

WATER QUALITY DATA PADRE ISLES AND CONTIGUOUS WATERS

May 27-28, 2021

June 4-5, 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 27, 2021. Day. Pt. Sunny. Wind SSE-20-25 mph. 29.4 C.

May 28, 2021. Night. Wind SSE-10 mph. 26.4 C.

June 4, 2021. Day. Pt. cloudy. Wind SE 10 mph. 29.8 C.

June 5, 2021. Night. Wind SSE 5 mph. 26.3 C.

Date	Time	Station	Temp. C	D.O. mg/l
5/27/2021	1840	1	29.1	7.3
	1600	2	28.6	4.7
	1850	3	31.3	8.7
	1720	4	30.8	7.3
	1610	5	29.1	5.8
	1625	6	28.6	6.3
	1645	7	28	25
	1735	8	30.3	11.7
	1750	9	30.1	8.2
	1800	10	30.5	10.1
	1810	11	30.4	8.4
	1825	12	29.4	8.3
	1715	13	29.8	8
	1710	21	29	5.2
	1705	23	29.8	7.3

All measurements taken one foot below the surface.

Date	Time	Station	Temp. C	D.O. mg/l
5/28/2021	650	1	28.4	4.2
	400	2	27.9	1.8
	700	3	27.2	5.2
	520	4	28.1	6
	410	5	28	3.2
	425	6	28.1	4.9
	445	7	28.3	3.5
	540	8	28	3.7
	600	9	28.3	5.4
	610	10	27.6	4.1
	620	11	28.2	5.5
	635	12	28.4	5.4
	515	13	28.5	6.1
	510	21	27.9	5.6
	505	23	27.9	4.7

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 (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
5/28/2021	1840	1B	11	0.019	ND	ND
		1S		0.02	0.01	ND
	1610	5B	10	0.007	0.041	0.09
		5S		0.007	0.033	0.084
	1625	6B	13	0.024	0.008	ND
		6S		0.013	ND	ND
	1735	8B	11	0.009	0.007	ND
		8S		0.011	ND	ND
	1750	9B	11	0.01	0.007	ND
		9S		0.013	ND	ND
	1800	10B	13	0.019	0.01	ND
		10S		0.02	0.007	ND
	1810	11B	11	0.013	0.007	ND
		11S		0.013	0.007	ND

Date	Time	Station	Temp C	D.O.mg/l
6/4/2021	1750	21	29.2	6.3
	1810	23	29.9	7.1
6/5/2021	600	21	27.8	5.3
	630	23	28	4.4

