

WATER QUALITY DATA PADRE ISLES AND CONTIGUOUS WATERS

July 23-24, 2021

July 30-31, 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

July 23 , 2021. Day. Sunny. Wind SSE - 20 mph. 33.3 C.

July 24 , 2021. Night. Wind SSE - 5 mph. 28.3 C.

July 30, 2021. Day. Sunny. Wind N - 5 mph. 35.4 C.

July 31, 2021. Night. Wind S - 5 mph. 30.5 C.

Date	Time	Station	Temp. C	D.O. mg/l
7/23/2021	1850	1	32.6	9.1
	1600	2	30.3	2.9
	1900	3	33.2	9.1
	1725	4	30.8	7.8
	1610	5	31.4	4.9
	1625	6	31.2	7.1
	1645	7	31.2	6.7
	1740	8	31.7	11
	1800	9	30.5	7.5
	1810	10	31.9	10.2
	1820	11	31.1	8
	1835	12	30.7	6
	1715	13	31	7.7
	1710	21	31.1	7.6
	1705	23	30.9	7.1

All measurements taken one foot below the surface.

Date	Time	Station	Temp. C	D.O. mg/l
7/24/2021	645	1	28.9	6.5
	350	2	29.7	6.1
	655	3	28	4.3
	515	4	29.4	6.1
	400	5	29.8	3.1
	415	6	30.1	4.1
	435	7	30.1	5.3
	535	8	28.4	3.3
	555	9	29.2	5.5
	605	10	28.3	4.7
	615	11	28.7	6.3
	630	12	29.3	4.5
	505	13	29.8	5.6
	500	21	29.8	5.9
	455	23	29.8	6.1

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
7/23/2021	1850	1B	11	0.014	0.007	ND
		1S		0.007	0.008	ND
	1610	5B	10	0.007	0.012	0.12
		5S		0.007	0.01	0.1
	1625	6B	13	0.009	0.007	ND
		6S		0.007	0.01	ND
	1740	8B	11	0.007	0.008	ND
		8S		0.007	0.008	ND
	1800	9B	11	0.008	0.012	ND
		9S		0.007	0.012	ND
	1810	10B	13	0.007	0.009	ND
		10S		0.008	0.009	ND
	1820	11B	11	0.007	0.009	ND
		11S		0.008	0.008	ND

Date	Time	Station	Temp C	D.O.mg/l
7/30/2021	600	21	30.6	5.7
	610	23	28.8	5.9
7/31/2021	1730	21	32.3	7.6
	1740	23	32.1	7.3

