

# WATER QUALITY DATA PADRE ISLES AND CONTIGUOUS WATERS

May 13-14, 2021

May 21-22, 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

May 13, 2021. Day. Pt. Sunny. Wind NNE-10 mph. 31.4 C.

May 14, 2021. Night. Wind E-5 mph. 22.5 C.

May 21, 2021. Day. Pt. Cloudy. Wind E-10 mph. 30.2 C

May 22, 2021. Night. Wind SSW-10 mph. 24.8 C.

Date	Time	Station	Temp C	D.O.mg/l
5/21/2021	1745	21	25.3	8.6
	1800	23	25.6	8.9
5/22/2021	615	21	26.2	6
	630	23	26.5	6.5

Date	Time	Station	Temp. C	D.O. mg/l
5/13/2021	1900	1	25.2	8.8
	1615	2	25.2	7.6
	1910	3	24.8	9.5
	1735	4	24.8	9.7
	1625	5	26.9	6.6
	1640	6	25.7	9
	1700	7	25.8	8.1
	1750	8	25.1	13.2
	1810	9	24.1	8.8
	1820	10	24.8	8.5
	1835	11	25	9
	1850	12	25.7	5.9
	1725	13	25.9	8.7
	1720	21	25.4	8.9
	1715	23	25.3	9.6

All measurements taken one foot below the surface.

Date	Time	Station	Temp. C	D.O. mg/l
5/14/2021	650	1	23.6	6.6
	400	2	24.8	5.3
	700	3	23.1	6.8
	525	4	23	7.1
	410	5	25.2	4.6
	425	6	24.2	6.7
	445	7	25.3	5.4
	545	8	22.9	6.9
	600	9	22.8	6.7
	610	10	23.3	6.9
	620	11	24.4	7.1
	635	12	24.6	6.4
	515	13	24.4	6.6
	510	21	24.4	5.3
	505	23	23.7	7

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 (NO<sub>3</sub>-N) and nitrite (NO<sub>2</sub>-N) nitrogen, and 0.010 mg/l for phosphate phosphorus (PO<sub>4</sub>-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 <sub>3</sub> -N	NO <sub>2</sub> -N	PO <sub>4</sub> -P
5/13/2021	1900	1B	11	0.033	0.01	0.151
		1S		0.026	0.01	ND
	1625	5B	10	0.06	0.033	0.105
		5S		0.045	0.025	0.098
	1640	6B	13	0.073	0.007	ND
		6S		0.058	0.008	ND
	1750	8B	11	0.029	ND	ND
		8S		0.031	ND	ND
	1810	9B	11	0.01	ND	ND
		9S		0.012	ND	ND
	1820	10B	13	0.007	ND	ND
		10S		0.007	ND	ND
	1835	11B	11	0.014	ND	ND
		11S		0.014	ND	ND

