107	-- --	-- --
APR 17, 74	1720	2	.3 1.5 2.7	24000 24000 24000	21.9 22.0 22.1	8.4 8.4 8.4	8.6 8.5 8.4	105 104 102	40. 40. 65.	42 -- --
APR 18, 74	1100	2	.3 1.5 2.7	22000 22000 22000	22.3 22.2 22.1	8.2 8.2 8.2	7.6 8.0 7.5	93 98 91	10. 5. 10.	69 -- --
MAY 31, 74	1240	2	.5 1.5 2.9	20000 20000 23000	28.7 28.7 28.6	-- -- --	7.8 7.2 6.6	108 106 92	10. 10. 45.	-- -- --
JUN 12, 74	1350	2	.3 1.5 2.7	20000 20000 20000	29.0 28.0 28.0	8.2 8.2 8.1	8.6 8.0 7.2	119 109 99	0. 5. 10.	84 -- --
LINE 89										
UCT 15, 73	1325	2	.3 1.8	600 1300	25.1 25.1	8.0 8.0	9.1 8.8	108 105	-- --	19 --
APR 18, 74	0925	2	.3 1.5	14000 14000	21.6 21.5	8.2 8.2	7.6 7.5	89 88	5. 10.	79 --
MAY 31, 74	1100	2	.3 1.5	6500 6400	28.0 27.5	-- --	7.6 7.1	90 91	-- --	-- --
JUN 12, 74	1500	2	.3 1.2	8800 9000	30.0 29.0	8.3 8.3	8.2 7.8	110 102	15. 35.	56 --
LINE 96										
UCT 15, 73	1355	2	.3 1.8	1700 1700	25.1 25.1	8.1 8.0	9.3 9.4	111 112	-- --	23 --
MAY 31, 74	1130	2	.3 1.5	14000 15000	28.0 28.0	-- --	6.8 5.9	87 78	-- --	-- --
JUN 12, 74	1510	2	.3 1.5	13000 13000	30.0 30.0	8.3 8.2	8.2 7.8	112 107	5. 35.	71 --
LINE 100										
UCT 15, 73	1405	2	.3 .9 1.5	2400 5800 13000	25.1 25.0 24.9	8.4 8.1 7.9	6.4 10.1 7.7	77 123 95	-- -- --	28 -- --
APR 18, 74	1020	2	.3 1.2	18000 17000	22.1 22.0	8.2 8.2	6.7 7.5	81 90	10. 15.	61 --
MAY 31, 74	1245	2	.3 1.1	20000 20000	29.0 29.0	-- --	7.0 7.6	97 97	-- --	-- --
JUN 12, 74	1520	2	.3 .9	19000 20000	30.0 29.5	8.2 8.2	8.6 8.5	119 116	2. 10.	61 --
LINE 104										
UCT 10, 73	1510	2	.5 1.8	18000 18000	28.7 28.7	-- --	8.5 9.5	116 130	100. 200.	22 --
UCT 15, 73	1325	2	.3	11000	24.9	8.3	9.9	121	25.	56



TABLE 7A--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
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LINE 104 CONTINUED

OCT 15, 73	1325	2	1.8	14000	24.0	8.2	9.5	116	90.	--
APR 17, 74	1555	2	.5 1.5	24000 23000	21.8 22.0	8.2	8.7 8.8	106 107	130. 150.	20 --
JUN 12, 74	1500	2	.3 1.2	-- --	29.4 29.8	8.2 8.0	-- --	-- --	0. 0.	65 --
OCT 10, 73	1550	4	.5 2.1	17000 17000	28.8 28.9	--	8.5 8.3	116 114	73. 70.	29 --
OCT 15, 73	1315	4	.3 1.8	8700 12000	25.0 24.4	8.2 8.2	8.7 8.1	106 99	20. 35.	56 --
APR 17, 74	1605	4	.5 1.8	23000 23000	21.8 22.0	8.2 8.2	9.0 8.6	110 105	60. 150.	30 --
MAY 31, 74	1315	4	.5 1.8	24000 24000	28.5 28.5	--	8.1 8.0	112 111	100. 450.	-- --
OCT 10, 73	1555	6	.5 1.8	16000 16000	28.6 28.6	--	8.5 8.0	115 108	112. 125.	22 --
OCT 15, 73	1305	6	.3 1.5 2.1	8000 10000 10000	24.6 24.4 24.4	8.1 8.1 8.0	9.8 9.9 8.1	120 119 98	40. 40. 60.	56 -- --
APR 17, 74	1610	6	.5 1.8	23000 23000	21.0 21.6	8.2 8.2	8.9 8.5	107 104	25. 35.	53 --
MAY 31, 74	1310	6	.5 2.0	23000 23000	28.6 28.6	--	8.5 8.2	118 114	40. 55.	-- --
JUN 12, 74	1445	6	.3 .9 1.8	-- -- --	30.0 29.7 30.2	8.2 8.2 8.2	-- -- --	-- -- --	10. 10. 20.	84 -- --
OCT 10, 73	1605	8	.5 2.0	15000 15000	28.7 28.6	--	8.4 8.2	114 111	130. 135.	23 --
OCT 15, 73	1255	8	.3 1.5 2.1	7700 9000 8200	24.8 25.0 24.6	8.1 8.1 8.0	9.0 9.6 9.2	110 117 112	20. 20. 30.	71 -- --
APR 17, 74	1620	8	.5 2.1	24000 24000	21.1 21.5	8.1 8.1	8.4 8.4	101 102	25. 30.	57 --
MAY 31, 74	1300	8	.5 2.0	23000 23000	28.5 28.6	--	7.9 7.9	110 110	70. 130.	-- --
OCT 10, 73	1610	10	.5 2.4	17000 17000	28.5 28.5	--	8.2 8.0	111 108	110. 118.	20 --
OCT 15, 73	1245	10	.3 1.5 2.4	3400 5000 7600	25.3 24.1 24.4	8.0 8.0 8.1	10.4 10.7 11.0	127 127 133	40. 40. 40.	41 -- --
APR 17, 74	1630	10	.5 1.5 2.4	25000 25000 25000	21.0 21.2 21.3	8.1 8.1 8.1	8.4 8.2 8.2	102 100 100	30. 40. 50.	47 -- --
MAY 31, 74	1250	10	.5 1.5 2.6	23000 23000 23000	28.6 28.6 28.7	--	7.7 7.6 7.4	107 106 103	60. 70. --	-- -- --
JUN 12, 74	1435	10	.3 1.2 2.4	-- -- --	30.4 30.2 30.8	8.2 8.1 8.1	-- -- --	-- -- --	10. 20. 0.	86 -- --

LINE 110

OCT 10, 73	1530	2	.3	17000	29.3	--	8.2	112	73.	28
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TABLE 7A--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,  
1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY (SECCHI DISK) (CM)
LINE 110 CONTINUED										
OCT 10, 73	1530	2	1.5	18000	29.0	--	8.3	114	85.	--
			4.3	18000	28.4	--	7.7	104	69.	--
OCT 15, 73	1250	2	.3	3300	24.8	8.3	9.8	118	--	30
			1.5	3300	24.5	8.3	9.4	112	--	--
			3.0	7700	24.5	8.2	9.0	110	--	--
			3.7	14000	24.6	8.1	8.3	102	--	--
			4.7	21000	25.3	8.1	8.7	113	--	--
APR 18, 74	1040	2	.3	18000	22.5	8.3	6.9	83	60.	--
			1.5	18000	22.4	8.3	7.0	84	60.	--
			3.7	18000	22.4	8.3	7.3	88	70.	--
LINE 115										
OCT 10, 73	1430	4	.5	18000	29.0	--	7.8	107	150.	23
			1.2	17000	29.0	--	7.7	105	180.	--
OCT 15, 73	1335	4	.3	7000	25.0	8.3	10.7	130	40.	38
			1.2	7000	25.1	8.3	10.7	130	55.	--
APR 17, 74	1530	4	.5	23000	21.5	8.2	8.8	107	70.	30
			1.2	23000	21.8	8.2	8.8	107	75.	--
OCT 10, 73	1435	5	.5	18000	28.9	--	8.2	112	115.	20
			1.5	18000	29.0	--	7.8	107	141.	--
OCT 15, 73	1345	5	.3	7300	24.9	8.3	11.8	144	--	38
			1.2	7500	24.9	8.3	11.8	144	40.	--
APR 17, 74	1535	5	.5	24000	21.5	8.2	9.1	111	45.	29
			1.4	24000	21.6	8.2	8.8	107	60.	--
MAY 31, 74	1300	5	.3	26000	28.0	--	6.7	93	--	--
			1.2	25000	28.0	--	6.7	93	--	--
JUN 12, 74	1515	5	.3	26000	29.8	8.2	8.0	114	20.	74
			1.2	26000	29.7	8.2	7.4	106	0.	--
OCT 10, 73	1455	6	.5	19000	28.9	--	8.9	122	95.	27
			1.4	19000	29.0	--	8.7	119	149.	--
OCT 15, 73	1400	6	.3	12000	25.2	8.3	12.2	151	50.	28
			1.5	12000	24.3	8.3	11.1	135	40.	--
APR 17, 74	1545	7	.5	25000	21.6	8.2	9.3	115	40.	33
			1.4	25000	21.8	8.2	9.1	112	50.	--
LINE 120										
OCT 15, 73	1425	1	.3	8200	24.8	8.2	17.0	207	35.	64
			1.5	16000	24.5	8.2	15.6	195	40.	--
			3.0	19000	24.4	8.2	14.1	176	40.	--
			4.6	20000	24.5	8.1	13.3	171	60.	--
APR 18, 74	0920	1	.3	27000	20.1	8.2	7.7	93	5.	107
			1.5	28000	20.1	8.2	7.9	95	10.	--
			3.0	31000	20.1	8.2	7.7	94	40.	--
			4.3	31000	20.4	8.2	7.1	88	40.	--
MAY 31, 74	1130	1	.5	23000	28.5	--	7.4	103	10.	--
			1.5	23000	28.4	--	7.4	101	20.	--
			3.0	23000	28.3	--	7.0	96	25.	--
			4.3	23000	28.3	--	6.2	85	90.	--
JUN 12, 74	1310	1	.3	22000	28.9	8.1	9.6	133	50.	91
			1.5	--	28.5	8.1	--	--	80.	--

TABLE 7A--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1974 WATER YEAR--CONTINUED

## FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICROHMUS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY (SECCHI DISK) (CM)
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## LINE 120 CONTINUED

JUN 12, 74	1310	1	3.4	28000	29.5	8.0	6.3	91	250.	--
OCT 15, 73	1455	2	.3	5000	24.8	8.1	11.7	141	30.	50
			1.5	6600	24.3	8.1	9.6	116	30.	--
			2.7	15000	25.1	8.1	6.7	84	35.	--
APR 18, 74	0910	2	.3	26000	20.5	8.2	7.5	90	10.	94
			2.0	27000	20.9	8.2	7.5	93	10.	--
MAY 31, 74	1120	2	.5	21000	28.4	--	6.8	93	30.	--
			1.5	21000	28.3	--	7.0	96	25.	--
			2.6	21000	28.4	--	7.0	96	30.	--
JUN 12, 74	1320	2	.3	--	29.2	8.2	--	--	80.	122
			1.2	--	29.0	8.2	--	--	80.	--
			2.1	--	29.7	8.2	--	--	90.	--
OCT 15, 73	1525	3	.3	4500	25.0	8.0	11.4	137	--	46
			1.5	5900	24.3	8.1	11.7	141	--	--
			2.7	10000	24.7	8.1	8.2	100	--	--
APR 18, 74	0855	3	.3	25000	20.6	8.2	7.5	90	10.	95
			1.5	26000	20.8	8.2	7.4	90	10.	--
			2.9	27000	20.9	8.2	6.8	84	15.	--
MAY 31, 74	1105	3	.5	18000	28.5	--	7.2	96	0.	--
			1.5	18000	28.5	--	7.0	95	10.	--
			2.7	18000	28.3	--	6.5	88	90.	--
JUN 12, 74	1330	3	.3	20000	29.2	8.2	10.6	147	90.	94
			1.2	--	28.8	8.2	--	--	90.	--
			2.4	21000	28.7	8.1	8.1	114	100.	--
OCT 10, 73	1705	4	.5	15000	28.3	--	8.4	112	65.	--
			1.5	15000	28.3	--	8.0	107	65.	--
			2.7	15000	28.2	--	7.6	101	62.	--
OCT 15, 73	1540	4	.3	4600	25.1	8.1	--	--	30.	56
			1.5	5000	24.7	8.1	--	--	35.	--
			2.7	6400	24.6	8.2	--	--	35.	--
APR 18, 74	0845	4	.3	26000	20.5	8.2	7.0	84	5.	86
			1.5	26000	20.6	8.2	6.7	81	10.	--
			2.4	26000	20.9	8.2	5.6	68	10.	--
MAY 31, 74	1050	4	.5	20000	28.6	--	7.0	97	5.	--
			1.5	20000	28.7	--	7.0	97	5.	--
			2.7	21000	28.9	--	6.0	83	20.	--
JUN 12, 74	1340	4	.3	--	29.1	8.2	--	--	80.	114
			1.2	--	29.0	8.2	--	--	80.	--
			2.4	--	29.1	8.2	--	--	80.	--

## LINE 133

APR 18, 74	0945	1	.3	31000	20.1	8.2	7.9	96	0.	114
			1.5	31000	20.2	8.2	7.9	96	35.	--
			3.2	31000	20.9	8.2	7.3	91	50.	--
MAY 31, 74	1010	1	.5	25000	28.4	--	6.5	90	5.	--
			1.5	25000	28.4	--	6.5	90	10.	--
			2.7	25000	28.7	--	6.6	94	20.	--
JUN 12, 74	1250	1	.3	--	29.0	8.2	--	--	60.	127
			1.5	--	28.8	8.2	--	--	50.	--
			3.0	--	29.3	8.2	--	--	70.	--
APR 18, 74	1000	2	.5	31000	20.9	8.2	7.3	91	10.	112

TABLE 7A--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
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LINE 133 CONTINUED

APR 18, 74	1000	2	1.5 4.1	31000 32000	20.9 20.9	8.2 8.2	7.3 7.0	91 88	15. 30.	-- --
MAY 31, 74	1025	2	.6 1.5 3.0 4.3	23000 24000 28000 29000	28.4 28.5 28.5 28.6	-- -- -- --	7.0 6.8 6.4 5.2	96 94 91 74	5. 10. 10. 30.	-- -- -- --
JUN 12, 74	1240	2	.3 1.5 3.0 4.0	-- -- -- --	29.1 28.9 28.8 29.0	8.3 8.2 8.1 8.0	-- -- -- --	-- -- -- --	80. 60. 70. 100.	124 -- -- --
APR 18, 74	1010	3	.5 1.7	30000 28000	21.0 21.0	8.2 8.2	7.5 7.5	94 93	5. 10.	94 --
MAY 31, 74	1035	3	.5 1.4	21000 21000	28.4 28.4	-- --	7.2 7.2	99 99	20. 10.	-- --
JUN 12, 74	1230	3	.3 1.2	-- --	29.2 29.3	8.3 8.3	-- --	-- --	60. 60.	117 --

LINE 141

OCT 15, 73	1555	1	.3 1.5 2.7	15000 15000 15000	25.0 24.8 24.7	8.3 8.3 8.3	-- -- --	-- -- --	20. 20. 20.	76 -- --
APR 18, 74	1135	1	.5 1.5 2.9	33000 34000 33000	21.0 21.0 21.1	8.2 8.2 8.1	7.8 7.6 6.6	99 96 84	0. 30. 70.	137 -- --
MAY 31, 74	0955	1	.5 1.5 2.9	25000 26000 26000	28.2 28.2 28.1	-- -- --	6.5 6.5 6.1	90 90 85	10. 15. 30.	-- -- --
JUN 12, 74	1140	1	.3 1.5 2.7	-- -- 34000	28.5 28.4 28.8	8.2 8.2 8.2	-- -- 6.0	-- -- 88	0. 0. 0.	173 -- --
OCT 15, 73	1610	2	.3 1.5 3.4	12000 14000 17000	25.0 24.5 24.3	8.3 8.3 8.3	-- -- --	-- -- --	20. 20. 25.	76 -- --
APR 18, 74	1125	2	.5 1.5 3.2	33000 33000 33000	21.0 21.0 21.5	8.2 8.2 8.1	7.7 7.5 6.5	97 95 83	10. 10. 25.	112 -- --
MAY 31, 74	0940	2	.5 1.5 3.2	28000 29000 29000	28.0 28.0 27.9	-- -- --	6.4 6.6 6.2	90 93 87	5. 0. 10.	-- -- --
JUN 12, 74	1150	2	.3 1.5 3.0	-- -- --	28.5 28.5 28.7	8.2 8.2 8.3	-- -- --	-- -- --	40. 30. 80.	218 -- --
OCT 15, 73	1630	3	.3 1.5 3.7	13000 14000 14000	25.2 25.0 24.7	8.3 8.3 8.3	-- -- --	-- -- --	20. 25. 35.	64 -- --
APR 18, 74	1110	3	.5 1.5 3.8	33000 34000 32000	21.1 21.1 21.8	8.2 8.2 8.2	7.5 7.5 7.7	95 95 97	10. 15. 15.	89 -- --
MAY 31, 74	0920	3	.5 1.5 3.0 3.8	29000 30000 32000 34000	28.0 28.0 28.1 28.4	-- -- -- --	6.7 6.7 6.3 5.9	96 96 90 84	0. 5. 0. 10.	-- -- -- --

TABLE 7A--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
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LINE 141 CONTINUED

JUN 12, 74	1200	3	.3	27000	28.7	8.3	8.4	120	40.	160
			1.5	--	28.5	8.2	--	--	60.	--
			3.7	34000	29.0	8.2	6.0	88	90.	--

LINE 165

OCT 15, 73	1700	2	.3	15000	25.0	8.3	--	--	25.	53
			1.5	15000	24.9	8.3	--	--	30.	--
			3.0	16000	24.9	8.3	--	--	30.	--
			4.6	16000	25.0	8.3	--	--	30.	--
			5.2	16000	25.0	8.3	--	--	30.	--

APR 18, 74	1255	2	.3	41000	21.9	8.1	8.2	108	5.	179
			1.5	44000	21.8	8.1	8.0	108	10.	--
			3.0	44000	21.2	8.1	7.8	104	5.	--
			4.7	42000	22.0	8.1	7.7	103	20.	--

MAY 30, 74	1435	2	.5	38000	27.9	--	4.5	66	10.	--
			1.5	39000	27.8	--	4.0	59	10.	--
			3.0	39000	27.9	--	3.7	54	10.	--
			4.9	38000	28.3	--	3.7	54	20.	--

MAY 31, 74	0845	2	.5	29000	28.2	--	6.6	93	5.	--
			1.5	30000	28.1	--	6.5	93	10.	--
			3.0	32000	28.2	--	6.1	87	10.	--
			5.3	34000	28.5	--	5.2	76	60.	--

JUN 12, 74	1115	2	.3	--	28.6	8.2	--	--	0.	127
			1.5	--	28.6	8.2	--	--	10.	--
			3.0	--	28.6	8.2	--	--	20.	--
			4.9	--	28.8	8.1	--	--	40.	--

LINE 172

JUN 12, 74	1220	10	.3	--	28.8	8.3	--	--	50.	114
			1.5	--	28.8	8.3	--	--	40.	--
			3.0	--	28.8	8.3	--	--	20.	--
			4.6	--	29.1	8.3	--	--	70.	--

TABLE 7B--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1974 WATER YEAR

NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS ORTHO (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (MG/L)
LINE 15												
OCT 15, 73	1630	2	.3	12.0	.09	.00	.00	.06	.06	.7	1	--
APR 17, 74	1650	2	.3	9.0	.01	.05	.00	--	.13	2.2	--	3.0
JUN 12, 74	1310	2	.3 1.2	9.4 --	.01 .01	.00 .01	.00 .00	-- --	.05 .07	1.2 1.1	-- --	-- --
LINE 31												
APR 17, 74	1455	2	.3 1.5	24.0 24.0	.02 .00	.09 .05	.00 .01	-- --	.96 .16	4.2 5.8	-- --	-- 7.0
APR 18, 74	1335	2	.3	28.0	.00	.02	.01	--	.10	8.5	--	17.0
JUN 12, 74	1000	2	.3	7.5	.35	.13	.03	--	.38	2.7	--	--
LINE 44												
OCT 15, 73	1805	2	.3	12.0	.30	.00	.01	.10	.27	2.2	0	--
APR 17, 74	1300	2	.3	1.0	.01	.03	.00	--	.13	3.3	--	4.0
JUN 12, 74	1045	2	.3	--	.13	.11	.01	--	.28	2.6	--	--
LINE 54												
OCT 15, 73	1705	1	.3 2.4	12.0 14.0	.06 .00	.00 .00	.02 .01	.10 .07	.11 .08	.6 .7	0 0	-- --
APR 17, 74	1400	1	.3 1.8	8.6 8.7	.00 .00	.04 .00	.01 .01	-- --	.11 .15	2.1 3.0	-- --	3.0 --
MAY 31, 74	0845	1	.3 2.4	-- --	.00 .00	.01 .01	.00 .00	-- --	.08 .08	1.1 .8	-- --	-- --
JUN 12, 74	1150	1	.3 2.0	9.0 --	.03 .04	.03 .04	.00 .01	-- --	.08 .08	.9 1.0	-- --	-- --
LINE 77												
JUN 03, 74	1805	2	.3	--	.01	.03	.00	--	.07	2.9	--	--
JUN 04, 74	0001	2	.3	--	.00	.06	.01	--	.05	2.0	--	--
JUN 04, 74	0605	2	.3	--	.00	.04	.00	--	.08	1.7	--	--
JUN 04, 74	1200	2	.3	--	.00	.03	.01	--	.08	2.1	--	--
JUN 04, 74	1800	2	.3	--	--	--	--	--	--	2.5	--	--
JUN 05, 74	0600	2	.3	--	--	--	--	--	--	2.0	--	--
JUN 05, 74	1200	2	.3	--	--	--	--	--	--	2.1	--	--
JUN 05, 74	1805	2	.3	--	--	--	--	--	--	2.7	--	--
JUN 05, 74	0001	2	.3	--	--	--	--	--	--	2.5	--	--
JUN 06, 74	0001	2	.3	--	--	--	--	--	--	2.7	--	--
JUN 06, 74	0650	2	.3	--	--	--	--	--	--	2.1	--	--
JUN 06, 74	1200	2	.3	--	--	--	--	--	--	2.5	--	--

TABLE 7B--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1974 WATER YEAR--CONTINUED

NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED SILICA (SiO <sub>2</sub> ) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS-SOLVED PHOSPHORUS ORTHO (P) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	PHENOLS (UG/L)	TOTAL INORGANIC CARBON (MG/L)
LINE 77 CONTINUED												
JUN 06, 74	1800	2	.3	--	--	--	--	--	--	2.7	--	--
LINE 89												
OCT 15, 73	1325	2	.3	16.0	.10	.00	.00	.06	.14	.6	0	--
APR 18, 74	0925	2	.3	9.7	.01	.10	.00	--	.07	2.1	--	5.0
MAY 31, 74	1100	2	.3	--	.00	.06	.01	--	.05	1.3	--	--
JUN 12, 74	1500	2	.3	--	--	--	--	--	--	1.2	--	--
LINE 115												
OCT 10, 73	1435	5	.5	10.0 1.5	.00 .00	.51 .50	.00 .00	.04 .07	.13 .14	1.0 1.5	0 0	5.5 3.0
OCT 15, 73	1345	5	.3	11.0 1.2	.20 .10	.05 .04	.03 .03	.14 .14	.16 .17	.9 1.0	0 0	-- --
APR 17, 74	1535	5	.5	5.4 1.4	.00 .00	.01 .01	.01 .00	-- --	.18 .18	3.1 3.1	-- --	-- --
MAY 31, 74	1300	5	.3	5.4 1.2	.02 .01	.06 .05	.01 .01	-- --	.13 .15	1.6 1.5	-- --	-- --
JUN 12, 74	1515	5	.3	-- 1.2	.00 .00	.01 .04	.00 .01	-- --	.05 .05	1.1 1.4	-- --	6.1 4.0
LINE 120												
OCT 15, 73	1425	1	.3	13.0 4.6	.01 .01	.07 .10	.01 .02	.06 .06	.06 .07	.5 .5	-- --	-- --
APR 18, 74	0920	1	.3	5.6 4.3	.00 .00	.01 .00	.01 .01	-- --	.14 .21	2.9 4.4	-- --	-- --
MAY 31, 74	1130	1	.5	-- 4.3	.00 .00	.01 .03	.01 .01	-- --	.08 .16	1.5 1.7	-- --	-- --
JUN 12, 74	1310	1	.3	-- 3.4	.00 .00	.07 .07	.01 .01	-- --	.06 .07	1.2 1.1	-- --	4.5 6.4
OCT 15, 73	1525	3	.3	11.0 2.7	.04 .00	.05 .00	.01 .01	.07 .07	.07 .07	.8 .5	-- --	-- --
APR 18, 74	0855	3	.3	6.2 2.9	.00 .00	.01 .05	.01 .00	-- --	.11 .10	2.7 2.4	-- --	-- --
MAY 31, 74	1105	3	.5	-- 2.7	-- .01	-- .02	-- .00	-- --	-- .09	1.2 1.5	-- --	-- --
JUN 12, 74	1330	3	.3	-- 2.4	.00 .00	.04 .05	.00 .00	-- --	.04 .06	-- 1.1	-- --	5.5 4.4
LINE 141												
OCT 15, 73	1555	1	.3	11.0 2.7	.01 .02	.00 .00	.01 .01	.06 .06	.06 .06	.5 .6	-- --	-- --
APR 18, 74	1135	1	.5	3.6 2.9	.00 .00	.00 .05	.00 .01	-- --	.09 .26	3.2 4.5	-- --	-- --
MAY 31, 74	0955	1	.5	-- 2.9	.00 .01	.02 .02	.00 .00	-- --	.05 .10	1.2 1.1	-- --	-- --

TABLE 7B--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1974 WATER YEAR--CONTINUED

## NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS ORTHO (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (MG/L)
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## LINE 141 CONTINUED

JUN 12, 74	1140	1	.3 2.7	-- --	.00 .00	.14 .06	.00 .01	-- --	.03 .06	-- 2.1	-- --	-- 7.4
OCT 15, 73	1630	3	.3 3.7	12.0 12.0	.00 .00	.00 .00	.02 .01	.06 .06	.07 .07	.4 .8	0 0	-- --
APR 18, 74	1110	3	.5 3.8	3.4 3.2	.01 .00	.02 .02	.01 .00	-- --	.09 .22	2.7 2.9	-- --	-- --
MAY 31, 74	0920	3	.5 3.8	4.6 --	.00 .00	.03 .05	.01 .01	-- --	.05 .04	1.3 1.1	-- --	-- --
JUN 12, 74	1200	3	.3 3.7	-- --	.00 .00	.04 .12	.00 .00	-- --	.04 .08	1.1 1.1	-- --	5.5 9.6

## LINE 165

JUN 03, 74	1818	2	.3	--	--	--	--	--	--	4.5	--	--
JUN 04, 74	0015	2	.3	--	.01	.03	.00	--	.05	2.8	--	--
JUN 04, 74	0615	2	.3	--	.00	.01	.00	--	.08	2.1	--	--



TABLE 7C--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1974 WATER YEAR

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICROMHOS) (LAB)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE-SIUM (MG)	DIS-SOLVED SODIUM + POTAS-SIUM (NA+K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
LINE 15											
OCT 15, 73	1630	2	.3	2140	31.0	42.0	380	74	96	650	1250
APR 17, 74	1650	2	.3	17700	170.0	390.0	3600	189	800	6200	11300
JUN 12, 74	1310	2	.3	18800	160.0	360.0	3600	166	900	6100	11300
LINE 31											
APR 17, 74	1455	2	.3	11600	170.0	210.0	2200	236	490	3800	6990
APR 18, 74	1335	2	.3	5540	200.0	50.0	1000	235	160	1700	3250
JUN 12, 74	1000	2	.3	567	31.0	6.0	67	79	15	150	288
LINE 44											
OCT 15, 73	1805	2	.3	205	20.0	3.9	11	78	5	13	105
LINE 54											
OCT 15, 73	1705	1	.3	3990	52.0	75.0	700	102	120	1200	2250
			2.4	8300	--	--	--	--	--	--	--
APR 17, 74	1400	1	.3	17500	170.0	450.0	3600	180	830	6100	11300
JUN 12, 74	1150	1	.3	18000	150.0	350.0	3300	152	760	5700	10400
LINE 77											
JUN 03, 74	1805	2	.3	18000	--	--	--	--	--	--	--
JUN 04, 74	0001	2	.3	18200	--	--	--	--	--	--	--
JUN 04, 74	0605	2	.3	18600	--	--	--	--	--	--	--
JUN 04, 74	1200	2	.3	19600	--	--	--	--	--	--	--
JUN 04, 74	1800	2	.3	20000	--	--	--	--	--	--	--
JUN 05, 74	0600	2	.3	18000	--	--	--	--	--	--	--
JUN 05, 74	1200	2	.3	19700	--	--	--	--	--	--	--
JUN 05, 74	1805	2	.3	22800	--	--	--	--	--	--	--
JUN 05, 74	0001	2	.3	18800	--	--	--	--	--	--	--
JUN 06, 74	0001	2	.3	19400	--	--	--	--	--	--	--
JUN 06, 74	0650	2	.3	18900	--	--	--	--	--	--	--
JUN 06, 74	1200	2	.3	20200	--	--	--	--	--	--	--
JUN 06, 74	1800	2	.3	22000	--	--	--	--	--	--	--
LINE 89											
OCT 15, 73	1325	2	.3	553	22.0	11.0	78	96	21	120	315
LINE 115											
OCT 10, 73	1435	5	.5	18800	160.0	420.0	3600	144	760	6400	11400

TABLE 7C--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1974 WATER YEAR--CONTINUED

CHEMICAL ANALYSES

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

LINE 115 CONTINUED

OCT 10, 73	1435	5	1.5	18800	--	--	--	--	--	--	--
OCT 15, 73	1345	5	.3 1.2	6950 7140	80.0	150.0	1300	160	390	2200	4210
APR 17, 74	1535	5	.5	22700	190.0	520.0	4600	195	1200	8000	14700
MAY 31, 74	1300	5	.3	26900	210.0	590.0	5300	163	1200	9500	17000
JUN 12, 74	1515	5	.3 1.2	25600 26000	--	--	--	--	--	--	--

LINE 120

OCT 15, 73	1425	1	.3 4.6	7610 18900	--	--	--	--	--	--	--
JUN 12, 74	1310	1	.3 3.4	21700 27500	--	--	--	--	--	--	--
OCT 15, 73	1525	3	.3 2.7	4110 8020	--	--	--	--	--	--	--
JUN 12, 74	1330	3	.3 2.4	19900 21300	--	--	--	--	--	--	--

LINE 141

OCT 15, 73	1555	1	.3 2.7	13100 14900	--	--	--	--	--	--	--
JUN 12, 74	1140	1	2.7	34300	--	--	--	--	--	--	--
OCT 15, 73	1630	3	.3 3.7	13000 13600	120.0	280.0	2600	133	620	4600	8360
APR 18, 74	1110	3	.5	32600	230.0	730.0	6900	173	1600	12000	21600
MAY 31, 74	0920	3	.5	28800	230.0	620.0	5700	160	1300	10000	18000
JUN 12, 74	1200	3	.3 3.7	27200 33800	--	--	--	--	--	--	--

LINE 165

JUN 03, 74	1818	2	.3	41700	--	--	--	--	--	--	--
JUN 04, 74	0015	2	.3	32300	--	--	--	--	--	--	--
JUN 04, 74	0615	2	.3	45800	--	--	--	--	--	--	--

TABLE 7D--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1974 WATER YEAR

SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED ALUMI- NUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	BOTTOM DEPOSIT ARSENIC (AS) (UG/GM)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	BOTTOM DEPOSIT CADMIUM (CD) (UG/GM)	DIS- SOLVED FLUORIDE (F) (MG/L)
LINE 15 -----											
OCT 15, 73	1630	2	.3 1.8	-- --	9 --	-- --	-- 1	0 --	-- --	-- 0	.2 --
LINE 44 -----											
OCT 15, 73	1805	2	.3 1.8	-- --	19 --	-- --	-- 3	0 --	-- --	-- 0	.2 --
LINE 54 -----											
OCT 15, 73	1705	1	.3	--	--	--	--	--	--	--	.3
LINE 89 -----											
OCT 15, 73	1325	2	.3 1.8	-- --	14 --	-- --	-- 2	0 --	-- --	-- 0	.2 --
LINE 115 -----											
OCT 10, 73	1435	5	.5	--	--	--	--	--	--	--	.5
OCT 15, 73	1345	5	.3	--	1	--	--	0	--	--	.4
LINE 141 -----											
OCT 15, 73	1630	3	.3	--	3	--	--	0	--	--	.5

TABLE 7D--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1974 WATER YEAR--CONTINUED

SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED CHROMIUM (CR) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	BOTTOM DEPOSIT COBALT (CO) (UG/GM)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	BOTTOM DEPOSIT COPPER (CU) (UG/GM)
LINE 15											
OCT 15, 73	1630	2	.3 1.8	-- --	-- --	0 --	-- --	-- 2	4 --	-- --	-- 3
LINE 44											
OCT 15, 73	1805	2	.3 1.8	-- --	-- --	0 --	-- --	-- 5	22 --	-- --	-- 8
LINE 89											
OCT 15, 73	1325	2	.3 1.8	-- --	-- --	0 --	-- --	-- 2	5 --	-- --	-- 6
LINE 115											
OCT 15, 73	1345	5	.3	--	--	0	--	--	5	--	--
LINE 141											
OCT 15, 73	1630	3	.3	--	--	0	--	--	4	--	--

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED CYANIDE (CN) (MG/L)	BOTTOM DEPOSIT CYANIDE (CN) (UG/GM)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL IRON (FE) (UG/L)	BOTTOM DEPOSIT IRON (FE) (UG/GM)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	BOTTOM DEPOSIT LEAD (PB) (UG/GM)
LINE 15											
OCT 15, 73	1630	2	.3 1.8	-- --	-- --	120 --	-- --	-- 8000	0 --	-- --	-- 8
LINE 44											
OCT 15, 73	1805	2	.3 1.8	-- --	-- --	130 --	-- --	-- 15000	0 --	-- --	-- 18
LINE 89											
OCT 15, 73	1325	2	.3 1.8	-- --	-- --	110 --	-- --	-- 12000	1 --	-- --	-- 9
LINE 115											
OCT 15, 73	1345	5	.3	--	--	40	--	--	1	--	--
LINE 141											
OCT 15, 73	1630	3	.3	--	--	100	--	--	1	--	--

TABLE 7D--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1974 WATER YEAR--CONTINUED

SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	BOTTOM DEPOSIT MANGANESE (MN) (UG/GM)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY (HG) (UG/L)	BOTTOM DEPOSIT MERCURY (HG) (UG/GM)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)
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LINE 15

OCT 15, 73	1630	2	.3 1.8	0 --	0 --	-- --	-- 280	.0 --	-- --	-- .0	0 --	410 --
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LINE 44

OCT 15, 73	1805	2	.3 1.8	0 --	0 --	-- --	-- 220	.0 --	-- --	-- .0	1 --	180 --
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LINE 89

OCT 15, 73	1325	2	.3 1.8	0 --	0 --	-- --	-- 110	.0 --	-- --	-- .0	0 --	140 --
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LINE 115

OCT 15, 73	1345	5	.3	30	0	--	--	.0	--	--	2	1100
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LINE 141

OCT 15, 73	1630	3	.3	50	0	--	--	.0	--	--	1	2300
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DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	BOTTOM DEPOSIT ZINC (ZN) (UG/GM)
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LINE 15

OCT 15, 73	1630	2	.3 1.8	40 --	-- --	-- 18
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LINE 44

OCT 15, 73	1805	2	.3 1.8	40 --	-- --	-- 42
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LINE 89

OCT 15, 73	1325	2	.3 1.8	50 --	-- --	-- 32
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LINE 115

OCT 15, 73	1345	5	.3	40	--	--
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LINE 141

OCT 15, 73	1630	3	.3	50	--	--
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TABLE 7E--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1974 WATER YEAR

INSECTICIDE AND HERBICIDE ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL ALDRIN (UG/L)	BOTTOM DEPOSIT ALDRIN (UG/KG)	TOTAL CHLOR-DANE (UG/L)	BOTTOM DEPOSIT CHLOR-DANE (UG/KG)	TOTAL DDD (UG/L)	BOTTOM DEPOSIT DDD (UG/KG)	TOTAL DDE (UG/L)	BOTTOM DEPOSIT DDE (UG/KG)
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LINE 15

OCT 15, 73	1630	2	.3 1.0	.00 --	-- .0	.0 --	-- .0	.00 --	-- .0	.00 --	-- .0
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LINE 44

OCT 15, 73	1605	2	.3 1.0	.00 --	-- .0	.0 --	-- .0	.00 --	-- 2.0	.00 --	-- 11.0
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LINE 89

OCT 15, 73	1325	2	.3 1.0	.00 --	-- .0	.0 --	-- .0	.00 --	-- .0	.00 --	-- .0
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LINE 115

OCT 10, 73	1435	5	.5 1.5	.00 --	-- .0	.0 --	-- .0	.00 --	-- .0	.00 --	-- .0
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OCT 15, 73	1345	5	.3	.00	--	.0	--	.00	--	.00	--
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LINE 141

OCT 15, 73	1630	3	.3	.00	--	.0	--	.00	--	.00	--
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DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL DDT (UG/L)	BOTTOM DEPOSIT DDT (UG/KG)	TOTAL DRIN (UG/L)	BOTTOM DEPOSIT DRIN (UG/KG)	TOTAL ENDRIN (UG/L)	BOTTOM DEPOSIT ENDRIN (UG/KG)	TOTAL HEPTA-CHLOR (UG/L)	BOTTOM DEPOSIT HEPTA-CHLOR (UG/KG)
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LINE 15

OCT 15, 73	1630	2	.3 1.8	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0
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LINE 44

OCT 15, 73	1805	2	.3 1.8	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0
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LINE 89

OCT 15, 73	1325	2	.3 1.8	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0
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LINE 115

OCT 10, 73	1435	5	.5 1.5	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0
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OCT 15, 73	1345	5	.3	.00	--	.00	--	.00	--	.00	--
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LINE 141

OCT 15, 73	1630	3	.3	.00	--	.00	--	.00	--	.00	--
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TABLE 7E--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1974 WATER YEAR--CONTINUED

INSECTICIDE AND HERBICIDE ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL	BOTTOM	TOTAL	BOTTOM	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL
				HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE (UG/KG)		DEPOSITI (UG/L)		DEPOSITI (UG/KG)	PARA-THION (UG/L)		METHYL-PARA-THION (UG/L)
LINE 15												
OCT 15, 73	1630	2	.3 1.8	.00 --	-- .0	.00 --	-- .0	.00 --	.00 --	.00 --	.00 --	.00 --
LINE 44												
OCT 15, 73	1805	2	.3 1.8	.00 --	-- .0	.00 --	-- .0	.00 --	.00 --	.00 --	.00 --	.00 --
LINE 89												
OCT 15, 73	1325	2	.3 1.8	.00 --	-- .0	.00 --	-- .0	.00 --	.00 --	.00 --	.00 --	.00 --
LINE 115												
OCT 10, 73	1435	5	.5 1.5	.00 --	-- .0	.00 --	-- .0	.00 --	.00 --	.00 --	.00 --	.00 --
OCT 15, 73	1345	5	.3	.00	--	.00	--	.00	.00	.00	.00	.01
LINE 141												
OCT 15, 73	1630	3	.3	.00	--	.00	--	.00	.00	.00	.00	.00

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL	BOTTOM	TOTAL	BOTTOM	TOTAL	TOTAL	BOTTOM	TOTAL	BOTTOM
				PCB (UG/L)	PCB (UG/KG)		2,4-D (UG/L)		2,4-D (UG/KG)	2,4,5-T (UG/L)	2,4,5-T (UG/KG)	SILVEX (UG/L)
LINE 15												
OCT 15, 73	1630	2	.3	.0	--	.00	--	.01	--	.00	--	--
LINE 44												
OCT 15, 73	1805	2	.3	.0	--	.15	--	.00	--	.00	--	--
LINE 89												
OCT 15, 73	1325	2	.3	.0	--	.00	--	.00	--	.00	--	--
LINE 115												
OCT 10, 73	1435	5	.5 1.5	.0 --	-- .0	.00 --	-- --	.00 --	-- --	.00 --	-- --	-- --
OCT 15, 73	1345	5	.3	.0	--	.00	--	.01	--	.00	--	--
LINE 141												
OCT 15, 73	1630	3	.3	.0	--	.00	--	.00	--	.00	--	--

TABLE 7F--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1974 WATER YEAR

## BACTERIOLOGICAL AND CHLOROPHYLL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	CHLORO- PHYLL (UG/L)				
LINE 15											
UCT 15, 73	1630	2	.3	28	16	330	--				
APR 17, 74	1650	2	.3	4	1	1	.10				
JUN 12, 74	1310	2	.3	8	1	2	--				
LINE 31											
APR 17, 74	1455	2	.3	--	--	--	.20				
APR 18, 74	1335	2	.3	55	18	42	1.90				
JUN 12, 74	1000	2	.3	*	*	160	--				
LINE 44											
OCT 15, 73	1805	2	.3	470	390	*	--				
APR 17, 74	1300	2	.3	2	1	2	.00				
JUN 12, 74	1045	2	.3	*	*	55	--				
LINE 54											
UCT 15, 73	1705	1	.3	32	21	52	--				
APR 17, 74	1400	1	.3	3	1	1	1.90				
MAY 31, 74	0845	1	.3	1	1	1	--				
JUN 12, 74	1150	1	.3	1	1	6	--				
LINE 77											
MAY 31, 74	1240	2	.5	1	1	1	--				
LINE 89											
OCT 15, 73	1325	2	.3	96	72	220	--				
APR 18, 74	0925	2	.3	*	*	466	.30				
MAY 31, 74	1100	2	.3	1	1	2	--				
JUN 12, 74	1500	2	.3	3	1	2	--				
LINE 115											
OCT 15, 73	1345	5	.3	8	3	46	--				
APR 17, 74	1535	5	.5	2	1	1	.40				
MAY 31, 74	1300	5	.3	7	3	34	3.00				
JUN 12, 74	1515	5	.3	2	1	1	--				
LINE 120											
APR 18, 74	0920	1	.3	7	1	1	.30				

\* - TOO NUMEROUS TO COUNT



TABLE 7F--QUALITY OF WATER IN THE MISSION-ARANSAS ESTUARY,

1974 WATER YEAR--CONTINUED

BACTERIOLOGICAL AND CHLOROPHYLL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	CHLORO- PHYLL A (UG/L)
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LINE 120 CONTINUED

MAY 31, 74	1130	1	.5	1	1	2	1.00
JUN 12, 74	1310	1	.3	21	1	1	--

LINE 141

MAY 31, 74	0955	1	.5	1	1	1	--
OCT 15, 73	1630	3	.3	7	1	2	--
APR 18, 74	1110	3	.5	11	4	1	.20
MAY 31, 74	0920	3	.5	1	1	1	--
JUN 12, 74	1200	3	.3	1	1	1	--



## Nueces Estuary

The Nueces estuary covers an area of about 200 square miles (520 km<sup>2</sup>) 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 (4.0 m) in Corpus Christi Bay; less than 3 feet (1.0 m) in Nueces Bay; more than 40

feet (12.2 m) in Aransas Pass, Corpus Christi Ship Channel, and Tule Lake Channel; and about 15 feet (4.6 m) in the Intracoastal Waterway. A part of Redfish Bay is about 10 feet (3.0 m) deep, but about one-fourth of it is only 1 foot (0.3 m) deep (mlw).

Water-quality data (Table 8) were collected during October 1973 and April, May, and June 1974.



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

TABLE 8A--QUALITY OF WATER IN THE NUECES ESTUARY,

1974 WATER YEAR

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
LINE 22										
OCT 16, 73	0955	2	.3	360	24.4	7.4	4.6	54	--	--
			3.4	360	24.2	7.3	5.0	59	--	--
APR 25, 74	1035	2	.3	1800	24.1	8.4	7.9	93	55.	34
			1.5	1900	24.1	8.4	7.6	90	55.	--
			1.8	9500	23.4	8.1	5.9	70	50.	--
			2.4	14000	23.3	8.1	3.6	43	60.	--
JUN 11, 74	1610	2	.3	1300	29.0	--	8.0	103	20.	36
			1.5	1500	28.0	--	5.8	73	20.	--
LINE 38										
OCT 16, 73	1025	2	.3	420	24.2	7.4	5.4	64	--	18
			1.5	420	24.2	7.4	5.5	65	--	--
APR 25, 74	1050	2	.3	6700	23.9	8.3	7.9	95	80.	30
			1.2	6700	23.8	8.3	7.8	94	90.	--
JUN 11, 74	1625	2	.8	2600	29.0	--	9.4	122	40.	28
LINE 53										
APR 25, 74	1035	1	.3	30000	23.4	8.1	7.3	95	60.	33
			1.2	30000	23.4	8.1	6.0	78	90.	--
MAY 30, 74	1055	1	.3	35000	28.0	8.5	6.2	90	340.	5
			1.2	35000	28.0	8.5	6.1	88	350.	--
JUN 11, 74	1500	1	.3	32000	33.0	--	6.4	98	70.	20
			.8	32000	32.5	--	6.4	97	70.	--
OCT 16, 73	1045	2	.3	490	23.9	7.7	7.2	85	--	23
			1.5	490	23.8	7.7	7.8	92	--	--
APR 25, 74	0955	2	.3	33000	23.4	8.1	6.7	88	120.	19
			1.2	33000	23.4	8.1	6.8	89	135.	--
MAY 30, 74	1045	2	.3	35000	28.0	8.3	6.0	87	390.	5
			1.5	31000	27.5	8.3	6.1	86	475.	--
JUN 11, 74	1505	2	.3	30000	28.0	--	7.9	129	75.	18
			.9	30000	28.0	--	7.9	129	80.	--
APR 25, 74	0945	3	.3	35000	23.2	8.1	7.1	93	110.	17
			1.2	35000	23.2	8.1	7.0	92	110.	--
MAY 30, 74	1030	3	.3	33000	27.5	8.3	5.9	84	200.	10
			1.5	33000	28.0	8.3	6.1	88	200.	--
JUN 11, 74	1515	3	.3	30000	28.0	--	7.9	113	50.	23
			1.2	30000	27.5	--	7.7	108	190.	--
OCT 16, 73	1110	4	.3	910	24.5	8.0	7.6	90	--	20
			.9	950	24.2	8.0	7.8	92	--	--
			1.2	9700	24.4	8.0	7.1	86	--	--
APR 25, 74	0935	4	.3	38000	23.3	8.2	7.1	95	110.	20
			1.2	38000	23.3	8.2	7.1	95	120.	--
MAY 30, 74	1015	4	.3	31000	27.5	8.3	6.1	86	200.	8
			1.2	26000	27.5	8.3	6.4	88	200.	--
JUN 11, 74	1525	4	.3	28000	27.5	--	8.0	111	160.	20

TABLE 8A--QUALITY OF WATER IN THE NUECES ESTUARY,

1974 WATER YEAR--CONTINUED

## FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS) (FIELD)	TEMPER- ATURE (DEG. C)	PH	DIS- SOLVED OXYGEN (MG/L)	PERCENT SATUR- ATION	TUR- BIDITY (JTU)	TRANS- PARENCY SECCHI DISK (CM)
LINE 53 CONTINUED										
JUN 11, 74	1525	4	1.2	28000	27.5	--	8.0	111	160.	--
APR 25, 74	0925	5	.3	38000	26.0	8.1	5.6	79	60.	33
			.9	38000	25.6	8.1	5.7	79	60.	--
MAY 30, 74	1000	5	.3	33000	27.5	8.3	6.0	86	175.	10
			1.2	33000	27.5	8.3	6.0	86	180.	--
JUN 11, 74	1535	5	.3	28000	27.5	--	9.0	125	40.	32
			.9	28000	27.5	--	9.0	125	90.	--
LINE 64										
OCT 16, 73	1210	6	.3	2100	24.3	8.4	8.0	95	--	25
			.9	8100	24.6	8.2	8.0	98	--	--
			1.5	32000	25.1	8.3	6.6	88	--	--
			2.1	32000	24.8	8.2	6.7	89	--	--
APR 25, 74	0910	6	.3	38000	23.7	8.2	6.8	92	110.	18
			1.5	38000	23.7	8.2	6.8	92	110.	--
JUN 11, 74	1430	6	.3	32000	28.0	--	8.3	119	35.	42
			1.5	32000	28.0	--	8.1	116	35.	--
OCT 16, 73	1145	9	.3	1800	24.3	8.0	7.8	92	--	25
			.9	1800	24.5	8.0	7.8	93	--	--
			1.5	27000	25.0	8.3	5.6	74	--	--
			2.4	33000	25.1	8.3	5.8	78	--	--
			5.5	33000	25.0	8.3	5.8	78	--	--
APR 25, 74	0855	9	.3	36000	23.1	8.2	6.8	89	105.	15
			1.5	38000	23.1	8.2	6.7	89	100.	--
			4.6	38000	23.1	8.2	6.7	89	90.	--
			7.3	38000	23.1	8.2	6.7	89	80.	--
JUN 11, 74	1415	9	.3	31000	28.0	--	8.5	121	20.	56
			1.5	31000	28.0	--	8.4	120	20.	--
			3.0	31000	28.0	--	8.3	119	20.	--
			5.5	31000	28.0	--	7.9	113	30.	--
OCT 16, 73	1130	12	.3	1300	24.2	8.1	8.4	99	--	25
			.9	1400	24.3	8.2	8.4	99	--	--
			1.5	9700	24.3	8.2	7.9	95	--	--
			2.4	32000	25.2	8.3	5.5	73	--	--
			3.4	32000	25.0	8.2	6.3	84	--	--
APR 25, 74	0840	12	.3	38000	22.2	8.1	6.7	87	95.	20
			1.5	38000	22.2	8.1	6.7	87	100.	--
			3.0	38000	22.2	8.1	6.7	87	100.	--
			4.6	38000	22.2	8.1	6.7	87	100.	--
JUN 11, 74	1440	12	.3	31000	28.0	--	7.7	111	25.	43
			1.5	31000	28.0	--	7.8	111	20.	--
			4.4	31000	28.0	--	7.5	107	30.	--
LINE 71										
OCT 16, 73	1425	2	.3	29000	26.6	8.2	3.1	42	--	161
			1.5	32000	26.9	8.1	.0	0	--	--
			3.0	33000	27.0	8.2	.0	0	--	--
			6.1	36000	27.2	8.0	.0	0	--	--
			9.1	33000	27.1	8.0	.0	0	--	--
			12.2	39000	26.3	7.7	.7	10	--	--
MAY 30, 74	1205	2	.3	36000	30.0	8.3	3.8	58	15.	109
			1.5	36000	30.0	8.4	3.8	58	15.	--
			3.0	36000	30.0	8.4	3.7	56	20.	--

TABLE 8A--QUALITY OF WATER IN THE NUECES ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
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LINE 71 CONTINUED

MAY 30, 74	1205	2	6.1	36000	30.0	8.4	3.8	58	15.	--
			9.1	36000	30.0	8.4	3.6	55	20.	--
			12.5	36000	30.0	8.4	3.5	53	15.	--
JUN 11, 74	1725	2	.3	31000	30.0	--	4.0	59	0.	127
			1.5	31000	30.0	--	4.0	59	0.	--
			3.0	31000	30.0	--	4.0	59	0.	--
			4.6	31000	29.5	--	3.4	49	0.	--
			6.1	31000	29.0	--	1.3	19	0.	--
			9.1	32000	28.5	--	1.1	16	0.	--
12.2	34000	28.5	--	1.2	18	0.	--			

LINE 83

OCT 16, 73	1435	2	.3	20000	25.9	8.6	7.4	97	--	60
			1.5	26000	26.4	8.4	5.1	68	--	--
			3.0	33000	27.2	8.2	.0	0	--	--
			6.1	36000	27.2	8.2	.0	0	--	--
			9.1	36000	27.1	8.1	.0	0	--	--
12.2	39000	26.7	7.9	.1	1	--	--			
JUN 11, 74	1745	2	.3	31000	29.5	--	7.1	104	0.	116
			1.5	31000	29.5	--	6.7	99	0.	--
			3.0	32000	29.0	--	4.9	71	0.	--
			6.1	32000	28.5	--	3.1	44	0.	--
			12.2	35000	28.0	--	.8	12	5.	--

LINE 93

OCT 16, 73	1500	2	.3	22000	25.6	8.5	8.5	110	--	91
			1.5	24000	25.9	8.4	5.8	76	--	--
			3.0	33000	27.0	8.2	2.4	34	--	--
			6.1	35000	25.9	8.3	5.2	72	--	--
			9.1	36000	26.6	8.3	3.1	44	--	--
12.2	38000	26.4	8.2	2.1	30	--	--			
MAY 30, 74	1220	2	.3	36000	29.5	8.2	4.0	60	10.	--
			1.5	36000	29.5	8.2	4.0	60	15.	--
			3.0	36000	29.5	8.2	3.9	58	10.	--
			6.1	36000	29.5	8.2	3.8	57	15.	--
			9.1	36000	29.5	8.2	3.8	57	10.	--
12.5	33000	29.5	8.2	3.8	56	20.	--			
JUN 11, 74	1810	2	.3	31000	29.5	--	9.8	144	10.	117
			1.5	31000	29.0	--	9.0	130	10.	--
			3.0	31000	29.0	--	6.6	96	5.	--
			4.6	31000	28.5	--	4.4	63	--	--
			6.1	32000	28.0	--	3.1	44	0.	--
			9.1	34000	28.0	--	3.4	49	0.	--
12.2	36000	28.0	--	1.4	20	0.	--			

LINE 108

OCT 16, 73	1510	2	.3	24000	26.1	8.4	7.0	92	--	107
			1.5	27000	26.4	8.4	5.6	76	--	--
			3.0	33000	26.1	8.3	4.6	64	--	--
			6.1	35000	25.7	8.3	4.8	66	--	--
			9.1	36000	26.1	8.4	4.2	58	--	--
12.2	38000	26.4	8.2	1.9	27	--	--			
APR 25, 74	1330	2	.3	36000	24.7	8.2	6.6	89	20.	77
			1.5	36000	24.7	8.1	6.5	88	25.	--
			3.0	36000	24.6	8.1	6.2	84	25.	--
			6.1	36000	24.4	8.1	5.2	69	30.	--
			9.1	36000	24.3	8.1	4.3	57	35.	--
12.2	36000	24.4	8.1	5.3	71	40.	--			

TABLE 8A--QUALITY OF WATER IN THE NUECES ESTUARY,

1974 WATER YEAR--CONTINUED

## FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS) (FIELD)	TEMPER- ATURE (DEG. C)	PH	DIS- SOLVED OXYGEN (MG/L)	PERCENT SATUR- ATION	TUR- BIDITY (JTU)	TRANS- PARENCY SECCHI DISK (CM)
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## LINE 108 CONTINUED

MAY 30, 74	1235	2	.3	36000	29.0	8.2	4.1	60	5.	117
			1.5	36000	29.0	8.2	4.2	62	5.	--
			3.0	36000	29.5	8.2	4.2	63	5.	--
			6.1	36000	29.0	8.2	4.1	60	5.	--
			9.1	36000	29.0	8.3	4.5	66	10.	--
			12.2	36000	29.0	8.2	3.8	56	25.	--
JUN 11, 74	1825	2	.3	32000	29.0	--	7.9	114	10.	118
			1.5	32000	29.0	--	7.1	103	5.	--
			3.0	32000	29.0	--	5.9	86	5.	--
			6.1	33000	28.5	--	5.1	75	10.	--
			9.1	34000	28.0	--	4.2	61	10.	--
			12.2	36000	27.5	--	2.0	29	10.	--

## LINE 118

OCT 16, 73	1535	2	.3	26000	26.4	8.5	8.4	112	--	102
			1.5	29000	26.1	8.3	5.4	73	--	--
			3.0	33000	25.6	8.3	4.8	66	--	--
			6.1	34000	25.7	8.3	4.3	59	--	--
			9.1	35000	25.9	8.3	3.8	53	--	--
			12.2	38000	26.4	8.3	3.7	52	--	--
MAY 30, 74	1250	2	.3	38000	29.0	8.3	4.9	73	5.	127
			1.5	38000	29.0	8.3	4.9	73	5.	--
			3.0	38000	29.0	8.3	4.9	73	10.	--
			6.1	38000	28.5	8.3	4.9	72	10.	--
			9.1	38000	28.5	8.3	4.9	72	85.	--
			12.2	38000	28.9	8.3	4.9	73	--	--
JUN 11, 74	1845	2	.3	32000	29.0	--	8.3	120	10.	94
			1.5	32000	29.0	--	7.1	103	5.	--
			3.0	32000	28.5	--	5.4	77	5.	--
			6.1	33000	28.0	--	4.5	65	5.	--
			9.1	34000	27.5	--	2.8	40	15.	--
			12.2	36000	27.0	--	2.8	39	25.	--

## LINE 122

OCT 16, 73	1230	2	.3	32000	25.2	8.4	7.8	104	--	69
			1.5	32000	25.2	8.4	7.7	103	--	--
			3.7	33000	25.1	8.4	7.4	100	--	--
APR 25, 74	1010	2	.6	42000	23.9	8.2	5.3	74	55.	38
			1.5	42000	23.8	8.2	4.7	65	60.	--
			3.0	41000	23.7	8.2	4.9	67	60.	--
JUN 11, 74	1355	2	.3	32000	29.0	--	8.5	123	10.	74
			1.5	32000	28.5	--	8.0	114	10.	--
			2.4	32000	28.0	--	6.5	93	10.	--
			3.5	32000	28.0	--	4.8	69	70.	--
APR 25, 74	0950	4	.6	42000	23.9	8.2	5.7	79	40.	50
			1.5	41000	23.9	8.1	5.1	70	40.	--
			3.7	41000	23.9	8.2	4.8	66	45.	--
JUN 11, 74	1345	4	.3	32000	28.5	--	8.1	116	10.	58
			1.5	32000	28.0	--	7.7	110	15.	--
			3.0	32000	28.0	--	6.9	99	15.	--
			3.7	32000	27.5	--	5.7	80	65.	--
OCT 16, 73	1300	6	.3	22000	24.9	8.4	8.1	104	--	--
			1.5	26000	25.2	8.4	7.4	96	--	--
			3.0	33000	25.2	8.4	7.0	95	--	--
			6.1	32000	25.3	8.4	7.0	95	--	--
			11.3	35000	25.4	8.2	5.1	70	--	--
APR 25, 74	0920	6	.6	41000	23.6	8.1	8.7	119	50.	47

TABLE 8A--QUALITY OF WATER IN THE NUECES ESTUARY,

1974 WATER YEAR--CONTINUED

## FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
LINE 122 CONTINUED										
APR 25, 74	0920	6	1.5	41000	23.7	8.2	8.4	115	50.	--
			3.0	41000	23.7	8.2	7.9	108	50.	--
			6.1	41000	23.8	8.2	8.3	114	50.	--
			9.1	41000	23.8	8.2	8.4	115	50.	--
			12.2	41000	23.8	8.1	7.8	107	80.	--
MAY 30, 74	1130	6	.9	33000	28.7	8.0	5.7	84	50.	--
			3.0	33000	28.8	--	5.7	84	40.	--
			6.1	33000	28.8	--	5.8	85	50.	--
			10.7	33000	28.9	--	5.5	81	50.	--
JUN 11, 74	1310	6	.3	32000	28.5	8.1	8.6	123	5.	71
			1.5	32000	28.5	--	8.5	121	8.	--
			3.0	32000	28.0	--	6.9	99	15.	--
			4.6	32000	27.5	--	6.0	84	15.	--
			6.1	33000	27.5	--	4.5	64	35.	--
			9.1	34000	28.0	--	4.4	64	70.	--
			10.7	36000	27.5	--	3.0	43	60.	--
			11.3	36000	27.5	--	2.6	37	120.	--
APR 25, 74	0905	8	.5	41000	24.0	8.2	7.7	105	35.	60
			1.5	41000	23.9	8.2	7.8	107	35.	--
			3.7	42000	23.9	8.2	7.4	103	60.	--
APR 25, 74	0900	10	.5	41000	24.0	8.2	7.9	108	40.	47
			1.5	41000	23.9	8.2	8.0	110	40.	--
			4.0	41000	23.9	8.2	7.5	103	55.	--
JUN 11, 74	1245	10	.3	32000	28.5	--	3.9	56	10.	75
			1.5	33000	28.0	--	3.6	52	20.	--
			3.4	33000	28.0	--	4.6	67	80.	--
OCT 16, 73	1330	12	.3	22000	24.6	8.4	6.9	88	--	104
			1.5	22000	24.7	8.4	6.4	82	--	--
			3.0	33000	25.0	8.3	4.8	65	--	--
			4.0	34000	24.9	8.3	5.2	70	--	--
APR 25, 74	0845	12	.5	41000	23.9	8.2	7.4	101	40.	53
			1.5	41000	23.9	8.2	7.4	101	45.	--
			2.6	41000	23.8	8.2	7.3	100	50.	--
JUN 11, 74	1230	12	.3	33000	28.0	--	7.8	113	--	79
			1.5	33000	28.0	--	7.5	109	--	--
			3.0	35000	27.5	--	5.4	77	--	--
APR 25, 74	0835	14	.5	41000	23.9	8.2	7.4	101	35.	57
			1.5	41000	23.9	8.3	7.4	101	30.	--
			3.8	41000	23.9	8.3	7.5	103	55.	--
LINE 127										
JUN 11, 74	1420	2	.3	--	28.5	8.3	--	--	60.	56
			1.5	--	28.4	8.3	--	--	65.	--
			3.0	--	28.0	8.3	--	--	70.	--
JUN 11, 74	1400	4	.3	--	28.2	8.3	--	--	40.	60
			1.5	--	28.1	8.3	--	--	10.	--
			3.0	--	28.0	8.3	--	--	15.	--
			6.1	--	27.9	8.3	--	--	25.	--
			9.1	--	28.0	8.1	--	--	20.	--
			11.0	--	28.0	8.0	--	--	45.	--
JUN 11, 74	1330	6	.3	--	28.5	8.4	--	--	--	70
			1.5	--	28.3	8.3	--	--	20.	--
			2.4	--	28.1	8.4	--	--	--	--
			3.0	--	28.0	8.3	--	--	10.	--
			3.7	--	28.0	8.4	--	--	--	--
JUN 11, 74	1315	8	.3	--	28.4	8.5	--	--	--	76



TABLE 8A--QUALITY OF WATER IN THE NUECES ESTUARY,

1974 WATER YEAR--CONTINUED

## FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
LINE 127 CONTINUED										
JUN 11, 74	1315	8	1.5	--	28.2	8.5	--	--	--	--
			2.4	--	28.2	8.5	--	--	--	--
			3.7	--	27.8	8.4	--	--	--	--
LINE 131										
APR 25, 74	1035	2	.3	41000	24.3	8.1	6.1	84	25.	67
			1.5	41000	24.3	8.1	6.0	82	30.	--
			3.0	41000	24.2	8.1	6.0	82	25.	--
			6.1	42000	24.1	8.1	5.8	81	25.	--
			9.1	42000	24.1	8.2	5.5	76	25.	--
			13.4	41000	24.1	8.2	5.5	75	35.	--
MAY 30, 74	1225	2	.5	33000	28.4	--	5.9	86	70.	--
			3.0	33000	28.4	--	5.8	84	100.	--
			6.1	33000	28.4	--	5.8	84	120.	--
			9.1	33000	28.4	--	5.6	81	250.	--
			12.2	33000	28.4	--	5.7	83	150.	--
JUN 11, 74	1430	2	.3	--	28.6	8.4	--	--	50.	52
			1.5	--	28.4	8.4	--	--	55.	--
			3.0	--	28.2	8.4	--	--	60.	--
			6.1	--	28.0	8.3	--	--	50.	--
			9.1	--	28.0	8.2	--	--	60.	--
			12.2	--	27.9	8.0	--	--	55.	--
LINE 142										
OCT 16, 73	1435	1	.3	32000	25.0	8.3	--	--	20.	79
			1.5	33000	25.1	8.3	--	--	20.	--
			3.0	33000	25.1	8.3	--	--	20.	--
			6.1	33000	25.1	8.3	--	--	45.	--
			9.1	33000	25.1	8.3	--	--	80.	--
			12.5	33000	25.2	8.3	--	--	120.	--
APR 25, 74	1155	1	.3	37000	24.2	8.2	5.7	76	30.	71
			1.5	38000	24.2	8.2	5.7	77	30.	--
			3.0	39000	24.2	8.2	5.6	76	35.	--
			6.1	39000	24.2	8.1	5.6	76	40.	--
			9.1	39000	24.2	8.1	5.5	74	60.	--
			13.7	38000	24.4	8.1	5.4	73	115.	--
JUN 11, 74	1500	1	.3	--	28.3	8.4	--	--	50.	61
			1.5	--	28.1	8.4	--	--	50.	--
			3.0	--	27.9	8.3	--	--	50.	--
			6.1	--	27.8	8.3	--	--	50.	--
			9.1	--	27.9	8.2	--	--	60.	--
			11.9	--	27.9	8.1	--	--	60.	--
OCT 16, 73	1420	2	.3	28000	24.7	8.2	--	--	10.	91
			1.5	28000	24.7	8.2	--	--	20.	--
			3.7	33000	25.2	8.3	--	--	35.	--
APR 25, 74	1225	2	.6	39000	24.2	8.1	5.9	79	35.	64
			1.5	39000	24.3	8.1	5.9	79	40.	--
			3.2	39000	24.4	8.1	5.4	73	60.	--
JUN 11, 74	1515	2	.3	40900	28.3	8.3	9.8	144	45.	66
			1.5	--	28.2	8.3	--	--	60.	--
			3.0	41500	27.8	8.3	5.9	88	70.	--
OCT 16, 73	1410	3	.3	25000	24.7	8.3	--	--	10.	97
			1.5	28000	24.7	8.3	--	--	30.	--
			3.7	33000	24.8	8.2	--	--	30.	--
JUN 11, 74	1530	4	.3	--	27.9	8.3	--	--	--	69
			1.5	--	28.0	8.4	--	--	45.	--

TABLE 8A--QUALITY OF WATER IN THE NUECES ESTUARY,

1974 WATER YEAR--CONTINUED

## FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICROMHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
LINE 142 CONTINUED										
JUN 11, 74	1530	4	2.7	--	27.7	8.3	--	--	60.	--
			4.0	--	27.9	8.3	--	--	65.	--
APR 25, 74	1245	6	.6	39000	24.4	8.1	5.7	77	35.	46
			1.5	39000	24.4	8.1	5.8	78	35.	--
			4.0	39000	24.5	8.1	6.2	84	40.	--
JUN 11, 74	1545	6	.3	--	28.0	8.4	--	--	60.	61
			1.5	--	27.9	8.4	--	--	60.	--
			2.7	--	27.9	8.4	--	--	60.	--
			4.0	--	27.9	8.4	--	--	110.	--
OCT 16, 73	1340	7	.3	24000	24.7	8.4	--	--	10.	132
			1.5	24000	24.7	8.4	--	--	10.	--
			3.0	25000	24.7	8.4	--	--	45.	--
			4.6	33000	24.8	8.1	--	--	45.	--
OCT 16, 73	1350	7	.3	24000	24.8	8.3	--	--	10.	117
			1.5	25000	25.0	8.4	--	--	25.	--
			3.0	30000	25.1	8.2	--	--	35.	--
			4.0	32000	25.0	8.2	--	--	45.	--
JUN 11, 74	1600	8	.3	--	28.0	8.4	--	--	40.	74
			1.5	--	28.1	8.4	--	--	60.	--
			2.7	--	28.0	8.4	--	--	110.	--
			4.0	--	27.7	8.4	--	--	100.	--
OCT 16, 73	1320	10	.3	19000	24.6	8.3	--	--	15.	107
			1.5	19000	24.6	8.3	--	--	15.	--
			3.0	20000	24.5	8.3	--	--	45.	--
			4.3	32000	24.6	8.0	--	--	--	--
APR 25, 74	1300	10	.6	41000	24.4	8.1	5.7	78	30.	51
			1.5	41000	24.4	8.1	5.8	79	30.	--
			4.0	41000	24.4	8.1	5.4	74	40.	--
JUN 11, 74	1610	10	.3	43800	28.1	8.4	9.2	139	65.	69
			1.5	--	28.1	8.4	--	--	60.	--
			2.7	--	27.9	8.4	--	--	60.	--
			4.0	44000	27.7	8.4	4.5	68	80.	--
LINE 147										
OCT 16, 73	1135	1	.3	33000	24.8	8.4	--	--	20.	91
			1.5	33000	24.7	8.4	--	--	20.	--
			2.4	33000	24.7	8.4	--	--	30.	--
APR 25, 74	1430	1	.6	35000	23.8	8.4	6.7	89	5.	150
			1.5	37000	23.8	8.4	7.0	93	10.	--
			2.7	40000	23.7	8.3	6.2	85	95.	--
MAY 30, 74	1245	1	.3	34000	29.0	--	6.2	91	5.	--
			3.0	34000	29.0	--	5.8	85	10.	--
			6.1	34000	28.8	--	5.8	85	20.	--
			9.1	34000	28.5	--	5.2	75	20.	--
			12.2	34000	28.4	--	4.8	70	30.	--
JUN 11, 74	1840	1	.3	--	28.5	8.4	--	--	70.	66
			1.2	--	28.6	8.4	--	--	70.	--
			2.1	--	28.5	8.4	--	--	65.	--
OCT 16, 73	1150	2	.3	31000	24.7	8.4	--	--	20.	117
			1.5	31000	24.7	8.4	--	--	30.	--
			3.7	24000	24.8	8.4	--	--	40.	--
APR 25, 74	1415	2	.6	41000	24.5	8.1	5.6	77	30.	51
			1.5	41000	24.4	8.1	5.6	77	35.	--
			3.7	41000	24.4	8.2	5.9	81	45.	--

TABLE 8A--QUALITY OF WATER IN THE NUECES ESTUARY,

1974 WATER YEAR--CONTINUED

## FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS) (FIELD)	TEMPER- ATURE (DEG. C)	PH	DIS- SOLVED OXYGEN (MG/L)	PERCENT SATUR- ATION	TUR- BIDITY (JTU)	TRANS- PARENCY SECCHI DISK (CM)
LINE 147 CONTINUED										
JUN 11, 74	1830	2	.3	42800	28.3	8.4	9.8	146	65.	56
			1.5	--	28.1	8.4	--	--	70.	--
			3.4	41000	27.9	8.4	4.8	70	90.	--
OCT 16, 73	1205	3	.3	25000	24.7	8.4	--	--	10.	107
			1.5	25000	24.7	8.4	--	--	10.	--
			3.4	26000	24.7	8.3	--	--	15.	--
APR 25, 74	1355	3	.6	41000	24.4	8.1	5.7	78	35.	58
			1.5	41000	24.4	8.1	5.7	78	35.	--
			3.4	41000	24.3	8.1	6.0	82	40.	--
JUN 11, 74	1815	3	.3	--	28.5	8.4	--	--	45.	67
			1.5	--	28.2	8.4	--	--	60.	--
			3.0	--	27.8	8.4	--	--	60.	--
OCT 16, 73	1220	4	.3	23000	24.8	8.4	--	--	10.	142
			1.5	23000	24.7	8.4	--	--	10.	--
			3.7	25000	24.7	8.3	--	--	20.	--
JUN 11, 74	1800	4	.3	--	28.3	8.4	--	--	60.	74
			1.5	--	28.3	8.4	--	--	65.	--
			2.7	--	28.2	8.4	--	--	65.	--
			4.0	--	28.1	8.4	--	--	65.	--
OCT 16, 73	1240	5	.3	18000	24.8	8.3	--	--	15.	112
			1.5	19000	24.9	8.3	--	--	15.	--
			3.4	23000	24.6	8.2	--	--	25.	--
APR 25, 74	1330	5	.6	41000	24.8	8.1	6.2	86	25.	71
			1.8	40000	24.9	8.2	6.2	86	25.	--
JUN 11, 74	1745	5	.3	--	28.6	8.4	--	--	85.	44
			1.2	--	28.5	8.4	--	--	85.	--
LINE 159										
OCT 16, 73	1515	1	.3	17000	24.7	8.4	--	--	20.	71
			1.5	18000	24.7	8.4	--	--	20.	--
			3.0	19000	24.7	8.4	--	--	25.	--
			4.6	24000	24.8	8.3	--	--	25.	--
APR 18, 74	1545	1	.3	44000	22.0	8.1	7.4	100	10.	124
			1.5	44000	22.0	8.1	7.4	100	10.	--
			3.0	44000	22.0	8.1	7.4	100	10.	--
			4.7	44000	22.1	8.1	7.9	107	10.	--
APR 25, 74	1515	1	.3	35000	23.7	8.4	6.8	91	5.	175
			1.5	35000	23.7	8.4	6.9	92	10.	--
			3.0	35000	23.7	8.4	7.0	93	10.	--
			4.6	35000	23.9	8.4	7.1	95	5.	--
JUN 11, 74	1925	1	.3	--	28.2	8.5	--	--	80.	69
			1.5	--	28.1	8.4	--	--	80.	--
			3.0	--	28.1	8.4	--	--	85.	--
			4.3	--	28.1	8.4	--	--	60.	--
APR 25, 74	1530	4	.5	35000	24.5	8.4	6.4	86	15.	127
			1.5	34000	24.7	8.3	6.2	84	20.	--
			3.0	35000	24.1	8.4	6.6	88	10.	--
			4.6	34000	24.2	8.4	6.7	89	20.	--
JUN 11, 74	1935	4	.3	--	28.0	8.4	--	--	85.	81
			1.5	--	27.8	8.4	--	--	80.	--
			2.7	--	27.8	8.3	--	--	95.	--
OCT 16, 73	1530	8	.3	16000	24.6	8.3	--	--	45.	79
			1.5	18000	24.6	8.4	--	--	60.	--

TABLE 8A--QUALITY OF WATER IN THE NUECES ESTUARY,

1974 WATER YEAR--CONTINUED

## FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)	
LINE 159 CONTINUED											
OCT 16, 73	1530	8	3.0	19000	24.6	8.6	--	--	350.	--	
			4.6	19000	24.6	8.5	--	--	135.	--	
APR 25, 74	1555	8	.5	32000	24.9	8.3	6.7	89	20.	86	
			1.5	35000	24.8	8.2	6.3	85	30.	--	
			3.0	35000	24.7	8.2	5.8	78	25.	--	
			4.9	35000	24.8	8.2	5.8	78	30.	--	
MAY 30, 74	1500	8	.5	29000	28.7	--	6.2	89	90.	--	
			1.5	30000	29.0	--	6.3	91	30.	--	
			3.0	30000	29.0	--	6.3	91	30.	--	
			5.3	31000	29.2	--	6.3	91	50.	--	
JUN 11, 74	1940	8	.3	34400	28.4	8.5	7.2	104	85.	71	
			1.5	--	27.8	8.4	--	--	85.	--	
			3.0	--	27.6	8.3	--	--	80.	--	
			4.6	37800	27.4	8.3	6.1	88	100.	--	
OCT 16, 73	1540	10	.3	20000	24.9	8.4	--	--	15.	97	
			1.5	21000	24.9	8.4	--	--	20.	--	
			3.0	26000	25.0	8.3	--	--	85.	--	
			4.6	27000	25.0	8.3	--	--	95.	--	
APR 25, 74	1610	10	.3	32000	24.6	8.3	5.9	79	15.	97	
			3.0	33000	24.6	8.2	5.3	72	20.	--	
			5.2	33000	24.7	8.2	3.8	51	30.	--	
JUN 11, 74	1955	10	.3	--	27.9	8.4	--	--	80.	107	
			1.5	--	27.9	8.4	--	--	75.	--	
			3.0	--	27.9	8.4	--	--	80.	--	
			4.9	--	28.0	8.4	--	--	100.	--	
APR 25, 74	1620	11	.3	32000	24.7	8.3	5.9	79	--	107	
			3.0	34000	24.6	8.2	5.0	68	15.	--	
			5.2	34000	24.7	8.2	3.2	43	10.	--	
JUN 11, 74	2005	11	.3	--	28.0	8.5	--	--	90.	99	
			1.5	--	28.0	8.5	--	--	85.	--	
			3.0	--	28.0	8.4	--	--	90.	--	
			4.9	--	28.0	8.3	--	--	110.	--	
LINE 168											
OCT 16, 73	1100	2	.3	32000	24.7	8.4	--	--	25.	56	
			1.5	32000	24.7	8.4	--	--	25.	--	
			3.0	32000	24.6	8.4	--	--	30.	--	
			6.1	33000	24.6	8.4	--	--	35.	--	
			9.1	33000	24.8	8.4	--	--	40.	--	
			11.6	33000	24.9	8.4	--	--	35.	--	
APR 18, 74	1315	2	.3	44000	21.1	8.1	7.5	100	10.	152	
			1.5	44000	21.1	8.1	7.5	100	10.	--	
			3.0	44000	21.0	8.1	7.5	100	15.	--	
			6.1	44000	20.8	8.1	7.3	97	10.	--	
			9.1	44000	20.4	8.1	7.1	93	20.	--	
			12.2	44000	20.5	8.1	7.0	92	20.	--	
			14.9	42000	20.9	8.2	7.3	96	30.	--	
APR 25, 74	1455	2	.3	37000	24.5	8.4	7.2	96	5.	216	
			3.0	37000	24.4	8.4	7.1	95	5.	--	
			6.1	37000	23.3	8.4	6.9	91	5.	--	
			9.1	37000	23.3	8.4	6.9	91	5.	--	
			12.2	37000	23.3	8.3	6.8	89	10.	--	
			14.9	37000	23.4	8.4	6.9	91	10.	--	
MAY 30, 74	1330	2	.3	36000	28.7	--	6.4	94	5.	--	
			3.0	38000	28.4	--	5.3	78	5.	--	
			6.1	38000	27.2	--	3.3	47	5.	--	

TABLE 8A--QUALITY OF WATER IN THE NUECES ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS										
DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS) (FIELD)	TEMPER- ATURE (DEG. C)	PH	DIS- SOLVED OXYGEN (MG/L)	PERCENT SATUR- ATION	TUR- BIDITY (JTU)	TRANS- PARENCY SECCHI DISK (CM)
LINE 168 CONTINUED										
MAY 30, 74	1330	2	9.1	40000	26.9	--	2.0	29	10.	--
			12.2	40000	26.8	--	1.8	26	10.	--
			14.8	40000	26.9	--	1.6	23	20.	--
JUN 11, 74	1900	2	.3	--	28.1	8.4	--	--	50.	86
			1.5	--	27.9	8.4	--	--	70.	--
			3.0	--	27.9	8.3	--	--	75.	--
			6.1	--	28.0	8.2	--	--	70.	--
			9.1	--	28.0	8.2	--	--	50.	--
			13.7	--	28.0	8.2	--	--	60.	--
LINE 170										
OCT 16, 73	1250	3	.3	32000	24.9	8.1	--	--	15.	109
			1.5	33000	24.7	8.0	--	--	15.	--
			3.0	33000	24.7	8.0	--	--	15.	--
			5.2	33000	24.7	8.0	--	--	15.	--
APR 25, 74	1320	3	.3	41000	24.8	8.1	6.1	85	30.	76
			1.5	41000	24.8	8.1	6.2	86	40.	--
			3.0	41000	24.8	8.1	6.2	86	30.	--
			4.9	41000	24.9	8.1	6.4	89	40.	--
MAY 30, 74	0915	3	.3	40000	28.3	--	4.7	69	10.	--
			1.5	40000	28.3	--	4.9	72	10.	--
			3.0	40000	28.2	--	4.9	72	5.	--
			5.0	40000	28.2	--	4.9	72	--	--
OCT 16, 73	1305	4	.3	22000	24.7	8.2	--	--	25.	66
			1.5	33000	24.6	8.0	--	--	25.	--
			2.7	33000	24.6	8.1	--	--	25.	--
APR 25, 74	0800	4	.5	41000	23.2	8.2	7.1	96	25.	66
			2.6	41000	23.4	8.2	7.2	97	30.	--
MAY 30, 74	1050	4	.5	39000	28.5	--	5.1	75	30.	--
			2.6	39000	28.6	--	5.2	78	30.	--
LINE 183										
JUN 11, 74	1630	2	.3	--	27.7	8.4	--	--	50.	86
			1.5	--	27.3	8.4	--	--	55.	--
			3.0	--	26.9	8.4	--	--	50.	--
			4.9	--	26.7	8.2	--	--	30.	--
APR 25, 74	0740	3	.3	41000	23.6	8.3	6.9	95	10.	--
			3.0	40000	23.5	8.3	7.0	95	20.	--
			5.5	41000	23.4	8.2	6.8	92	25.	--
MAY 30, 74	0940	3	.3	40000	28.1	--	5.1	75	0.	--
			1.5	40000	28.1	--	5.1	75	5.	--
			3.0	40000	28.2	--	4.7	69	0.	--
			5.9	40000	28.4	--	4.7	69	10.	--
MAY 30, 74	1015	6	.3	40000	28.5	--	6.2	93	0.	--
			1.5	40000	28.5	--	6.1	91	0.	--
			3.5	38000	28.6	--	5.8	87	0.	--
LINE 901										
OCT 16, 73	1010	70	.3	31000	25.3	8.3	--	--	30.	56
			1.5	32000	25.4	8.3	--	--	30.	--
			3.0	33000	25.7	8.3	--	--	30.	--
			6.1	34000	26.1	8.3	--	--	20.	--
			9.1	34000	26.2	8.3	--	--	20.	--
			12.2	34000	26.2	8.3	--	--	20.	--

TABLE 8A--QUALITY OF WATER IN THE NUECES ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS) (FIELD)	TEMPER- ATURE (DEG. C)	PH	DIS- SOLVED OXYGEN (MG/L)	PERCENT SATUR- ATION	TUR- BIDITY (JTU)	TRANS- PARENCY SECCHI DISK (CM)
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LINE 901 CONTINUED

OCT 16, 73	1010	70	15.2	38000	26.4	8.3	--	--	15.	--
APR 18, 74	1520	70	.6	44000	21.8	8.1	7.1	96	10.	128
			3.0	44000	21.7	8.1	6.8	92	15.	--
			6.1	44000	21.4	8.2	6.9	92	15.	--
			9.1	44000	21.3	8.2	6.9	92	20.	--
			14.0	44000	21.4	8.2	6.9	92	30.	--

LINE 903

JUN 12, 74	1020	70	.3	46000	28.2	8.1	8.4	121	10.	142
			1.5	--	28.1	8.0	--	--	20.	--
			3.0	--	28.0	8.0	--	--	15.	--
			6.1	--	27.8	8.0	--	--	25.	--
			9.1	--	27.6	8.0	--	--	20.	--
			12.2	47000	27.8	8.0	7.1	104	35.	--

LINE 910

OCT 16, 73	0925	70	.3	43000	26.9	8.3	--	--	15.	--
			1.5	34000	26.8	8.3	--	--	15.	--
			3.0	34000	27.0	8.3	--	--	15.	--
			6.1	34000	27.1	8.3	--	--	15.	--
			9.1	34000	27.3	8.3	--	--	15.	--
			12.2	38000	27.3	8.3	--	--	15.	--
			15.2	39000	27.3	8.3	--	--	45.	--
			18.3	45000	27.3	8.3	--	--	10.	--
			21.9	45000	27.3	8.3	--	--	10.	--
APR 18, 74	1420	70	.6	44000	21.1	8.2	6.6	88	10.	218
			3.0	44000	21.1	8.2	6.5	87	5.	--
			6.1	44000	20.8	8.2	6.3	84	5.	--
			9.1	44000	20.7	8.2	6.5	86	5.	--
			12.2	46000	20.4	8.2	6.4	84	5.	--
			15.2	46000	20.4	8.2	6.3	83	5.	--
			18.3	48000	20.5	8.1	6.0	80	5.	--
			21.3	48000	20.4	8.1	6.2	83	5.	--

TABLE 8B--QUALITY OF WATER IN THE NUECES ESTUARY,

1974 WATER YEAR

## NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED SILICA (SI02) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS-SOLVED PHOS- PHORUS ORTHO (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (MG/L)
LINE 22												
OCT 16, 73	0955	2	.3 3.4	16.0 16.0	.20 .20	.00 .00	.00 .00	.20 .20	.28 .28	1.4 1.3	0 0	-- --
LINE 53												
MAY 30, 74	1055	1	.3 1.2	3.1 --	.01 .01	.06 .09	.01 .01	-- --	.33 .21	1.8 1.7	-- --	-- --
OCT 16, 73	1045	2	.3	15.0	.09	.00	.00	.16	.22	1.6	0	--
APR 25, 74	0955	2	.3	3.2	.03	.09	.03	--	.28	1.3	--	10.0
JUN 11, 74	1505	2	.3	--	.04	.14	.04	--	.11	1.3	--	--
APR 25, 74	0935	4	.3	.0	.00	.05	.03	--	.28	.6	--	8.0
JUN 11, 74	1525	4	.3	5.5	.03	.15	.03	--	.07	1.6	--	--
LINE 64												
JUN 03, 74	1800	12	.3	--	.01	.07	.00	--	.08	2.6	--	--
JUN 03, 74	2400	12	.3	--	.00	.05	.00	--	.11	2.8	--	--
JUN 04, 74	0600	12	.3	--	.01	.04	.00	--	.10	2.4	--	--
JUN 04, 74	1200	12	.3	--	.01	.06	.00	--	.13	2.1	--	--
JUN 04, 74	1800	12	.3	--	.00	.04	.01	--	.09	2.8	--	--
JUN 04, 74	2400	12	.3	--	.00	.04	.01	--	.15	2.6	--	--
JUN 05, 74	0600	12	.3	--	.00	.05	.00	--	.20	2.5	--	--
JUN 05, 74	1200	12	.3	--	.00	.03	.01	--	.16	2.2	--	--
JUN 05, 74	1800	12	.3	--	.00	.04	.01	--	.15	3.6	--	--
JUN 05, 74	2400	12	.3	--	.00	.08	.00	--	.25	3.0	--	--
JUN 06, 74	0600	12	.3	--	.02	.12	.00	--	.26	2.9	--	--
JUN 06, 74	1200	12	.3	--	.01	.05	.00	--	.24	3.1	--	--
JUN 06, 74	1800	12	.3	--	.00	.07	.01	--	.18	2.4	--	--
LINE 71												
JUN 11, 74	1725	2	.3 12.2	-- --	.02 .02	.48 .41	.00 .01	-- --	.21 .13	2.6 1.0	-- --	-- --
LINE 108												
OCT 16, 73	1510	2	.3 12.2	6.5 3.7	.01 .00	.06 .20	.01 .00	.22 .09	.28 .09	2.9 1.4	49 0	-- --
APR 25, 74	1330	2	.3 12.2	.0 .0	.04 .00	.21 .09	.01 .01	-- --	.31 .26	2.4 1.9	-- --	-- --
MAY 30, 74	1235	2	.3 12.2	-- --	.03 .00	.27 .15	.02 .01	-- --	.17 .10	1.3 1.1	-- --	8.0 8.0
JUN 11, 74	1825	2	.3	--	.07	.35	.03	--	.16	3.0	--	--

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

1974 WATER YEAR--CONTINUED

NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED SILICA (SI02) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS-SOLVED PHOS-ORTHO (P) (MG/L)	TOTAL PHOS-PHOS (P) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	PHENOLS (UG/L)	TOTAL INORGANIC CARBON (MG/L)
LINE 108 CONTINUED												
JUN 11, 74	1825	2	12.2	--	.01	.50	.01	--	.08	1.0	--	--
LINE 122												
OCT 16, 73	1230	2	.3 3.7	5.0 5.0	.00 .00	.03 .04	.01 .01	.05 .06	.05 .08	1.0 1.2	0 0	-- --
APR 25, 74	1010	2	.6 3.0	.0 .0	.00 .00	.06 .02	.01 .01	-- --	.26 .27	1.4 .6	-- --	6.0 5.5
JUN 11, 74	1355	2	.3 3.5	-- --	.01 .01	.00 .18	.00 .02	-- --	.06 .09	1.1 .9	-- --	-- --
OCT 16, 73	1300	6	.3 11.3	9.1 4.7	.00 .01	.00 .11	.01 .00	.09 .06	.09 .13	.9 1.1	0 0	-- --
APR 25, 74	0920	6	.6 12.2	.0 .0	.00 .00	.02 .04	.01 .01	-- --	.25 .25	1.3 .9	-- --	5.5 6.0
MAY 30, 74	1130	6	.9 10.7	1.5 --	.01 .00	.04 .07	.01 .01	-- --	.00 .13	1.1 1.5	-- --	-- --
JUN 11, 74	1310	6	.3 11.3	1.8 --	.01 .00	.00 .27	.00 .01	-- --	.06 .16	1.8 1.2	-- --	-- --
OCT 16, 73	1330	12	.3 4.0	11.0 5.2	.02 .00	.00 .06	.01 .01	.10 .07	.10 .08	1.2 1.6	0 0	-- --
APR 25, 74	0845	12	.5 2.6	.0 .0	.00 .00	.06 .02	.01 .01	-- --	.25 .26	1.0 .7	-- --	6.0 5.0
JUN 11, 74	1230	12	.3 3.0	-- --	.00 .00	.05 .12	.00 .01	-- --	.06 .09	1.0 .7	-- --	-- --
LINE 142												
OCT 16, 73	1420	2	.3 3.7	6.3 4.7	.00 .00	.01 .00	.01 .01	.05 .05	.05 .06	1.8 1.1	-- --	-- --
APR 25, 74	1225	2	.6 3.2	.0 .0	.00 .00	.04 .00	.01 .01	-- --	.21 .23	.5 .5	-- --	5.0 4.0
JUN 11, 74	1515	2	.3 3.0	-- --	.00 .01	.01 .07	.00 .00	-- --	.05 .06	2.0 .7	-- --	-- 9.4
OCT 16, 73	1320	10	.3 4.3	9.7 6.0	.00 .00	.00 .09	.01 .00	.08 .05	.09 .07	.5 1.0	-- --	-- --
APR 25, 74	1300	10	.6 4.0	.0 .0	.00 .00	.00 .05	.01 .01	-- --	.22 .23	.9 1.7	-- --	10.0 15.0
JUN 11, 74	1610	10	.3 4.0	-- --	.00 .00	.03 .11	.00 .00	-- --	.06 .08	2.2 2.1	-- --	9.2 11.0
LINE 147												
OCT 16, 73	1150	2	.3 3.7	5.0 4.5	.00 .00	.00 .00	.01 .01	.05 .06	.06 .06	.9 1.1	-- --	-- --
APR 25, 74	1415	2	.6 3.7	.0 .0	.00 .00	.01 .02	.01 .01	-- --	.22 .24	1.0 1.0	-- --	6.0 10.0
JUN 11, 74	1830	2	.3 3.4	-- --	.01 .00	.01 .12	.00 .01	-- --	.06 .09	1.9 3.1	-- --	7.6 6.8
OCT 16, 73	1240	5	.3	10.0	.00	.00	.01	.08	.09	.2	0	--



TABLE 8B--QUALITY OF WATER IN THE NUECES ESTUARY,

1974 WATER YEAR--CONTINUED

NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED SILICA (SiO <sub>2</sub> ) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS-SOLVED PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (MG/L)
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LINE 147 CONTINUED

OCT 16, 73	1240	5	3.4	8.5	.01	.00	.02	.05	.07	1.0	0	--
APR 25, 74	1330	5	.6 1.8	.0 .0	.00 .00	.01 .01	.01 .01	-- --	.21 .21	1.3 .7	-- --	4.5 5.5

LINE 159

OCT 16, 73	1530	8	.3 4.6	10.0 9.5	.02 .00	.00 .02	.01 .00	.05 .06	.05 .28	1.1 5.0	-- --	-- --
APR 25, 74	1555	8	.5 4.9	3.4 1.5	.00 .00	.01 .06	.01 .01	-- --	.09 .21	.8 .9	-- --	5.5 3.0
MAY 30, 74	1500	8	.5 5.3	-- --	.00 .00	.02 .02	.01 .01	-- --	.06 .08	1.1 1.6	-- --	-- --
JUN 11, 74	1940	8	.3 4.6	-- --	.00 .00	.00 .05	.00 .00	-- --	.03 .03	1.1 1.2	-- --	8.3 7.8

LINE 168

MAY 30, 74	1330	2	.3	--	.00	.02	.01	--	.07	1.7	--	--
JUN 03, 74	1800	2	.3	--	.00	.03	.01	--	.05	3.0	--	--
JUN 03, 74	2400	2	.3	--	.00	.02	.00	--	.03	3.0	--	--
JUN 04, 74	0600	2	.3	--	.01	.05	.01	--	.05	2.4	--	--
JUN 04, 74	1200	2	.3	--	.00	.04	.01	--	.04	2.0	--	--
JUN 04, 74	1745	2	.3	--	.00	.03	.01	--	.05	2.3	--	--
JUN 04, 74	2400	2	.3	--	.01	.04	.00	--	.08	2.7	--	--
JUN 05, 74	0600	2	.3	--	.01	.04	.01	--	.05	2.3	--	--
JUN 05, 74	1200	2	.3	--	.00	.04	.01	--	.09	2.1	--	--
JUN 05, 74	1800	2	.3	--	.01	.05	.00	--	.06	2.5	--	--
JUN 06, 74	0020	2	.3	--	.00	.03	.01	--	.10	2.6	--	--
JUN 06, 74	0600	2	.3	--	.00	.07	.00	--	.08	2.3	--	--
JUN 06, 74	1225	2	.3	--	.00	.04	.01	--	.07	2.7	--	--
JUN 06, 74	1750	2	.3	--	.00	.03	.01	--	.05	2.2	--	--

LINE 183

MAY 30, 74	0940	3	.3 5.9	-- --	.00 .00	.02 .05	.01 .01	-- --	.04 .05	.8 1.1	-- --	-- --
JUN 03, 74	1800	3	.3	--	.00	.05	.00	--	.05	2.6	--	--
JUN 03, 74	2400	3	.3	--	.00	.07	.00	--	.05	1.9	--	--
JUN 04, 74	0600	3	.3	--	.00	.06	.01	--	.05	1.9	--	--
JUN 04, 74	1200	3	.3	--	.01	.05	.01	--	.05	1.8	--	--
JUN 04, 74	1800	3	.3	--	.00	.05	.01	--	.05	1.6	--	--
JUN 04, 74	2400	3	.3	--	.00	.01	.01	--	.05	1.7	--	--
JUN 05, 74	0600	3	.3	--	.00	.05	.01	--	.05	1.3	--	--

TABLE 8B--QUALITY OF WATER IN THE NUECES ESTUARY,

1974 WATER YEAR--CONTINUED

NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED SILICA (SI02) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS ORTHO (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (MG/L)
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LINE 183 CONTINUED

JUN 05, 74	1200	3	.3	--	.01	.04	.00	--	.05	1.3	--	--
JUN 05, 74	1800	3	.3	--	.00	.03	.00	--	.10	2.0	--	--
JUN 05, 74	2400	3	.3	--	.01	.03	.00	--	.05	2.0	--	--
JUN 06, 74	0600	3	.3	--	.00	.07	.01	--	.05	1.5	--	--
JUN 06, 74	1200	3	.3	--	.00	.05	.01	--	.05	3.1	--	--

LINE 901

OCT 16, 73	1010	70	.3	4.8	.00	.06	.01	.05	.05	.4	--	--
			15.2	1.2	.00	.01	.02	.04	.04	.7	--	--
APR 18, 74	1520	70	.6	.0	.00	.01	.01	--	.19	1.7	--	--
			14.0	.0	.00	.01	.00	--	.24	2.3	--	--

LINE 903

JUN 12, 74	1020	70	.3	--	.01	.03	.00	--	.03	.7	--	7.1
			12.2	--	.00	.02	.00	--	.03	.0	--	8.3

LINE 910

OCT 16, 73	0925	70	.3	.3	.02	.04	.02	.04	.09	.5	0	--
			21.9	.5	.00	.05	.02	.03	.03	1.0	--	--
APR 18, 74	1420	70	.6	.0	.01	.01	.00	--	.19	1.7	--	.0
			21.3	.0	.01	.02	.00	--	.21	2.4	--	--

TABLE 8C--QUALITY OF WATER IN THE NUECES ESTUARY,

1974 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)	DIS-SOLVED SODIUM + POTASIUM (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 22											
OCT 16, 73	0955	2	.3	389	43.0	--	29	134	24	40	226
			3.4	392	--	--	--	--	--	--	--
LINE 53											
MAY 30, 74	1055	1	.3	38400	340.0	900.0	7700	156	1800	14000	24900
OCT 16, 73	1045	2	.3	520	--	--	--	--	--	--	--
JUN 11, 74	1525	4	.3	34300	300.0	790.0	7200	149	1300	13000	22700
LINE 64											
JUN 03, 74	1800	12	.3	37500	--	--	--	--	--	--	--
JUN 03, 74	2400	12	.3	36900	--	--	--	--	--	--	--
JUN 04, 74	0600	12	.3	38300	--	--	--	--	--	--	--
JUN 04, 74	1200	12	.3	37300	--	--	--	--	--	--	--
JUN 04, 74	1800	12	.3	37700	--	--	--	--	--	--	--
JUN 04, 74	2400	12	.3	37500	--	--	--	--	--	--	--
JUN 05, 74	0600	12	.3	38000	--	--	--	--	--	--	--
JUN 05, 74	1200	12	.3	37800	--	--	--	--	--	--	--
JUN 05, 74	1800	12	.3	37900	--	--	--	--	--	--	--
JUN 05, 74	2400	12	.3	37900	--	--	--	--	--	--	--
JUN 06, 74	0600	12	.3	35800	--	--	--	--	--	--	--
JUN 06, 74	1200	12	.3	37800	--	--	--	--	--	--	--
JUN 06, 74	1800	12	.3	39800	--	--	--	--	--	--	--
LINE 108											
OCT 16, 73	1510	2	.3	22000	--	--	--	--	--	--	--
			12.2	36100	--	--	--	--	--	--	--
LINE 122											
OCT 16, 73	1230	2	.3	28400	--	--	--	--	--	--	--
			3.7	28900	--	--	--	--	--	--	--
OCT 16, 73	1300	6	.3	19500	190.0	470.0	4100	142	1000	7200	13000
			11.3	34100	--	--	--	--	--	--	--
APR 25, 74	0920	6	.6	39520	300.0	1000.0	8700	178	2000	15000	27200
MAY 30, 74	1130	6	.9	37900	330.0	810.0	8100	154	1800	14000	25200
JUN 11, 74	1310	6	.3	40400	300.0	860.0	9700	159	2000	15000	28000
OCT 16, 73	1330	12	.3	13800	--	--	--	--	--	--	--
			4.0	32000	--	--	--	--	--	--	--
APR 25, 74	0845	12	.5	40600	330.0	1000.0	9200	169	2400	15000	28200

TABLE 8C--QUALITY OF WATER IN THE NUECES ESTUARY,

1974 WATER YEAR--CONTINUED

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (LAB)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)	DISSOLVED SODIUM + POTASSIUM (NA+K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
LINE 142											
OCT 16, 73	1420	2	.3	27100	--	--	--	--	--	--	--
			3.7	33800	--	--	--	--	--	--	--
JUN 11, 74	1515	2	.3	40900	--	--	--	--	--	--	--
			3.0	41500	--	--	--	--	--	--	--
OCT 16, 73	1320	10	.3	18600	--	--	--	--	--	--	--
			4.3	31500	--	--	--	--	--	--	--
APR 25, 74	1300	10	.6	40400	310.0	1000.0	8700	168	2100	15000	27400
JUN 11, 74	1610	10	.3	44000	--	--	--	--	--	--	--
			4.0	44000	--	--	--	--	--	--	--
LINE 147											
OCT 16, 73	1150	2	.3	34000	--	--	--	--	--	--	--
			3.7	34000	--	--	--	--	--	--	--
JUN 11, 74	1830	2	.3	43000	--	--	--	--	--	--	--
			3.4	41000	--	--	--	--	--	--	--
OCT 16, 73	1240	5	.3	17500	--	--	--	--	--	--	--
			3.4	20800	--	--	--	--	--	--	--
LINE 159											
OCT 16, 73	1530	8	.3	16100	--	--	--	--	--	--	--
			4.6	18500	--	--	--	--	--	--	--
JUN 11, 74	1940	8	.3	34000	--	--	--	--	--	--	--
			4.6	38000	--	--	--	--	--	--	--
LINE 168											
JUN 03, 74	1800	2	.3	42800	--	--	--	--	--	--	--
JUN 03, 74	2400	2	.3	42200	--	--	--	--	--	--	--
JUN 04, 74	1200	2	.3	45800	--	--	--	--	--	--	--
JUN 04, 74	1745	2	.3	43600	--	--	--	--	--	--	--
JUN 04, 74	2400	2	.3	43600	--	--	--	--	--	--	--
JUN 05, 74	0600	2	.3	45200	--	--	--	--	--	--	--
JUN 05, 74	1200	2	.3	48400	--	--	--	--	--	--	--
JUN 05, 74	1800	2	.3	48700	--	--	--	--	--	--	--
JUN 06, 74	0020	2	.3	44000	--	--	--	--	--	--	--
JUN 06, 74	0600	2	.3	44700	--	--	--	--	--	--	--
JUN 06, 74	1225	2	.3	49200	--	--	--	--	--	--	--
JUN 06, 74	1750	2	.3	49200	--	--	--	--	--	--	--
LINE 183											
JUN 03, 74	1800	3	.3	53500	--	--	--	--	--	--	--

TABLE 8C--QUALITY OF WATER IN THE NUECES ESTUARY,

1974 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/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)
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LINE 183 CONTINUED

JUN 03, 74	2400	3	.3	51500	--	--	--	--	--	--	--
JUN 04, 74	0600	3	.3	51600	--	--	--	--	--	--	--
JUN 04, 74	1200	3	.3	52200	--	--	--	--	--	--	--
JUN 04, 74	1800	3	.3	52700	--	--	--	--	--	--	--
JUN 04, 74	2400	3	.3	53000	--	--	--	--	--	--	--
JUN 05, 74	0600	3	.3	53300	--	--	--	--	--	--	--
JUN 05, 74	1200	3	.3	53100	--	--	--	--	--	--	--
JUN 05, 74	1800	3	.3	53000	--	--	--	--	--	--	--
JUN 05, 74	2400	3	.3	53700	--	--	--	--	--	--	--
JUN 06, 74	0600	3	.3	52900	--	--	--	--	--	--	--
JUN 06, 74	1200	3	.3	49000	--	--	--	--	--	--	--
LINE 901											
-----											
OCT 16, 73	1010	70	.3	30100	--	--	--	--	--	--	--
			15.2	37900	--	--	--	--	--	--	--
LINE 903											
-----											
JUN 12, 74	1020	70	.3	46000	--	--	--	--	--	--	--
			12.2	46900	--	--	--	--	--	--	--
LINE 910											
-----											
OCT 16, 73	0925	70	.3	42000	340.0	1100.0	8800	154	2200	16000	28400
			21.9	45800	--	--	--	--	--	--	--
APR 18, 74	1420	70	.6	40900	280.0	990.0	8900	137	2100	15000	27500

TABLE 8D--QUALITY OF WATER IN THE NUECES ESTUARY,

1974 WATER YEAR

SELECTED IONS ANALYSES

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

LINE 22

OCT 16, 73 0955 2 .3 -- -- -- -- -- -- -- .2

LINE 53

OCT 16, 73 1045 2 .3 -- 7 -- -- -- 0 -- -- 0 --  
1.5 -- -- -- 1 -- -- 0 --

LINE 122

OCT 16, 73 1230 2 .3 -- 2 -- -- 0 -- -- --  
OCT 16, 73 1300 6 .3 -- -- -- -- -- -- -- .5  
OCT 16, 73 1330 12 .3 -- 5 -- -- 0 -- -- --

LINE 147

OCT 16, 73 1240 5 .3 -- 8 -- -- 0 -- -- --

LINE 910

OCT 16, 73 0925 70 .3 -- 4 -- -- 0 -- -- -- .7

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

LINE 53

OCT 16, 73 1045 2 .3 -- -- 0 -- -- -- 9 -- --  
1.5 -- -- -- 2 -- -- 2 --

LINE 122

OCT 16, 73 1230 2 .3 -- -- 0 -- -- 4 -- --  
OCT 16, 73 1330 12 .3 -- -- 1 -- -- 5 -- --

LINE 147

OCT 16, 73 1240 5 .3 -- -- 1 -- -- 4 -- --

LINE 910

OCT 16, 73 0925 70 .3 -- -- 0 -- -- 3 -- --

TABLE 8D--QUALITY OF WATER IN THE NUECES ESTUARY,

1974 WATER YEAR--CONTINUED

SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED CYANIDE (CN) (MG/L)	BOTTOM DEPOSIT CYANIDE (CN) (UG/GM)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL IRON (FE) (UG/L)	BOTTOM DEPOSIT IRON (FE) (UG/GM)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	BOTTOM DEPOSIT LEAD (PB) (UG/GM)	
LINE 53												
OCT 16, 73	1045	2	.3	--	--	70	--	--	0	--	--	
			1.5	--	--	--	--	3600	--	--	4	
LINE 122												
OCT 16, 73	1230	2	.3	--	--	40	--	--	0	--	--	
OCT 16, 73	1330	12	.3	--	--	30	--	--	0	--	--	
LINE 147												
OCT 16, 73	1240	5	.3	--	--	30	--	--	0	--	--	
LINE 910												
OCT 16, 73	0925	70	.3	--	--	30	--	--	1	--	--	

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	BOTTOM DEPOSIT MANGANESE (MN) (UG/GM)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY (HG) (UG/L)	BOTTOM DEPOSIT MERCURY (HG) (UG/GM)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)
LINE 53												
OCT 16, 73	1045	2	.3	0	38	--	--	.0	--	--	5	230
			1.5	--	--	--	85	--	--	.0	--	--
LINE 122												
OCT 16, 73	1230	2	.3	110	60	--	--	.0	--	--	0	4400
OCT 16, 73	1330	12	.3	50	38	--	--	.1	--	--	1	2200
LINE 147												
OCT 16, 73	1240	5	.3	70	60	--	--	.1	--	--	0	3000
LINE 910												
OCT 16, 73	0925	70	.3	120	50	--	--	.1	--	--	0	6000

TABLE 8D--QUALITY OF WATER IN THE NUECES ESTUARY,

1974 WATER YEAR--CONTINUED

SELECTED IONS ANALYSES

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

LINE 53

OCT 16, 73 1045 2 .3 40 -- --  
1.5 -- --

LINE 122

OCT 16, 73 1230 2 .3 80 -- --  
OCT 16, 73 1330 12 .3 90 -- --

LINE 147

OCT 16, 73 1240 5 .3 60 -- --

LINE 910

OCT 16, 73 0925 70 .3 70 -- --



TABLE 8E--QUALITY OF WATER IN THE NUECES ESTUARY,

1974 WATER YEAR

INSECTICIDE AND HERBICIDE ANALYSES

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

LINE 53

OCT 16, 73	1045	2	.3	.00	--	.0	--	.00	--	.00	--
			1.5	--	.0	--	.0	--	.0	--	.0

LINE 122

OCT 16, 73	1230	2	.3	.00	--	.0	--	.00	--	.00	--
------------	------	---	----	-----	----	----	----	-----	----	-----	----

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

LINE 53

OCT 16, 73	1045	2	.3	.00	--	.00	--	.00	--	.00	--
			1.5	--	.0	--	.0	--	.0	--	.0

LINE 122

OCT 16, 73	1230	2	.3	.00	--	.00	--	.00	--	.00	--
------------	------	---	----	-----	----	-----	----	-----	----	-----	----

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL	BOTTOM	TOTAL	BOTTOM	TOTAL	TOTAL	TOTAL	TOTAL
				HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE (UG/KG)	LINDANE (UG/L)	LINDANE (UG/KG)	THION PARATHION (UG/L)	METHYL PARATHION (UG/L)	MALATHION (UG/L)	DIAZINON (UG/L)

LINE 53

OCT 16, 73	1045	2	.3	.00	--	.00	--	.00	.00	.00	.00
			1.5	--	.0	--	.0	--	--	--	--

LINE 122

OCT 16, 73	1230	2	.3	.00	--	.00	--	.00	.00	.00	.00
------------	------	---	----	-----	----	-----	----	-----	-----	-----	-----

TABLE 8E--QUALITY OF WATER IN THE NUECES ESTUARY,

1974 WATER YEAR--CONTINUED

INSECTICIDE AND HERBICIDE ANALYSES

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

LINE 53

OCT 16, 73	1045	2	.3	.0	--	.09	--	.01	--	.00	--
			1.5	--	.0	--	--	--	--	--	--

LINE 122

OCT 16, 73	1230	2	.3	.0	--	.00	--	.01	--	.00	--
------------	------	---	----	----	----	-----	----	-----	----	-----	----

TABLE 8F--QUALITY OF WATER IN THE NUECES ESTUARY,

1974 WATER YEAR

## BACTERIOLOGICAL AND CHLOROPHYLL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCII (COL- ONIES PER 100 ML)	CHLORO- PHYLL A (UG/L)	
LINE 22 -----								
OCT 16, 73	0955	2	.3	200	66	640	--	
LINE 53 -----								
MAY 30, 74	1055	1	.3	1	1	21	--	
OCT 16, 73	1045	2	.3	70	48	100	--	
APR 25, 74	0955	2	.3	21	1	60	2.10	
JUN 11, 74	1505	2	.3	14	8	6	--	
APR 25, 74	0935	4	.3	--	--	--	.70	
JUN 11, 74	1525	4	.3	8	2	9	--	
LINE 108 -----								
OCT 16, 73	1510	2	.3	*	*	*	--	
APR 25, 74	1330	2	.3	--	--	--	.20	
MAY 30, 74	1235	2	.3	25	11	42	--	
JUN 11, 74	1825	2	.3	*	*	13	--	
LINE 122 -----								
OCT 16, 73	1230	2	.3	27	7	8	--	
APR 25, 74	1010	2	.6	40	1	48	.00	
JUN 11, 74	1355	2	.3	6	1	1	--	
OCT 16, 73	1330	12	.3	220	26	13	--	
JUN 11, 74	1230	12	.3	22	6	4	--	
LINE 147 -----								
APR 25, 74	1415	2	.6	--	--	--	1.10	
JUN 11, 74	1830	2	.3	1	1	3	--	
OCT 16, 73	1240	5	.3	360	40	6	--	
APR 25, 74	1330	5	.6	--	--	--	3.20	
LINE 183 -----								
MAY 30, 74	0940	3	.3	14	12	71	--	
LINE 910 -----								
OCT 16, 73	0925	70	.3	5	1	8	--	
APR 18, 74	1420	70	.6	--	--	--	.00	

\* - TOO NUMEROUS TO COUNT



## Laguna Madre Estuary

The Laguna Madre estuary covers an area of about 640 square miles (1,660 km<sup>2</sup>) 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 m) deep, but in a few areas are as much as 10 feet (3.0 m) deep. The Intracoastal Waterway, Port Mansfield Channel, and Arroyo Colorado are about 15 feet (4.6 m) deep; the Brownsville Ship Channel is about 40 feet (12.2 m) deep.

Water-quality data (Table 9) were collected in October 1973 and April 1974.

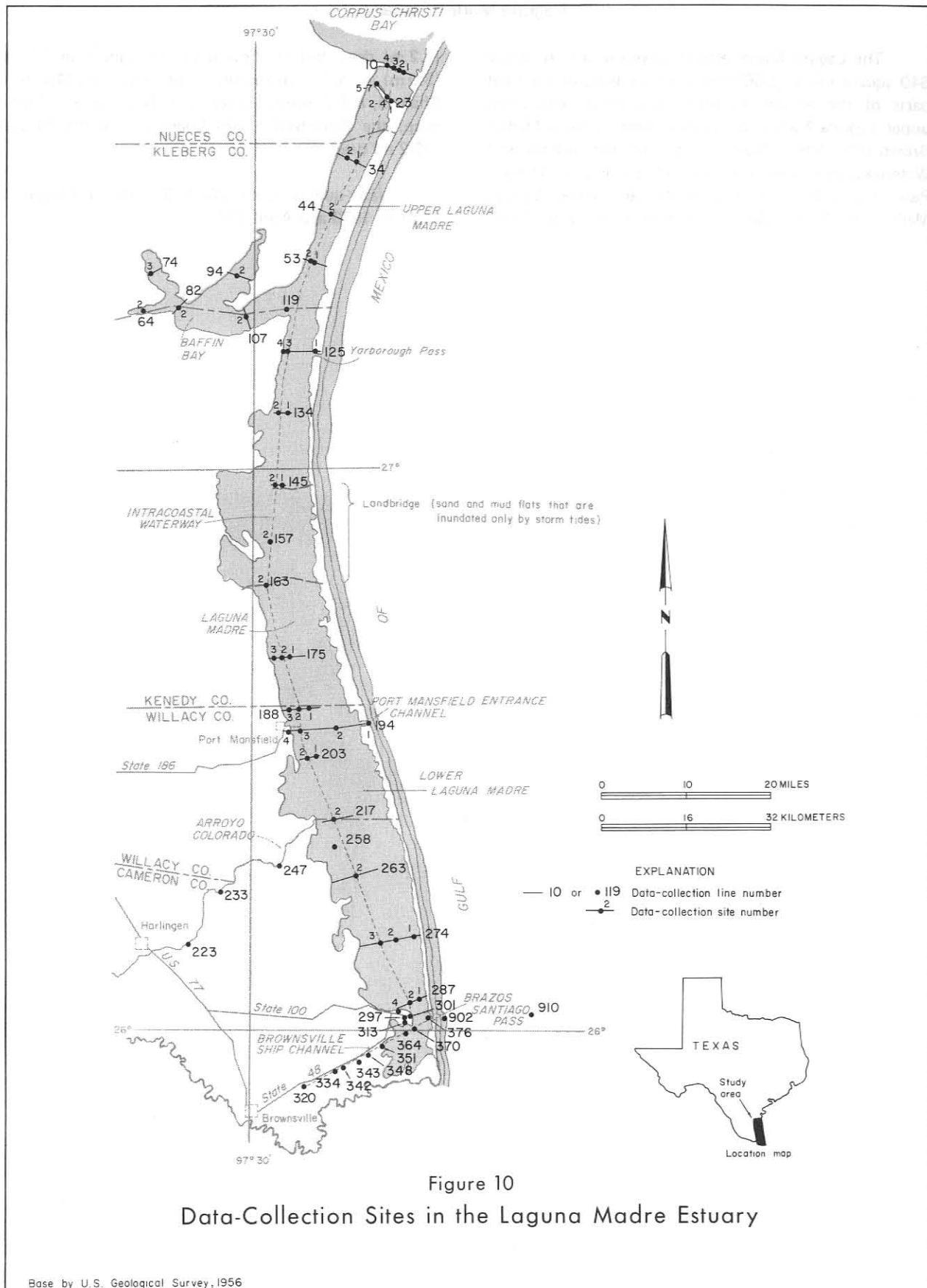


Figure 10

Data-Collection Sites in the Laguna Madre Estuary

Base by U.S. Geological Survey, 1956

TABLE 9A--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1974 WATER YEAR

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
LINE 10										
OCT 17, 73	0930	3	.3	20000	22.2	8.3	10.0	122	--	64
			1.5	21000	22.2	8.4	9.5	116	--	--
			3.0	33000	22.4	8.1	8.3	106	--	--
			4.9	35000	22.2	8.1	8.1	104	--	--
LINE 23										
OCT 17, 73	0945	3	.3	35000	21.6	8.0	8.5	109	--	--
			1.5	35000	21.6	8.0	8.4	108	--	--
			3.0	35000	21.6	8.0	9.1	117	--	--
			7.0	35000	21.6	8.0	8.4	108	--	--
APR 24, 74	1810	3	.5	41000	24.8	8.2	8.9	124	40.	--
			1.5	41000	24.8	8.2	8.9	124	40.	--
			3.0	41000	24.9	8.2	8.9	124	40.	--
			6.1	41000	25.0	8.3	9.8	136	50.	--
LINE 34										
OCT 17, 73	1045	1	.3	34000	22.1	8.1	8.9	114	--	132
			1.5	34000	22.1	8.1	8.9	114	--	--
			3.0	35000	22.0	8.1	9.0	115	--	--
			4.9	35000	21.7	8.1	8.7	112	--	--
APR 24, 74	1730	1	.5	41000	24.8	8.2	7.6	106	20.	130
			1.5	41000	24.8	8.2	7.4	103	20.	--
			4.3	41000	24.8	8.2	7.2	100	20.	--
OCT 17, 73	1035	2	.3	33000	22.2	8.2	8.7	112	--	102
			1.8	33000	22.1	8.2	8.9	114	--	--
LINE 44										
OCT 17, 73	1115	2	.3	23000	22.6	8.3	9.4	116	--	102
			1.5	23000	22.6	8.3	9.6	119	--	--
			3.0	23000	22.6	8.3	9.3	115	--	--
			4.9	24000	22.5	8.3	9.2	112	--	--
APR 24, 74	1655	2	.5	37000	24.9	8.1	8.2	111	20.	99
			1.5	37000	24.9	8.1	8.0	108	20.	--
			3.0	37000	24.9	8.1	7.9	107	25.	--
			4.3	37000	24.8	8.1	7.5	101	15.	--
LINE 53										
OCT 17, 73	1215	1	.3	18000	22.6	8.4	10.3	126	--	61
			1.8	18000	22.2	8.4	9.8	118	--	--
OCT 17, 73	1145	2	.3	18000	22.9	8.2	9.1	111	--	74
			1.5	18000	23.0	8.2	8.8	107	--	--
			3.0	21000	23.3	8.2	7.4	92	--	--
			4.9	26000	23.6	8.1	5.6	71	--	--
APR 24, 74	1615	2	.5	37000	25.1	8.0	7.6	103	20.	71
			1.5	37000	25.0	8.0	7.4	100	25.	--
			3.5	37000	25.0	8.0	7.0	95	30.	--
LINE 64										
OCT 17, 73	1815	2	.3	1900	22.5	8.1	8.6	100	--	33
			2.1	2400	22.3	8.1	9.1	105	--	--

TABLE 9A--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
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LINE 64 CONTINUED

OCT 31, 73	1155	2	.3	2600	22.9	--	9.4	109	--	39
			1.5	2600	22.7	--	9.9	115	--	--
APR 24, 74	1335	2	.5	14000	26.0	8.4	7.7	97	60.	33
			1.8	14000	26.4	8.4	7.8	99	60.	--

LINE 74

OCT 17, 73	1740	3	.3	920	22.5	7.9	9.4	107	--	17
			1.8	1100	22.5	7.9	9.4	107	--	--
OCT 31, 73	1130	3	.3	2100	21.9	8.6	8.3	95	--	9
			1.2	2200	22.0	8.7	8.5	98	--	--
APR 24, 74	1630	3	.5	16000	25.6	8.5	8.4	106	70.	24
			1.5	16000	25.6	8.5	8.4	106	70.	--

LINE 82

OCT 17, 73	1720	2	.3	3200	22.7	7.9	9.4	109	--	25
			2.1	3700	22.7	7.9	9.7	113	--	--
APR 24, 74	1250	2	.5	18000	25.5	8.5	9.1	117	35.	64
			1.5	18000	25.5	8.5	9.2	118	35.	--
			2.3	20000	25.5	8.5	8.9	116	45.	--

LINE 94

OCT 17, 73	1640	2	.3	2600	22.4	7.9	9.7	111	--	28
			1.8	2900	22.5	7.9	9.1	106	--	--
APR 24, 74	1520	2	.5	20000	25.4	8.4	8.0	104	140.	14
			1.5	20000	25.4	8.4	8.0	104	225.	--

LINE 107

OCT 17, 73	1550	2	.3	4800	22.6	8.0	9.2	107	--	29
			1.5	5000	22.6	8.0	9.2	107	--	--
			2.7	5600	22.5	8.0	9.0	105	--	--
APR 24, 74	1215	2	.5	27000	24.9	8.3	7.6	100	40.	50
			1.5	28000	24.9	8.3	7.7	101	80.	--
			2.3	31000	24.5	8.1	4.4	58	100.	--

LINE 119

OCT 17, 73	1525	3	.3	9000	22.6	8.1	10.0	118	--	61
			1.5	9000	22.6	8.1	9.3	109	--	--
			3.0	14000	22.4	8.1	8.4	99	--	--
APR 24, 74	1155	3	.5	35000	24.8	8.1	7.1	96	40.	50
			1.5	35000	24.8	8.1	7.1	96	40.	--
			2.6	35000	24.8	8.1	6.5	88	70.	--

LINE 125

OCT 17, 73	1420	1	.3	22000	21.0	8.5	10.9	131	--	147
			2.1	22000	21.0	8.4	9.5	114	--	--
APR 24, 74	1305	1	.3	48000	25.3	8.4	7.3	106	20.	83
			.9	48000	24.8	8.4	6.8	99	25.	--
OCT 17, 73	1440	3	.3	20000	22.8	8.5	11.2	138	--	99



TABLE 9A--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
LINE 125 CONTINUED										
OCT 17, 73	1440	3	1.5	21000	22.8	8.5	11.0	136	--	--
			3.0	--	23.0	8.5	--	--	--	--
			4.9	26000	22.9	8.4	8.6	109	--	--
APR 24, 74	1320	3	.3	41000	24.9	8.1	6.6	92	5.	102
			1.5	41000	24.8	8.1	6.6	92	5.	--
			3.0	44000	24.6	8.1	5.7	81	40.	--
			4.0	49000	24.6	8.1	5.7	81	70.	--
OCT 17, 73	1450	4	.3	21000	22.9	8.5	11.3	140	--	127
			1.5	21000	22.9	8.5	11.6	143	--	--
			2.7	24000	22.7	8.5	10.4	128	--	--
APR 24, 74	1345	4	.3	36000	24.9	8.1	6.5	89	5.	112
			2.1	38000	24.9	8.1	6.5	89	10.	--
LINE 134										
OCT 17, 73	1340	2	.3	26000	22.4	8.3	10.1	125	--	124
			1.5	26000	22.2	8.3	10.3	127	--	--
			3.0	26000	21.9	8.4	10.5	130	--	--
			4.3	29000	22.1	8.4	9.3	116	--	--
APR 24, 74	1100	2	.3	47000	25.1	8.2	5.9	86	15.	145
			1.5	47000	25.0	8.2	5.8	84	10.	--
			3.0	47000	24.9	8.2	5.7	83	20.	--
			4.7	48000	25.0	8.2	5.3	77	20.	--
LINE 145										
APR 24, 74	1025	2	.3	50000	25.3	8.2	6.1	90	15.	108
			1.5	50000	25.3	8.2	6.1	90	20.	--
			3.0	51000	25.2	8.2	5.9	87	20.	--
			5.2	50000	24.9	8.2	5.6	82	50.	--
LINE 157										
APR 24, 74	0950	2	.3	50000	25.2	8.2	5.5	81	20.	140
			1.5	50000	25.1	8.2	5.4	79	15.	--
			3.0	50000	25.1	8.2	5.5	81	20.	--
			4.9	50000	25.1	8.3	5.6	82	10.	--
LINE 163										
APR 24, 74	0920	2	.3	50000	25.3	8.3	5.4	79	20.	147
			1.5	50000	25.3	8.3	5.3	78	15.	--
			3.0	51000	25.2	8.4	5.9	87	20.	--
			4.3	51000	25.2	8.4	6.0	88	25.	--
LINE 175										
APR 24, 74	1110	2	.3	48000	24.8	8.0	5.9	86	15.	91
			1.2	48000	24.8	8.0	6.0	87	20.	--
APR 24, 74	1105	3	.3	46000	24.8	8.1	6.3	90	15.	109
			1.5	46000	24.8	8.1	6.3	90	20.	--
			3.0	46000	24.7	8.1	6.0	86	30.	--
			4.3	46000	24.7	8.1	5.7	81	30.	--
APR 24, 74	1100	4	.3	46000	25.1	8.0	6.0	86	15.	165
			1.8	46000	25.0	8.0	6.2	89	20.	--
LINE 188										
APR 23, 74	1700	2	.3	48000	25.4	8.1	7.7	112	--	91

TABLE 9A--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1974 WATER YEAR--CONTINUED

## FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
LINE 188 CONTINUED										
APR 23, 74	1700	2	.9	50000	25.4	8.1	8.1	119	20.	--
APR 23, 74	1720	3	.5	47000	25.3	8.0	6.9	100	20.	96
			1.5	47000	25.3	8.0	6.9	100	25.	--
			3.0	47000	25.3	8.0	6.8	99	25.	--
			4.3	48000	25.2	8.0	5.1	74	40.	--
APR 24, 74	1030	3	.3	48000	25.1	8.1	6.2	90	15.	114
			1.5	48000	25.1	8.1	6.2	90	5.	--
			3.0	48000	24.9	8.1	6.0	87	30.	--
			4.3	48000	25.1	8.1	5.3	77	60.	--
APR 23, 74	1730	4	.5	47000	25.4	8.0	7.4	107	30.	61
			1.7	47000	25.3	8.0	7.1	103	40.	--
APR 24, 74	0820	4	.3	45000	24.8	8.2	5.8	83	15.	86
			1.7	45000	24.8	8.2	6.0	86	20.	--
LINE 194										
OCT 30, 73	1420	1	.6	38000	25.5	8.4	9.3	129	--	--
			1.5	38000	25.5	8.4	8.9	124	--	--
			3.0	38000	25.6	8.3	8.7	121	--	--
			4.6	38000	25.6	8.3	9.3	129	--	--
			7.3	39000	25.7	8.2	9.1	126	--	--
APR 23, 74	1635	1	.6	46000	--	8.1	--	--	20.	102
			3.0	49000	25.1	8.1	--	--	20.	--
			6.7	49000	25.0	8.1	--	--	30.	--
OCT 30, 73	1400	2	.3	34000	25.9	8.5	10.0	139	--	--
			1.5	34000	25.9	8.5	9.8	136	--	--
			3.4	34000	26.0	8.5	9.6	133	--	--
APR 23, 74	1650	2	.3	48000	25.1	8.1	--	--	20.	--
			3.0	48000	25.1	8.1	--	--	25.	--
			4.9	48000	25.2	8.1	--	--	30.	--
OCT 30, 73	1330	3	.6	29000	25.2	8.3	9.6	126	--	66
			1.5	29000	25.2	8.2	9.0	118	--	--
			3.0	32000	25.2	8.2	8.3	111	--	--
			5.2	38000	25.7	8.1	6.7	93	--	--
APR 23, 74	1710	3	.6	48000	25.4	8.1	--	--	25.	--
			3.0	48000	25.3	8.1	--	--	30.	--
			4.6	48000	25.4	8.1	--	--	35.	--
OCT 30, 73	1455	4	.3	27000	25.9	8.4	9.8	132	--	44
			1.5	29000	25.8	8.3	8.8	119	--	--
			3.0	32000	25.9	8.0	7.1	97	--	--
			4.3	38000	25.8	7.9	2.9	41	--	--
APR 23, 74	1745	4	.3	46000	25.4	8.0	6.0	87	30.	47
			1.5	46000	25.3	8.0	5.8	84	20.	--
			3.0	47000	25.2	7.9	4.3	62	35.	--
			6.1	50000	24.7	7.8	.1	1	30.	--
LINE 203										
OCT 30, 73	1310	2	.3	34000	25.4	8.3	9.0	123	--	71
			1.5	34000	25.4	8.2	8.6	118	--	--
			3.0	34000	25.4	8.2	9.2	126	--	--
			4.3	38000	25.9	8.1	6.9	97	--	--
APR 23, 74	1620	2	.5	47000	25.5	8.0	6.9	101	30.	67
			1.5	48000	25.5	8.0	6.8	100	35.	--
			3.0	48000	25.4	8.0	6.8	99	35.	--

TABLE 9A--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
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LINE 203 CONTINUED

APR 23, 74	1620	2	4.3	48000	25.4	8.0	6.2	90	40.	--
LINE 217										
OCT 30, 73	1230	2	.3	29000	25.4	8.4	9.6	128	--	41
			1.5	29000	24.9	8.4	8.8	116	--	--
			3.0	29000	24.9	8.4	8.6	113	--	--
			4.6	26000	25.1	8.4	9.1	118	--	--
APR 23, 74	1550	2	.3	44000	26.1	8.1	8.4	124	40.	70
			1.5	46000	25.9	8.1	7.2	106	50.	--
			3.0	46000	25.9	8.1	6.7	99	45.	--
			4.4	46000	26.0	8.1	6.6	97	60.	--
LINE 223										
OCT 30, 73	0905	2	.3	6500	24.4	7.7	7.2	87	--	25
			1.2	6700	24.4	7.7	7.4	89	--	--
APR 23, 74	1350	2	.3	2800	26.7	7.5	7.1	89	100.	20
			1.2	3300	26.6	7.6	7.5	94	140.	--
LINE 233										
OCT 30, 73	0950	2	.3	9000	26.6	8.1	16.0	203	--	53
			1.5	9600	26.6	8.2	13.8	175	--	--
			2.4	12000	26.9	8.0	11.1	142	--	--
			3.0	24000	26.4	7.6	.0	0	--	--
			4.6	35000	26.7	7.5	.0	0	--	--
APR 23, 74	1415	2	.3	3400	25.7	7.6	6.7	82	50.	56
			1.5	3400	25.6	7.6	6.7	82	45.	--
			2.4	7500	25.2	7.4	4.7	57	40.	--
			3.0	19000	24.2	7.5	.9	11	35.	--
			4.3	42000	23.3	7.5	.0	0	50.	--
LINE 247										
OCT 30, 73	1025	2	.3	13000	25.7	8.3	12.3	154	--	--
			1.5	13000	25.7	8.3	11.9	149	--	--
			2.4	20000	25.9	7.8	4.4	58	--	--
			3.0	30000	26.1	7.9	1.5	21	--	--
APR 23, 74	1450	2	.3	5200	25.3	8.0	9.4	115	30.	69
			1.5	5200	25.2	8.0	10.1	123	30.	--
			2.4	38000	25.0	7.9	4.2	58	25.	--
			3.0	46000	25.5	8.0	6.6	96	25.	--
			4.6	49000	26.3	7.9	3.4	51	50.	--
LINE 258										
OCT 30, 73	1050	2	.3	17000	24.5	8.3	10.0	125	--	64
			1.5	22000	24.8	8.2	8.8	113	--	--
			3.0	29000	24.8	8.2	9.2	121	--	--
			4.3	32000	25.3	8.0	4.1	55	--	--
APR 23, 74	1340	2	.3	9500	25.0	8.1	7.9	96	10.	81
			.9	11000	24.9	8.0	7.9	96	10.	--
			1.5	32000	25.2	8.0	5.4	72	10.	--
			3.0	45000	25.2	8.0	5.1	73	25.	--
			4.9	50000	25.5	8.0	2.7	40	45.	--
LINE 263										
OCT 30, 73	1105	2	.3	30000	24.7	8.3	10.5	140	--	43

TABLE 9A--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
LINE 263 CONTINUED										
OCT 30, 73	1105	2	1.5	30000	24.7	8.3	10.9	145	--	--
			3.7	30000	24.6	8.2	10.7	143	--	--
APR 23, 74	1320	2	.3	44000	25.2	8.0	5.7	81	155.	25
			1.5	44000	25.2	8.0	5.5	79	240.	--
			3.0	44000	25.2	8.0	5.5	79	160.	--
			4.3	44000	25.1	8.0	5.6	80	350.	--
LINE 274										
APR 23, 74	1225	1	.3	52000	25.8	8.2	5.7	86	5.	104
			1.1	51000	25.7	8.2	5.9	88	15.	--
APR 23, 74	1215	2	.3	51000	25.8	8.2	6.0	90	25.	84
			1.4	50000	25.6	8.2	6.0	90	25.	--
OCT 30, 73	1135	3	.6	34000	24.5	8.1	9.6	130	--	38
			1.5	34000	24.4	8.1	9.2	123	--	--
			2.7	34000	24.5	8.1	10.2	138	--	--
APR 23, 74	1155	3	.5	50000	25.7	8.0	5.5	82	40.	46
			1.5	51000	25.6	8.0	5.5	82	35.	--
			3.0	51000	25.6	8.0	5.5	82	55.	--
			4.0	51000	25.5	8.0	5.7	84	60.	--
LINE 287										
OCT 29, 73	1210	1	.6	43000	25.2	8.6	9.7	137	--	89
APR 23, 74	1120	1	.3	48000	25.5	8.2	5.7	84	5.	91
			.9	45000	25.4	8.1	6.1	88	10.	--
OCT 29, 73	1200	3	.3	43000	24.8	8.5	7.6	107	--	103
			1.5	44000	24.8	8.4	7.2	103	--	--
			3.0	44000	24.8	8.4	7.2	103	--	--
			4.6	44000	25.1	8.4	7.5	107	--	--
APR 23, 74	1105	3	.5	45000	23.3	8.1	6.6	92	15.	94
			1.5	45000	23.3	8.1	6.6	92	15.	--
			3.0	45000	23.3	8.1	6.6	92	15.	--
			4.6	44000	23.4	8.1	6.4	89	20.	--
APR 23, 74	1055	4	.3	45000	26.3	8.0	5.4	79	40.	64
			1.5	46000	25.3	8.1	5.8	84	35.	--
			3.4	46000	25.3	8.1	5.9	86	55.	--
LINE 297										
OCT 29, 73	1305	2	.3	42000	24.9	8.2	8.3	117	--	51
			1.5	43000	24.9	8.2	7.6	107	--	--
			4.0	44000	25.0	8.2	7.2	103	--	--
APR 23, 74	0910	2	.3	48000	25.1	8.1	6.0	87	25.	74
			1.5	48000	25.1	8.1	5.7	83	25.	--
			4.0	48000	25.2	8.0	6.1	88	30.	--
LINE 301										
OCT 29, 73	1255	2	.3	42000	25.0	8.3	8.5	120	--	56
			1.5	40000	25.0	8.3	8.4	117	--	--
			3.0	42000	24.9	8.3	8.1	114	--	--
			5.5	42000	25.1	8.3	8.3	117	--	--
APR 23, 74	0900	2	.3	46000	24.9	8.1	6.3	90	20.	86
			1.5	46000	24.9	8.1	6.5	93	20.	--

TABLE 9A--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
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LINE 301 CONTINUED

APR 23, 74	0900	2	3.0	46000	24.9	8.1	6.0	86	25.	--
			5.2	46000	24.8	8.1	6.2	89	110.	--

LINE 313

OCT 29, 73	1245	2	.3	43000	25.1	8.3	7.8	110	--	53
			1.5	43000	25.1	8.3	7.5	106	--	--
			3.0	43000	25.1	8.3	7.5	106	--	--
			4.6	43000	25.1	8.3	7.5	106	--	--
			7.9	45000	25.5	8.3	7.1	103	--	--

APR 23, 74	0925	2	.3	46000	25.2	8.1	6.4	91	20.	104
			1.5	46000	25.1	8.1	6.3	90	20.	--
			3.0	46000	25.1	8.1	6.3	90	20.	--
			6.1	46000	25.1	8.1	6.2	89	30.	--
			8.8	46000	24.8	8.1	6.0	86	--	--

LINE 320

OCT 29, 73	1445	2	.3	39000	26.9	8.3	4.1	59	--	109
			1.5	39000	26.9	8.3	3.9	56	--	--
			3.0	39000	26.8	8.3	3.7	53	--	--
			6.1	44000	27.2	7.8	1.6	24	--	--
			10.7	47000	26.8	8.0	1.8	27	--	--

APR 23, 74	1105	2	.3	46000	24.5	8.1	8.0	113	10.	188
			3.0	46000	24.3	8.1	7.8	110	10.	--
			4.6	46000	24.1	8.0	6.6	93	--	--
			6.1	48000	23.4	7.9	4.8	67	10.	--
			7.6	48000	22.9	7.8	2.8	39	--	--
			9.1	48000	22.8	7.8	1.7	24	15.	--
			10.7	48000	22.7	7.7	.3	4	20.	--

LINE 334

OCT 29, 73	1415	2	.3	39000	26.4	8.1	9.7	137	--	64
			1.5	39000	26.4	8.1	8.9	125	--	--
			3.0	40000	26.4	8.0	7.4	106	--	--
			4.6	42000	26.6	7.9	3.3	49	--	--
			6.1	44000	26.6	7.9	2.4	36	--	--
			7.6	47000	26.7	8.1	3.6	54	--	--
			8.8	46000	26.7	8.1	4.1	61	--	--
			11.0	47000	26.7	8.1	4.3	64	--	--

APR 23, 74	1045	2	.3	46000	24.9	8.1	8.1	116	10.	117
			3.0	46000	24.8	8.0	8.1	116	15.	--
			6.1	48000	24.4	8.0	7.1	101	15.	--
			9.1	48000	23.7	7.9	5.4	76	25.	--
			10.7	48000	23.4	7.9	4.4	61	55.	--

LINE 343

OCT 29, 73	1400	2	.3	38000	25.8	7.9	6.9	97	--	52
			1.5	39000	26.0	8.0	6.3	89	--	--
			3.0	42000	26.2	8.0	4.8	70	--	--
			6.1	45000	26.6	8.1	3.8	57	--	--
			11.0	46000	26.7	8.1	4.7	70	--	--

APR 23, 74	1015	2	.3	48000	25.2	8.1	8.1	117	20.	117
			3.0	48000	24.9	8.1	7.8	113	10.	--
			6.1	48000	24.7	8.1	8.4	120	15.	--
			9.1	48000	24.4	8.0	6.7	96	--	--
			10.7	48000	24.2	8.0	5.8	82	50.	--

LINE 351

OCT 29, 73	1330	2	.3	40000	25.9	8.1	9.4	134	--	58
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TABLE 9A--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICRO-MHOS) (FIELD)	TEMPERATURE (DEG. C)	PH	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	TURBIDITY (JTU)	TRANSPARENCY SECCHI DISK (CM)
LINE 351 CONTINUED										
OCT 29, 73	1330	2	1.5	40000	26.0	8.2	9.6	137	--	--
			3.0	42000	26.1	8.2	9.1	132	--	--
			4.6	42000	26.0	8.1	7.3	106	--	--
			6.1	47000	26.4	8.2	6.4	94	--	--
			11.6	47000	26.7	8.2	6.0	90	--	--
APR 23, 74	1050	2	.3	46000	25.0	8.1	5.9	84	20.	124
			1.5	46000	25.0	8.1	5.9	84	40.	--
			3.0	46000	25.0	8.1	5.9	84	40.	--
			6.1	46000	25.0	8.1	5.9	84	40.	--
			9.1	46000	24.5	8.0	5.0	70	55.	--
			11.0	46000	24.1	8.0	3.3	46	--	--
LINE 364										
OCT 29, 73	1315	2	.3	42000	25.7	8.2	9.1	130	--	64
			1.5	42000	25.7	8.2	8.4	120	--	--
			3.0	43000	25.6	8.2	7.9	113	--	--
			6.1	44000	25.6	8.2	7.6	110	--	--
			11.0	46000	25.9	8.2	8.2	121	--	--
APR 23, 74	0935	2	.3	46000	24.9	8.1	6.1	87	20.	107
			1.5	46000	24.9	8.1	5.9	84	15.	--
			3.0	46000	24.9	8.1	5.9	84	30.	--
			6.1	46000	24.9	8.1	5.9	84	20.	--
			9.1	48000	24.3	8.0	4.8	68	20.	--
			11.0	48000	24.2	8.0	4.0	56	40.	--
LINE 370										
OCT 29, 73	1235	2	.3	43000	25.6	8.2	7.5	107	--	74
			1.5	44000	25.4	8.2	7.0	101	--	--
			3.0	45000	25.3	8.2	6.6	96	--	--
			6.1	45000	25.3	8.2	6.2	90	--	--
			9.1	45000	25.4	8.2	6.2	90	--	--
			12.5	46000	25.7	8.2	6.2	90	--	--
APR 23, 74	0845	2	.3	46000	22.9	8.1	6.8	93	15.	84
			1.5	46000	22.9	8.1	6.8	93	15.	--
			3.0	44000	22.9	8.1	6.8	93	20.	--
			6.1	44000	23.0	8.1	6.7	92	20.	--
			9.1	46000	23.8	8.1	6.5	92	25.	--
			11.3	46000	24.5	8.1	5.1	72	40.	--
LINE 376										
OCT 29, 73	1225	2	.3	42000	24.8	8.3	7.2	101	--	53
			1.5	42000	24.8	8.3	7.1	100	--	--
			3.0	43000	24.9	8.3	7.2	101	--	--
			6.1	44000	25.1	8.3	7.0	100	--	--
			9.1	45000	25.3	8.3	6.8	99	--	--
			13.7	45000	25.4	8.3	6.7	97	--	--
APR 23, 74	1010	2	.3	44000	23.1	8.1	6.8	93	10.	226
			1.5	44000	23.0	8.1	6.7	92	10.	--
			3.0	44000	22.8	8.1	6.7	92	10.	--
			6.1	44000	22.8	8.1	6.8	93	10.	--
			9.1	44000	22.8	8.1	6.8	93	10.	--
			12.8	44000	22.9	8.1	6.8	93	10.	--
LINE 902										
APR 24, 74	0955	90	1.5	41000	22.2	8.2	7.3	96	8.	745
			9.1	41000	22.1	8.2	7.3	96	8.	--
			16.5	43000	22.4	8.1	6.9	93	25.	--

TABLE 9A--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1974 WATER YEAR--CONTINUED

FIELD DETERMINATIONS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS) (FIELD)	TEMPER- ATURE (DEG. C)	PH	DIS- SOLVED OXYGEN (MG/L)	PERCENT SATUR- ATION	TUR- BIDITY (JTU)	TRANS- PARENCY SECCHI DISK (CM)
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LINE 902 CONTINUED

APR 23, 74	0935	95	0.6	44000	23.1	8.1	6.8	93	10.	323
			1.5	44000	23.1	8.0	6.8	93	5.	--
			3.0	44000	23.0	8.1	6.7	92	10.	--
			6.1	44000	22.8	8.1	6.8	93	5.	--
			9.1	44000	22.5	8.1	6.8	92	5.	--
			12.2	44000	22.3	8.1	6.6	89	10.	--
			17.1	44000	22.2	8.2	6.6	89	25.	--

LINE 910

APR 24, 74	0910	90	1.5	41000	22.2	8.2	7.3	96	8.	836
			9.1	41000	21.9	8.1	7.0	92	8.	--
			15.2	43000	22.0	8.1	6.7	89	10.	--
			23.5	44000	22.3	8.1	6.6	89	15.	--

TABLE 9B--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1974 WATER YEAR

NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS ORTHO (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (MG/L)
LINE 23												
UCT 17, 73	0945	3	.3 7.0	6.3 6.6	.00 .00	.01 .00	.00 .00	.03 .03	.03 .03	1.3 1.8	0 0	-- --
APR 24, 74	1810	3	.5 6.1	.0 .3	.00 .00	.03 .01	.01 .01	-- --	.24 .24	1.1 1.6	-- --	-- --
LINE 53												
UCT 17, 73	1145	2	.3 4.9	8.5 7.7	.00 .00	.14 .20	.03 .02	.04 .04	.06 .05	1.3 1.7	-- --	-- --
APR 24, 74	1615	2	.5 3.5	4.0 4.0	.01 .01	.11 .14	.03 .04	-- --	.19 .22	2.4 3.6	-- --	-- --
LINE 64												
UCT 17, 73	1815	2	.3 2.1	5.3 6.1	.01 .00	.00 .00	.02 .02	.10 .12	.13 .50	2.1 2.2	0 --	-- --
UCT 31, 73	1155	2	.3 1.5	12.0 10.0	.00 .00	.01 .04	.01 .01	.12 .11	.12 .15	4.1 3.5	-- --	-- --
APR 24, 74	1335	2	.5 1.8	18.0 17.0	.00 .00	.17 .19	.01 .01	-- --	.30 .23	2.2 2.2	-- --	14.0 --
LINE 74												
UCT 17, 73	1740	3	.3 1.8	18.0 19.0	.05 .09	.00 .00	.04 .04	.32 .31	.42 .44	2.4 2.3	0 --	-- --
UCT 31, 73	1130	3	.3 1.2	18.0 17.0	.00 .00	.08 .07	.01 .01	.30 .28	.42 .43	3.5 1.7	-- --	-- --
APR 24, 74	1630	3	.5 1.5	12.0 12.0	.01 .01	.24 .19	.00 .00	-- --	.31 .38	3.7 5.1	-- --	22.0 14.0
LINE 94												
UCT 17, 73	1640	2	.3 1.8	10.0 10.0	.07 .02	.15 .20	.03 .03	.14 .14	.19 .20	1.3 1.0	0 --	-- --
APR 24, 74	1520	2	.5 1.5	8.8 8.7	.00 .00	.12 .11	.01 .03	-- --	.26 .26	2.8 4.8	-- --	14.0 10.0
LINE 107												
UCT 17, 73	1550	2	.3 2.7	9.4 9.2	.07 .05	.11 .15	.03 .03	.12 .12	.16 .22	.6 1.7	-- --	-- --
APR 24, 74	1215	2	.5 2.3	7.6 7.0	.00 .00	.11 .20	.01 .01	-- --	.21 .30	1.2 2.7	-- --	-- --
LINE 125												
UCT 17, 73	1440	3	.3 4.9	8.0 7.3	.00 .00	.06 .08	.02 .09	.05 .03	.07 .03	2.8 1.3	0 0	-- --
APR 24, 74	1320	3	.3 4.0	4.8 4.8	.02 .03	.10 .10	.02 .01	-- --	.23 .24	1.1 .8	-- --	8.5 9.0
LINE 163												
APR 24, 74	0920	2	.3	3.5	.01	.09	.01	--	.25	.6	--	12.0



TABLE 9B--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1974 WATER YEAR--CONTINUED

NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS-SOLVED SILICA (MG/L)	TOTAL NITRATE (MG/L)	AMMONIA NITROGEN (MG/L)	TOTAL NITRITE NITROGEN (MG/L)	DIS-SOLVED PHOSPHORUS ORTHO (MG/L)	TOTAL PHOSPHORUS (MG/L)	BIO-CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (MG/L)
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LINE 163 CONTINUED

APR 24, 74	0920	2	4.3	3.7	.02	.06	.01	--	.28	.9	--	8.0
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LINE 183

JUN 03, 74	1800	3	.3	--	--	--	--	--	--	2.6	--	--
JUN 03, 74	2400	3	.3	--	--	--	--	--	--	1.9	--	--
JUN 04, 74	0600	3	.3	--	--	--	--	--	--	1.9	--	--
JUN 04, 74	1200	3	.3	--	--	--	--	--	--	1.8	--	--
JUN 04, 74	1800	3	.3	--	--	--	--	--	--	1.6	--	--
JUN 04, 74	2400	3	.3	--	--	--	--	--	--	1.7	--	--
JUN 05, 74	0600	3	.3	--	--	--	--	--	--	1.3	--	--
JUN 05, 74	1200	3	.3	--	--	--	--	--	--	1.3	--	--
JUN 05, 74	1800	3	.3	--	--	--	--	--	--	2.0	--	--
JUN 05, 74	2400	3	.3	--	--	--	--	--	--	2.0	--	--
JUN 06, 74	0600	3	.3	--	--	--	--	--	--	1.5	--	--
JUN 06, 74	1200	3	.3	--	--	--	--	--	--	3.1	--	--

LINE 188

APR 23, 74	1730	4	.5 1.7	5.1 4.7	.02 .00	.03 .05	.01 .01	-- --	.28 .28	1.6 2.2	-- --	6.0 7.0
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LINE 194

OCT 30, 73	1400	2	.3 3.4	1.0 .7	.00 .00	.01 .03	.00 .00	.03 .02	.03 .04	1.2 1.4	-- --	-- --
APR 23, 74	1650	2	.3 4.9	3.7 2.8	.01 .00	.07 .01	.01 .00	-- --	.24 .25	1.6 1.3	-- --	-- --

LINE 203

OCT 30, 73	1310	2	.3 4.3	3.2 2.4	.00 .00	.02 .11	.01 .02	.02 .04	.02 .04	1.1 .9	-- --	-- --
APR 23, 74	1620	2	.5 4.3	4.2 4.2	.01 .00	.03 .03	.01 .01	-- --	.26 .26	2.1 2.0	-- --	-- --

LINE 223

OCT 30, 73	0905	2	.3 1.2	27.0 26.0	1.70 1.30	.44 .62	.15 .16	.42 .40	.45 .44	3.4 2.6	0 0	-- --
APR 23, 74	1350	2	.3 1.2	21.0 22.0	2.00 2.00	.35 .37	.16 .16	-- --	.42 .42	2.5 3.2	-- --	8.0 7.0

LINE 247

OCT 30, 73	1025	2	.3 3.0	18.0 7.3	.20 .00	.10 .74	.08 .03	.09 .11	.11 .11	4.0 .9	-- --	-- --
APR 23, 74	1450	2	.3	15.0	3.20	.34	.18	--	.24	1.6	--	--

TABLE 9B--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1974 WATER YEAR--CONTINUED

NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED SILICA (SiO <sub>2</sub> ) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DIS- SOLVED PHOS- PHORUS ORTHO (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	BIO- CHEMICAL OXYGEN DEMAND (BOD) (MG/L)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (MG/L)
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LINE 247 CONTINUED

APR 23, 74	1450	2	4.6	3.5	.08	.23	.01	--	.34	1.9	--	--
LINE 274												
OCT 30, 73	1135	3	.6 2.7	3.3 3.5	.00 .00	.01 .01	.00 .00	.02 .02	.05 .11	1.6 2.3	0 0	-- --
APR 23, 74	1155	3	.5 4.0	.7 .9	.00 .00	.05 .04	.01 .01	-- --	.28 .30	1.3 .8	-- --	5.0 6.0
LINE 320												
OCT 29, 73	1445	2	.3 10.7	1.7 1.3	.00 .07	.03 .34	.01 .12	.08 .06	.08 .06	3.5 1.0	0 0	-- --
APR 23, 74	1105	2	.3 10.7	.0 2.0	.01 .02	.02 .48	.00 .01	-- --	.24 .42	.9 1.1	-- --	4.0 4.0
LINE 351												
OCT 29, 73	1330	2	.3 11.6	1.6 1.0	.00 .00	.02 .04	.03 .08	.06 .04	.13 1.00	1.0 .9	-- --	-- --
APR 23, 74	1050	2	.3 11.0	.0 .0	.01 .00	.02 .09	.00 .01	-- --	.26 .17	.7 1.0	-- --	-- --
LINE 902												
APR 24, 74	0955	90	1.5 16.5	.0 .0	.01 .00	.03 .02	.00 .00	-- --	.19 .22	.8 .8	-- --	-- --
APR 23, 74	0935	95	.6 17.1	.0 .0	.00 .00	.00 .00	.01 .01	-- --	.21 .23	1.1 2.7	-- --	-- --
LINE 910												
APR 24, 74	0910	90	1.5 23.5	.0 .0	.00 .00	.01 .02	.01 .00	-- --	.19 .21	1.0 1.1	-- --	4.5 3.0

TABLE 9C--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1974 WATER YEAR

CHEMICAL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	SPECIFIC CONDUCTANCE (MICROMHOS) (LAB)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG)	DISSOLVED SODIUM + POTASSIUM (NA+K) (MG/L)	BICARBONATE (HCO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SOLIDS (SUM OF IONS) (MG/L)
LINE 23											
OCT 17, 73	0945	3	.3	34400	320.0	900.0	6900	132	1800	12000	22400
			7.0	34500	--	--	--	--	--	--	--
APR 24, 74	1810	3	.5	40760	320.0	1000.0	9000	164	3000	15000	28600
LINE 53											
OCT 17, 73	1145	2	.3	16600	170.0	380.0	3300	102	840	5800	10500
			4.9	22500	--	--	--	--	--	--	--
LINE 64											
OCT 17, 73	1815	2	.3	1980	--	--	--	--	--	--	--
			2.1	2480	--	--	--	--	--	--	--
OCT 31, 73	1155	2	.3	3130	--	--	--	--	--	--	--
			1.5	3150	--	--	--	--	--	--	--
LINE 74											
OCT 17, 73	1740	3	.3	958	41.0	26.0	130	120	55	240	564
			1.8	1230	--	--	--	--	--	--	--
OCT 31, 73	1130	3	.3	2470	--	--	--	--	--	--	--
			1.2	2510	--	--	--	--	--	--	--
APR 24, 74	1630	3	.5	16320	190.0	370.0	3100	247	850	5400	10100
LINE 94											
OCT 17, 73	1640	2	.3	2870	--	--	--	--	--	--	--
			1.8	3570	--	--	--	--	--	--	--
LINE 107											
OCT 17, 73	1550	2	.3	4220	56.0	86.0	760	81	190	1300	2500
			2.7	4730	--	--	--	--	--	--	--
LINE 125											
OCT 17, 73	1440	3	.3	17300	170.0	380.0	3600	99	900	6200	11300
			4.9	25000	--	--	--	--	--	--	--
APR 24, 74	1320	3	.3	42400	380.0	1100.0	9700	--	2500	16000	--
LINE 163											
APR 24, 74	0920	2	.3	49920	440.0	1300.0	11000	183	2800	19000	35100
LINE 194											
OCT 30, 73	1400	2	.3	35300	--	--	--	--	--	--	--
			3.4	35300	--	--	--	--	--	--	--
LINE 203											
OCT 30, 73	1310	2	.3	34500	320.0	850.0	6800	139	1800	12000	22000

TABLE 9C--QUALITY OF WATER IN THE LAGUNA MAURE ESTUARY,

1974 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)	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 IONS) (MG/L)
--------------------	------	------	----------------	---	--------------------------------	---------------------------	---	---------------------------	---------------------------------	---------------------------------	--

LINE 203 CONTINUED

OCT 30, 73	1310	2	4.3	38900	--	--	--	--	--	--	--
APR 23, 74	1620	2	.5	47840	410.0	1300.0	10000	190	2700	18000	33000

LINE 223

OCT 30, 73	0905	2	.3 1.2	5950 6020	300.0 --	140.0 --	890 --	314 --	940 --	1400 --	3870 --
APR 23, 74	1350	2	.3	2860	150.0	55.0	410	184	460	580	1760

LINE 247

OCT 30, 73	1025	2	.3 3.0	12600 28400	-- --	-- --	-- --	-- --	-- --	-- --	-- --
------------	------	---	-----------	----------------	----------	----------	----------	----------	----------	----------	----------

LINE 274

OCT 30, 73	1135	3	.6 2.7	34000 34000	330.0 --	840.0 --	6900 --	156 --	1800 --	12000 --	22200 --
APR 23, 74	1155	3	.5	49920	380.0	1300.0	11000	155	2600	19000	34800

LINE 320

OCT 29, 73	1445	2	.3 10.7	39900 46800	-- --	-- --	-- --	-- --	-- --	-- --	-- --
------------	------	---	------------	----------------	----------	----------	----------	----------	----------	----------	----------

LINE 351

OCT 29, 73	1330	2	.3 11.6	41200 48400	-- --	-- --	-- --	-- --	-- --	-- --	-- --
------------	------	---	------------	----------------	----------	----------	----------	----------	----------	----------	----------

LINE 902

APR 23, 74	0935	95	.6	45340	350.0	1200.0	9700	146	2400	17000	30900
------------	------	----	----	-------	-------	--------	------	-----	------	-------	-------

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

SELECTED IONS ANALYSES

1979 WATER YEAR

TABLE 9D--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

OCT 17, 73	0995	3	.3	--	--	--	--	--	--	--	--	--	--	--	--	.8
-----																
LINE 23																
OCT 17, 73	1145	2	.3	--	--	--	--	--	12	--	--	0	--	--	--	.6
-----																
LINE 53																
OCT 17, 73	1815	2	.3	--	--	--	--	--	1	--	--	1	--	--	--	--
-----																
LINE 74																
OCT 17, 73	1740	3	.3	--	--	--	--	--	13	--	--	0	--	--	--	.2
-----																
LINE 94																
OCT 17, 73	1640	2	.3	--	--	--	--	--	17	--	--	0	--	--	--	--
-----																
LINE 107																
OCT 17, 73	1550	2	.3	--	--	--	--	--	--	--	--	--	--	--	--	.3
-----																
LINE 125																
OCT 17, 73	1440	3	.3	--	--	--	--	--	--	--	--	--	--	--	--	.6
-----																
LINE 203																
OCT 30, 73	1310	2	.3	--	--	--	--	--	--	--	--	--	--	--	--	.8
-----																
LINE 223																
OCT 30, 73	0905	2	.3	--	--	--	--	--	8	--	--	2	--	--	--	.8
-----																
LINE 274																
OCT 30, 73	1135	3	.6	--	--	--	--	--	1	--	--	0	--	--	--	.8

TABLE 9D--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1974 WATER YEAR--CONTINUED

## SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	BOTTOM DEPOSIT COBALT (CO) (UG/GM)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	BOTTOM DEPOSIT COPPER (CU) (UG/GM)
LINE 53 -----											
OCT 17, 73	1145	2	.3	--	--	0	--	--	4	--	--
LINE 64 -----											
OCT 17, 73	1815	2	.3 2.1	-- --	-- --	0 --	-- --	-- 11	11 --	-- --	-- 12
LINE 74 -----											
OCT 17, 73	1740	3	.3 1.8	-- --	-- --	0 --	-- --	-- 4	5 --	-- --	-- 5
LINE 94 -----											
OCT 17, 73	1640	2	.3 1.8	-- --	-- --	0 --	-- --	-- 4	4 --	-- --	-- 4
LINE 223 -----											
OCT 30, 73	0905	2	.3 1.2	-- --	-- --	0 --	-- --	-- 7	11 --	-- --	-- 11
LINE 274 -----											
OCT 30, 73	1135	3	.6	--	--	0	--	--	5	--	--

TABLE 9D--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1974 WATER YEAR--CONTINUED

## SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED CYANIDE (CN) (MG/L)	BOTTOM DEPOSIT CYANIDE (CN) (UG/GM)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL IRON (FE) (UG/L)	BOTTOM DEPOSIT IRON (FE) (UG/GM)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	BOTTOM DEPOSIT LEAD (PB) (UG/GM)
LINE 53 -----											
OCT 17, 73	1145	2	.3	--	--	30	--	--	2	--	--
LINE 64 -----											
OCT 17, 73	1815	2	.3 2.1	-- --	-- --	70 --	-- --	-- 16000	4 --	-- --	-- 16
LINE 74 -----											
OCT 17, 73	1740	3	.3 1.8	-- --	-- --	80 --	-- --	-- 12000	0 --	-- --	-- 5
LINE 94 -----											
OCT 17, 73	1640	2	.3 1.8	-- --	-- --	40 --	-- --	-- 13000	2 --	-- --	-- 5
LINE 223 -----											
OCT 30, 73	0905	2	.3 1.2	-- --	-- --	20 --	-- --	-- 17000	3 --	-- --	-- 8
LINE 274 -----											
OCT 30, 73	1135	3	.6	--	--	50	--	--	0	--	--





TABLE 9D--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1974 WATER YEAR--CONTINUED

SELECTED IONS ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	BOTTOM DEPOSIT ZINC (ZN) (UG/GM)					
							LINE 53				
OCT 17, 73	1145	2	.3	440	--	--					
							LINE 64				
OCT 17, 73	1815	2	.3	230	--	--					
			2.1	--	--	50					
							LINE 74				
OCT 17, 73	1740	3	.3	820	--	--					
			1.8	--	--	31					
							LINE 94				
OCT 17, 73	1640	2	.3	500	--	--					
			1.8	--	--	28					
							LINE 223				
OCT 30, 73	0905	2	.3	40	--	--					
			1.2	--	--	57					
							LINE 274				
OCT 30, 73	1135	3	.6	50	--	--					

TABLE 9E--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1974 WATER YEAR

## INSECTICIDE AND HERBICIDE ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL ALDRIN (UG/L)	BOTTOM DEPOSIT ALDRIN (UG/KG)	TOTAL CHLOR- DANE (UG/L)	BOTTOM DEPOSIT CHLOR- DANE (UG/KG)	TOTAL DDD (UG/L)	BOTTOM DEPOSIT DDD (UG/KG)	TOTAL DDE (UG/L)	BOTTOM DEPOSIT DDE (UG/KG)
LINE 53 -----											
OCT 17, 73	1145	2	.3 4.9	.00 --	-- .0	.0 --	-- .0	.00 --	-- .0	.00 --	-- .0
LINE 64 -----											
OCT 17, 73	1815	2	2.1	--	.0	--	.0	--	.0	--	.5
LINE 74 -----											
OCT 17, 73	1740	3	.3 1.8	.00 --	-- .0	.0 --	-- .0	.00 --	-- .0	.00 --	-- .4
LINE 94 -----											
OCT 17, 73	1640	2	.3 1.8	.00 --	-- .0	.0 --	-- .0	.00 --	-- .0	.00 --	-- .7
LINE 223 -----											
OCT 30, 73	0905	2	.3 1.2	.00 --	-- .0	-- --	-- --	-- --	-- --	-- --	-- --
LINE 233 -----											
OCT 30, 73	0950	2	.3 1.5	.00 --	-- .0	-- --	-- --	-- --	-- --	-- --	-- --
LINE 274 -----											
OCT 30, 73	1135	3	.6	.00	--	.0	--	.00	--	.00	--

TABLE 9E--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1974 WATER YEAR--CONTINUED

## INSECTICIDE AND HERBICIDE ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL DDT (UG/L)	BOTTOM DEPOSIT DDT (UG/KG)	TOTAL DIEL- DRIN (UG/L)	BOTTOM DEPOSIT DIEL- DRIN (UG/KG)	TOTAL ENDRIN (UG/L)	BOTTOM DEPOSIT ENDRIN (UG/KG)	HEPTA- CHLOR (UG/L)	BOTTOM DEPOSIT HEPTA- CHLOR (UG/KG)
LINE 53 -----											
OCT 17, 73	1145	2	.3 4.9	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0
LINE 64 -----											
OCT 17, 73	1815	2	2.1	--	.0	--	.0	--	.0	--	.0
LINE 74 -----											
OCT 17, 73	1740	3	.3 1.8	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0
LINE 94 -----											
OCT 17, 73	1640	2	.3 1.8	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0	.00 --	-- .0
LINE 223 -----											
OCT 30, 73	0905	2	.3	.00	--	.01	--	.00	--	.00	--
LINE 274 -----											
OCT 30, 73	1135	3	.6	.00	--	.00	--	.00	--	.00	--

TABLE 9E--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1974 WATER YEAR--CONTINUED

## INSECTICIDE AND HERBICIDE ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL		BOTTOM DEPOSIT		TOTAL PARA- THION	TOTAL METHYL PARA- THION	TOTAL MALA- THION	TOTAL DIAZ- INON	
				HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE (UG/KG)	TOTAL LINDANE (UG/L)	BOTTOM LINDANE (UG/KG)					
LINE 53 -----												
OCT 17, 73	1145	2	.3 4.9	.00 --	-- .0	.00 --	-- .0	.00 --	.00 --	.00 --	.00 --	
LINE 64 -----												
OCT 17, 73	1815	2	2.1	--	.0	--	.0	--	--	--	--	
LINE 74 -----												
OCT 17, 73	1740	3	.3 1.8	.00 --	-- .0	.00 --	-- .0	.00 --	.00 --	.00 --	.01 --	
LINE 94 -----												
OCT 17, 73	1640	2	.3 1.8	.00 --	-- .0	.00 --	-- .0	.00 --	.00 --	.00 --	.01 --	
LINE 223 -----												
OCT 30, 73	0905	2	.3 1.2	.00 --	-- --	.00 --	-- .0	.02 --	.00 --	.00 --	.01 --	
LINE 274 -----												
OCT 30, 73	1135	3	.6	.00	--	.00	--	.00	.00	.00	.00	

TABLE 9E--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1974 WATER YEAR--CONTINUED

INSECTICIDE AND HERBICIDE ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	TOTAL PCB (UG/L)	BOTTOM DEPOSIT PCB (UG/KG)	TOTAL 2,4-D (UG/L)	BOTTOM DEPOSIT 2,4-D (UG/KG)	TOTAL 2,4,5-T (UG/L)	BOTTOM DEPOSIT 2,4,5-T (UG/KG)	TOTAL SILVEX (UG/L)	BOTTOM DEPOSIT SILVEX (UG/KG)
LINE 53											
OCT 17, 73	1145	2	.3	.0	--	.02	--	.01	--	.00	--
			4.9	--	.0	--	--	--	--	--	--
LINE 64											
OCT 17, 73	1815	2	.3	.0	--	--	--	--	--	--	--
LINE 74											
OCT 17, 73	1740	3	.3	.0	--	--	--	--	--	--	--
			1.8	.0	--	--	--	--	--	--	--
LINE 94											
OCT 17, 73	1640	2	.3	.0	--	.05	--	.01	--	.00	--
			1.8	.0	.0	--	--	--	--	--	--
LINE 223											
OCT 30, 73	0905	2	.3	.0	--	.00	--	.00	--	.00	--
			1.2	.0	.0	--	--	--	--	--	--
LINE 274											
OCT 30, 73	1135	3	.6	.0	--	.00	--	.00	--	.00	--

TABLE 9F--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1974 WATER YEAR

## BACTERIOLOGICAL AND CHLOROPHYLL ANALYSES

DATE OF COLLECTION	TIME	SITE	DEPTH (METERS)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	CHLORO- PHYLL A (UG/L)				
LINE 53 -----											
OCT 17, 73	1145	2	.3	26	4	34	--				
APR 24, 74	1615	2	.5	39	1	20	.10				
LINE 64 -----											
OCT 17, 73	1815	2	.3	34	32	50	--				
APR 24, 74	1335	2	.5	•	•	•	1.20				
LINE 74 -----											
OCT 17, 73	1740	3	.3	480	400	290	--				
APR 24, 74	1630	3	.5	5	1	8	.00				
LINE 94 -----											
OCT 17, 73	1640	2	.3	78	46	200	--				
APR 24, 74	1520	2	.5	•	•	•	2.90				
LINE 188 -----											
APR 23, 74	1730	4	.5	2	1	8	1.30				
LINE 223 -----											
OCT 30, 73	0905	2	.3	•	•	330	--				
APR 23, 74	1350	2	.3	•	•	42	.40				
LINE 247 -----											
APR 23, 74	1450	2	.3	3	1	12	1.60				
LINE 274 -----											
OCT 30, 73	1135	3	.6	5	2	10	--				
APR 23, 74	1155	3	.5	13	5	27	.20				
LINE 320 -----											
OCT 29, 73	1445	2	.3	21	9	6	--				
APR 23, 74	1105	2	.3	52	18	92	--				
LINE 351 -----											
APR 23, 74	1050	2	.3	4	1	13	.40				
LINE 902 -----											
APR 23, 74	0935	95	.6	8	3	1	.10				

• - TOO NUMEROUS TO COUNT

TABLE 9F--QUALITY OF WATER IN THE LAGUNA MADRE ESTUARY,

1974 WATER YEAR--CONTINUED

BACTERIOLOGICAL AND CHLOROPHYLL ANALYSES

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

LINE 910

APR 24, 74	0910	90	1.5	80	1	85	--				
			23.5	--	--	--	.10				





# SELECTED HYDROLOGIC RECORDS

## 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-km-) wide band along the Texas coast are shown on Figure 11.

Tabulations of daily precipitation, temperature, and other data are published monthly, and monthly summaries are published annually by the Environmental Science Services Administration 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).

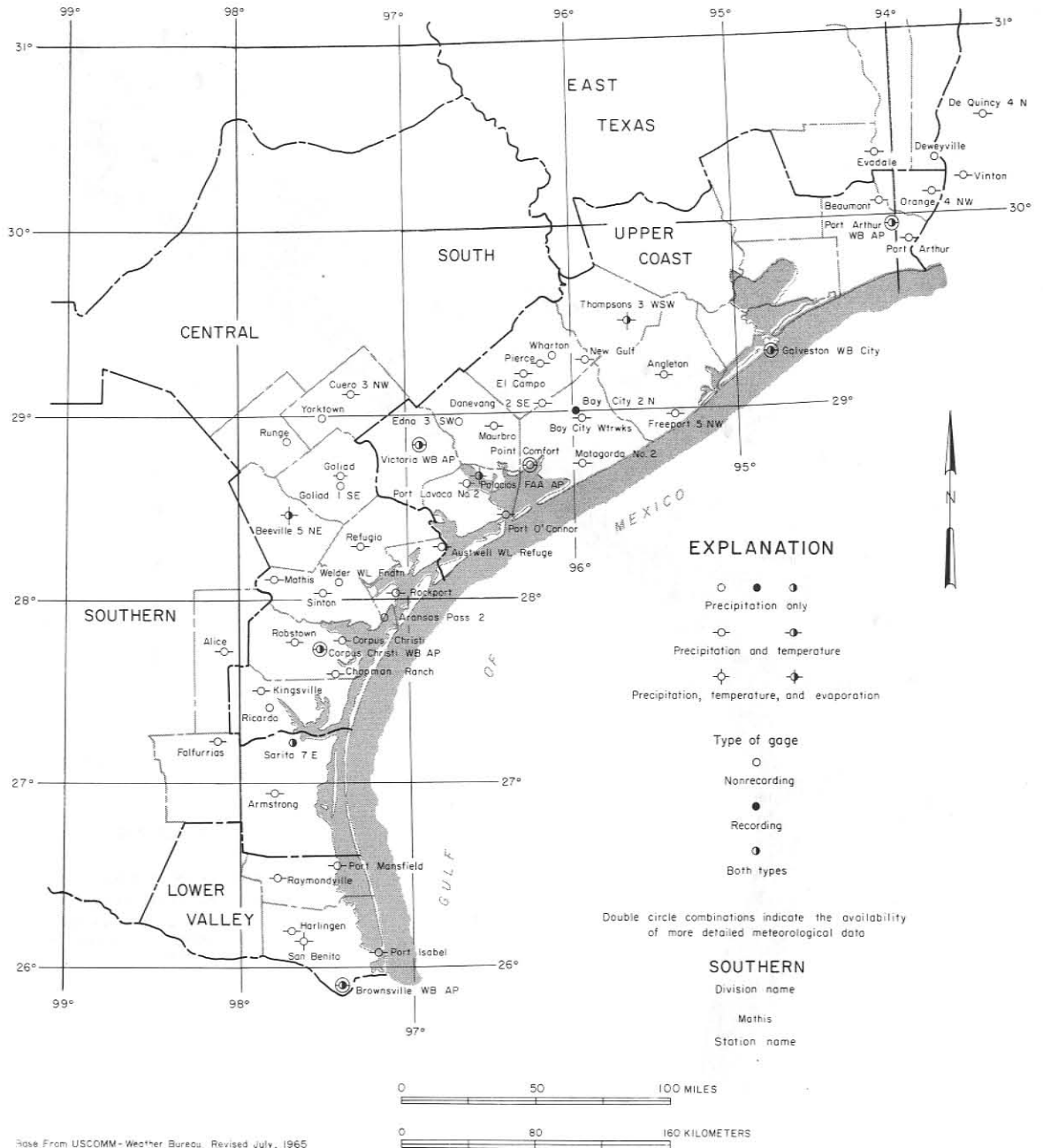


Figure 11.—Locations of Selected Climatological Stations



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

Drainage areas from which unmeasured runoff enters the estuaries range from less than 100 square miles (259 km<sup>2</sup>) on some estuaries to more than 10,000 square miles (25,900 km<sup>2</sup>). 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.

Both continuous and periodic 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 (1974).

Some of the sites are not sampled regularly and have no index number. These sites were numbered consecutively, from 1 through 4, for this report. The station names are listed below so the reader can identify them in the literature. The data not previously published (from the four sites and for other sites) are listed in Table 10.

1. Artesian Creek near Tivoli
2. Melon Creek near Refugio
3. Sous Creek near Woodsboro
4. Nueces River at bridge on FM 666 northwest of Calallen

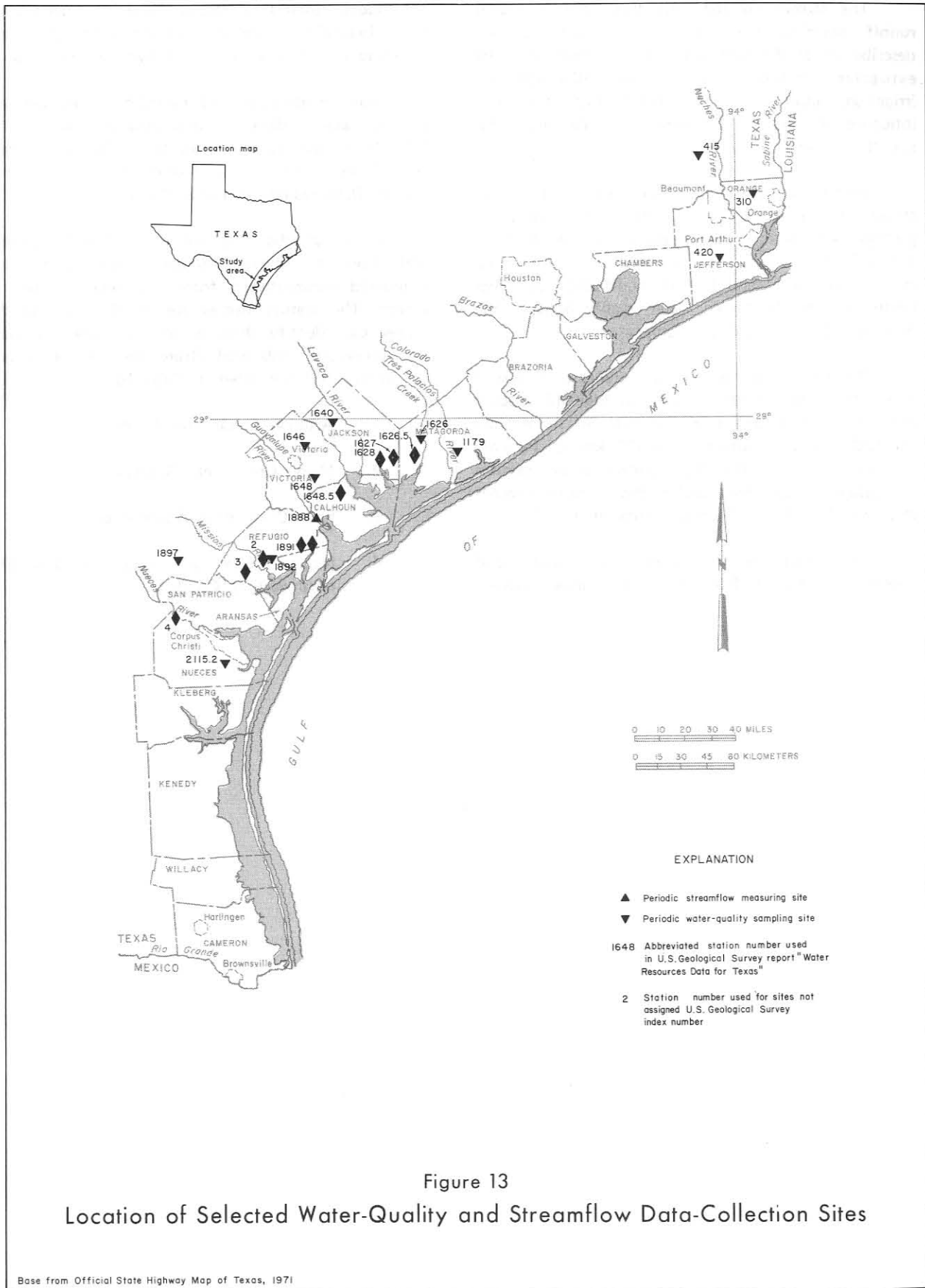


Figure 13  
 Location of Selected Water-Quality and Streamflow Data-Collection Sites

Base from Official State Highway Map of Texas, 1971

TABLE 10A.--NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS FOR SELECTED TRIBUTARIES, 1974 WATER YEAR

Date	Time	INSTANTANEOUS DISCHARGE (Ft <sup>3</sup> /S) L/	SPECIFIC CONDUCTANCE (MICROMHOS) (FIELD)	pH (UNITS) (FIELD)	TEMPERATURE (°C) (FIELD)	DISSOLVED OXYGEN (MG/L) (FIELD)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND (MG/L)	CHEMICAL OXYGEN DEMAND (MG/L)	DISSOLVED SILICA (SiO <sub>2</sub> ) (MG/L)	AMMONIA NITROGEN (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DISSOLVED PHOSPHORUS ORTHO (P) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
TRIBUTARIES TO SABINE-NECHES ESTUARY															
<u>305 Sabine River near Ruliff</u>															
Sept. 9	1425	6440	--	--	25.0	--	--	1.0	--	6.7	0.09	0.01	0.00	--	0.05
<u>310 Cow Bayou near Mauriceville</u>															
Sept. 4	1215	1.1	--	--	22.0	--	--	2.1	--	7.9	.08	.08	.00	--	.04
Sept. 9	1355	1.4	--	--	25.0	--	--	1.6	--	10	.10	.06	.00	--	.06
<u>410 Neches River at Evadale</u>															
Sept. 5	1015	3110	--	--	24.0	--	--	2.2	--	8.6	.06	.03	.00	--	.06
Sept. 9	1315	2950	--	--	26.0	--	--	1.2	--	9.5	.07	.01	.00	--	.05
<u>415 Village Creek near Kountze</u>															
Sept. 5	1250	293	--	--	23.0	--	--	.8	--	11	.04	.08	.00	--	.03
Sept. 9	1235	190	--	--	24.0	--	--	1.2	--	12	.04	.08	.01	--	.03
<u>417 Pine Island Bayou near Sour Lake</u>															
Sept. 5	1515	85	--	--	25.0	--	--	0.9	--	9.1	.02	.09	.00	--	.07
Sept. 9	1155	48	--	--	24.0	--	--	0.9	--	10	.04	.10	.00	--	.10
<u>420 Taylor Bayou near LaBelle</u>															
Sept. 3	1255	--	--	--	27.0	--	--	2.2	--	11	.17	.06	.01	--	.28
Sept. 9	1145	--	--	--	--	--	--	3.2	--	8.3	.03	.12	.00	--	.18
TRIBUTARIES TO MISSION-ARANSAS ESTUARY															
<u>1. Artesian Creek near Tivoli</u>															
May 29	0928	2.7	430	6.3	28.5	5.5	71	--	--	--	--	--	--	--	--
June 4	1445	.42	741	7.6	31.5	6.3	85	--	--	--	--	--	--	--	--
<u>1891 Salt Creek near Refugio</u>															
May 31	0855 2/	.50	314	6.2	27.0	4.6	57	5.3	--	--	.18	.01	.02	--	.14
June 4	1400 2/	.09	306	7.6	31.0	5.2	69	5.7	--	--	.15	.00	.02	--	.14
<u>2. Melon Creek near Refugio</u>															
May 29	1120	3.6	439	6.0	28.0	5.6	71	--	--	--	--	--	--	--	--
June 4	1145	2.0	551	7.4	29.0	5.4	69	4.5	--	--	.07	.11	.01	--	.11
<u>1892 Copano Creek near Refugio</u>															
May 31	0923	2.2	294	6.1	27.0	4.5	56	3.7	--	--	.13	.16	.02	--	.13
June 4	1325	1.2	398	7.3	29.5	5.9	77	4.5	--	--	.07	.12	.00	--	.13

See footnotes at end of table.

TABLE 10A.--NUTRIENT AND OTHER ENVIRONMENTAL CHARACTERISTICS FOR SELECTED TRIBUTARIES, 1974 WATER YEAR--Continued

Date	Time	INSTANTANEOUS DISCHARGE (FT <sup>3</sup> /S) <u>1/</u>	SPECIFIC CONDUCTANCE (MICROMHOS) (FIELD)	pH (UNITS) (FIELD)	TEMPERATURE (°C) (FIELD)	DISSOLVED OXYGEN (MG/L) (FIELD)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND (MG/L)	CHEMICAL OXYGEN DEMAND (MG/L)	DISSOLVED SILICA (SiO <sub>2</sub> ) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	DISSOLVED PHOSPHORUS ORTHO (P) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
TRIBUTARIES TO MISSION-ARANSAS ESTUARY--Continued															
<u>1895 Mission River at Refugio</u>															
May 30	1510	20	3,070	6.8	28.5	8.3	106	2.3	--	--	0.02	0.02	0.00	--	0.03
June 4	1035	65	660	7.3	27.0	6.3	78	4.4	--	--	.05	.38	.01	--	.06
<u>3. Sous Creek near Woodsboro</u>															
May 29	1250 <u>2/</u>	.18	3,900	6.5	31.5	5.5	74	--	--	--	--	--	--	--	--
June 4	0900 <u>2/</u>	.17	4,950	7.4	28.0	3.7	47	--	--	--	--	--	--	--	--
<u>1898 Chiltipin Creek at Sinton</u>															
May 30	1250	.63	16,600	7.2	29.5	11.3	157	7.3	--	--	.22	.01	.00	--	.18
June 3	1555	.63	18,600	8.9	36.0	16.4	248	9.0	--	--	.17	.00	.01	--	.20
TRIBUTARIES TO NUECES ESTUARY															
<u>2110 Nueces River near Mathis</u>															
May 29	1500	195	810	6.6	28.5	8.6	110	--	--	--	--	--	--	--	--
June 3	1135	190	785	6.7	29.0	8.6	110	--	--	--	--	--	--	--	--
<u>4. Nueces River at bridge on FM 666 northwest of Calallen</u>															
May 30	1055	208	923	6.6	28.0	7.2	91	1.7	--	--	.05	.14	.00	--	.06
June 3	1300	212	881	6.7	30.0	9.2	121	3.7	--	--	.01	.01	.00	--	.07
<u>2115.2 Oso Creek at Corpus Christi</u>															
May 30	0845	1.4	4,650	7.4	27.0	4.9	61	5.9	--	--	.17	.05	.04	--	.58
June 3	1435	2.2	3,080	8.3	35.0	16.6	237	9.2	--	--	.39	.83	.37	--	.73

1/ To convert water discharge in cubic feet per second (ft<sup>3</sup>/s) to cubic meters per second (m<sup>3</sup>/s) multiply by 0.02832.  
2/ Estimated.

TABLE 10B.--CHEMICAL ANALYSES OF WATER FROM SELECTED TRIBUTARIES, 1974 WATER YEAR

Date	Time	INSTANTANEOUS DISCHARGE (Ft <sup>3</sup> /S) <sup>1/</sup>	SPECIFIC CONDUCTANCE (MICROMHOS)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG/L)	DIS-SOLVED SODIUM (Na) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO <sub>3</sub> ) (MG/L)	DIS-SOLVED SULFATE (SO <sub>4</sub> ) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA, MG)	NON-CARBONATE HARDNESS
TRIBUTARIES TO SABINE-NECHES ESTUARY													
<u>305 Sabine River near Ruliff</u>													
Sept. 9	1425	6,440	130	8.1	2.3	12	3.0	23	13	17	73	30	11
<u>310 Cow Bayou near Mauriceville</u>													
Sept. 4	1215	1.1	105	3.4	1.9	10	1.7	16	8.0	16	57	16	3
Sept. 9	1355	1.4	191	9.2	3.2	21	2.3	21	9.3	37	102	36	19
<u>.410 Neches River at Evadale</u>													
Sept. 5	1015	3,110	140	6.3	2.7	13	2.6	29	14	17	79	27	3
Sept. 9	1315	2,950	147	8.8	3.0	15	2.8	29	14	18	85	34	11
<u>415 Village Creek near Kountze</u>													
Sept. 5	1250	296	62	2.8	1.3	6.3	1.4	11	4.0	11	43	12	3
Sept. 9	1235	194	70	5.0	1.1	7.0	1.3	13	3.1	13	49	17	6
<u>417 Pine Island Bayou near Sour Lake</u>													
Sept. 5	1515	85	401	17	3.2	55	3.0	50	14	94	220	56	15
Sept. 9	1155	43	322	18	3.2	39	3.5	59	13	58	174	58	10
<u>420 Taylor Bayou near LaBelle</u>													
Sept. 3	1255	--	292	16	4.7	32	3.3	58	25	40	161	59	12
Sept. 9	1145	--	639	19	9.7	90	4.5	59	26	150	337	87	39

<sup>1/</sup> To convert water discharge in cubic feet per second (ft<sup>3</sup>/s) to cubic meters per second (m<sup>3</sup>/s) multiply by 0.02832.

TABLE 10C.--BACTERIOLOGICAL ANALYSES OF WATER FROM SELECTED TRIBUTARIES, 1974 WATER YEAR

Date	Time	INSTAN- TANEOUS DISCHARGE (Ft <sup>3</sup> /S) <u>1/</u>	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREP- TOCOCCI (COL. PER 100 ML)
TRIBUTARIES TO MISSION-ARANSAS ESTUARY					
<u>1891 Salt Creek near Refugio</u>					
May 31	0855	0.50 <u>2/</u>	> 500	> 400	> 600
<u>1892 Copano Creek near Refugio</u>					
May 31	0923	2.2	> 500	> 400	> 600
<u>1895 Mission River at Refugio</u>					
May 30	1510	20	200	59	12
<u>1898 Chiltipin Creek at Sinton</u>					
May 30	1250	.63	170	170	140
TRIBUTARIES TO NUECES ESTUARY					
<u>4. Nueces River at bridge on FM 666 northwest of Callallen</u>					
May 30	1055	208	48	32	53
<u>2115.2 Oso Creek at Corpus Christi</u>					
May 30	0845	1.4	66	52	100

1/ To convert water discharge in cubic feet per second (ft<sup>3</sup>/s) to cubic meters per second (m<sup>3</sup>/s) multiply by 0.02832.  
2/ Estimated.



## REFERENCES CITED

- American Public Health Association, American Water Works Association, Water Pollution Control Federation, 1971, Standard methods for the examination of water and wastewater: Am. Public Health Assoc., 13th ed., 874 p.
- Grozier, R. U., and others, 1968, Floods from Hurricane Beulah in South Texas and Northeastern Mexico, September-October 1967: Texas Water Devel. Board Rept. 83, 195 p.
- Hahl, D. C., and Ratzlaff, K. W., 1970, Chemical and physical characteristics of water in estuaries of Texas, September 1967-September 1968: Texas Water Devel. Board Rept. 117, 91 p.
- \_\_\_\_\_, 1972, Chemical and physical characteristics of water in estuaries of Texas, October 1968-September 1969: Texas Water Devel. Board Rept. 144, 161 p.
- \_\_\_\_\_, 1973, Chemical and physical characteristics of water in estuaries of Texas, October 1969-September 1970: Texas Water Devel. Board Rept. 171, 123 p.
- Hahl, D. C., and Ratzlaff, K. W., 1970, Chemical and physical characteristics of water in estuaries of Texas, October 1970-September 1971: Texas Water Devel. Board Rept. 191, 153 p.
- Lauff, G. H., ed., 1967, Estuaries: Washington, D. C., Am. Assoc. Adv. Sci., 757 p.
- Ratzlaff, K. W., 1976, Chemical and physical characteristics of water in estuaries of Texas, October 1971-September 1973: Texas Water Devel. Board Rept. 208, 348 p.
- U.S. Geological Survey, 1974, Water resources data for Texas, Part 1, surface-water records; Part 2, water-quality records: U.S. Geol. Survey rept., pt. 1, 609 p.; pt. 2, 719 p.
- U.S. Weather Bureau, 1958, Climatic summary of the United States-supplement for 1931 through 1952, Texas: Climatology of the United States No. 11-36, U.S. Dept. of Commerce, 147 p.
- \_\_\_\_\_, 1965, Climatic summary of the United States-supplement for 1951 through 1960, Texas: Climatology of the United States No. 86-36, U.S. Dept. of Commerce, 198 p.

