

WATER QUALITY DATA PADRE ISLES AND CONTIGUOUS WATERS

Oct. 17-18, 2021

Oct. 22-23 2021

ATTN: PETER SCHAEFER, STDS. IMPLEMENTATION TEAM

MC 150

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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

Oct. 17, 2021. Day. Partly cloudy. Wind ENE - 15 mph. 27.8 C.

Oct. 18, 2021. Night. Wind NE - 5 mph. 22.7 C.

Oct. 22, 2021. Day. Sunny. Wind E - 10 mph. 30.4 C.

Oct. 23, 2021. Night. Wind N - 5 mph. 25.3 C.

Date	Time	Station	Temp. C	D.O. mg/l
10/17/2021	1825	1	23.6	9.5
	1530	2	24.5	7.2
	1835	3	22.1	9.9
	1655	4	27.4	8.5
	1540	5	26.6	5.7
	1555	6	26.2	6.3
	1615	7	25.8	7
	1715	8	22.7	11.3
	1730	9	22.4	9.1
	1740	10	22.9	9.8
	1750	11	21.9	9.1
	1810	12	24.2	7.9
	1645	13	24.5	8.6
	1640	21	23.8	9
	1635	23	25.2	9.9

All measurements taken one foot below the surface.

Date	Time	Station	Temp. C	D.O. mg/l
10/18/2021	705	1	22.2	7.9
	420	2	23.5	6.7
	710	3	21.5	9.1
	540	4	23.7	7.7
	430	5	25.8	4.9
	445	6	24.7	5.4
	303	7	24.9	6.5
	600	8	20.7	6.9
	615	9	22.9	8
	625	10	22.1	7.8
	635	11	23.6	7.9
	650	12	23.3	8
	530	13	23.3	7
	525	21	22.8	7.3
	520	23	23.5	7.3

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
10/17/2021	1825	1B	11	0.007	0.007	ND
		1S		0.007	0.009	ND
	1540	5B	10	0.035	0.015	ND
		5S		0.05	0.017	ND
	1555	6B	13	0.025	0.008	ND
		6S		0.044	0.016	ND
	1715	8B	11	0.007	0.007	ND
		8S		0.007	0.007	ND
	1730	9B	11	ND	ND	ND
		9S		ND	ND	ND
	1740	10B	13	ND	ND	ND
		10S		ND	ND	ND
	1750	11B	12	0.007	ND	ND
		11S		0.007	ND	ND

Date	Time	Station	Temp C	D.O.mg/l
10/22/2021	1720	21	26.7	8
	1730	23	27.5	8.6
10/23/2021	610	21	25.7	6.1
	620	23	26.2	6.6

