

INTRODUCTION

The following are water quality reports for the canals and contiguous waters of Padre Isles, Corpus Christi, Texas, which fulfill the monitoring requirements as set forth in a letter from TCEQ (Sidne Tiemann) to the USACE (Mark King) dated October 12, 1994. All temperature measurements are in degrees centigrade. All dissolved oxygen measurements are in milligrams per liter.

METEOROLOGICAL CONDITIONS

Sept.16, 2021. Day. Partly cloudy. Wind SE - 10 mph. 31.7 C.

Sept.17, 2021. Night. Wind SE - 5 mph. 27.2 C.

Sept.23, 2021. Day. Clear. Wind ENE - 10 mph. 31.1 C.

Sept.24, 2021. Night. Wind E - 5 mph. 25.3C.

WATER QUALITY DATA PADRE ISLES AND CONTIGUOUS WATERS

Sept. 16-17 2021

Sept. 23-24, 2021

ATTN: PETER SCHAEFER, STDS. IMPLEMENTATION TEAM

MC 150

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Date	Time	Station	Temp. C	D.O. mg/l
9/16/2021	1850	1	29.3	8.3
	1600	2	29.9	6.6
	1900	3	31.4	11.1
	1725	4	30.1	9
	1610	5	29.1	5.8
	1625	6	29.6	8.4
	1645	7	28.6	5.5
	1740	8	30.5	10.5
	1800	9	30	10.1
	1810	10	30.1	10
	1820	11	29.4	8.4
	1835	12	28.6	6.9
	1715	13	28.8	8.7
	1710	21	29.7	9.2
	1705	23	30.6	9.1

All measurements taken one foot below the surface.

Date	Time	Station	Temp. C	D.O. mg/l
9/17/2021	700	1	28.3	6.6
	400	2	28.2	4.6
	710	3	28.7	5.9
	530	4	28.8	6.9
	410	5	28.3	4.7
	425	6	28.1	5.4
	445	7	28.5	4.5
	550	8	28.1	4.6
	610	9	28.6	6
	620	10	28.7	7
	630	11	28.4	6.8
	645	12	28.3	6.7
	520	13	28.4	6.8
	515	21	28.2	6
	510	23	29.1	6.5

All measurements taken one foot below the surface

NUTRIENTS

Water samples for nutrient analyses were collected one foot below the surface (S) and one foot above the bottom (B) at stations 1,5,6,8,9,10 and 11. Values are reported as milligrams per liter (mg/l or PPM) of the element in the compound. * The lower limit of detection is 0.007 mg/l for nitrate (NO₃-N) and nitrite (NO₂-N) nitrogen, and 0.010 mg/l for phosphate phosphorus (PO₄-P). ND means not detectable.

* Strickland and Parsons (1968). A Practical Handbook of Seawater Analysis. Fisheries Research Board of Canada. Ottawa.

Date	Time	Station	Depth(ft)	NO ₃ -N	NO ₂ -N	PO ₄ -P
9/16/2021	1850	1B	11	0.012	0.007	ND
		1S		0.012	0.007	ND
	1610	5B	10	0.007	0.009	0.04
		5S		0.007	0.008	0.045
	1625	6B	13	ND	0.007	ND
		6S		ND	ND	ND
	1740	8B	11	ND	0.007	ND
		8S		ND	ND	ND
	1800	9B	11	0.012	0.008	ND
		9S		0.012	0.008	ND
	1810	10B	13	0.011	0.009	ND
		10S		0.012	0.008	ND
	1820	11B	11	ND	ND	ND
		11S		ND	ND	ND

Date	Time	Station	Temp C	D.O.mg/l
9/23/2021	1730	21	29.1	6.9
	1745	23	30	7.3
9/24/2021	600	21	27.5	5.5
	615	23	27.9	5.9

