

WATER QUALITY DATA PADRE ISLES AND CONTIGUOUS WATERS

July 10-11, 2023

July 17-18, 2023

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 10, 2023. Day. Clear. Wind SSE 15 mph. 33.3 C.

July 11, 2023. Night. Wind SSE 10 mph. 29.1 C.

July 17, 2023. Day. Clear. Wind SE 15 mph. 34.3 C.

July 18, 2023. Night. Wind SE 5 mph. 28.2 C.

Date	Time	Station	Temp. C	D.O. mg/l
7/10/2023	1930	1	32.8	7.4
	1630	2	31.7	3.9
	1940	3	34.7	8.2
	1800	4	33.1	7.6
	1640	5	32.7	5.7
	1700	6	32.7	9.6
	1720	7	32.5	7.6
	1820	8	33.1	8.9
	1840	9	32	7.2
	1850	10	33.5	8.6
	1900	11	32.5	7.3
	1915	12	31.5	7
	1750	13	32.2	6.8
	1745	21	32.5	7.2
	1740	23	32.4	7

All measurements taken one foot below the surface.

Date	Time	Station	Temp. C	D.O. mg/l
7/11/2023	650	1	29.2	5.3
	400	2	30.8	2.3
	700	3	30.4	4.8
	520	4	31.5	6.1
	410	5	31.9	4.2
	425	6	31.5	6
	445	7	31.8	5
	540	8	29.8	4.3
	600	9	31.4	5.9
	610	10	29.9	4.6
	620	11	28.7	6.2
	635	12	30.9	4.8
	510	13	31.1	5.4
	505	21	31	5.3
	500	23	31.4	5.7

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 0.001 mg/l for nitrate (NO₃-N) and nitrite (NO₂-N) nitrogen, and 0.016 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
7/10/2023	1930	1B	13	0.003	0.001	ND
		1S		0.008	0.003	ND
	1640	5B	11	0.003	ND	0.02
		5S		0.004	0.002	0.018
	1700	6B	14	0.003	0.005	ND
		6S		0.001	0.003	ND
	1820	8B	12	ND	ND	ND
		8S		ND	ND	ND
	1840	9B	13	0.003	ND	ND
		9S		0.005	ND	ND
	1850	10B	14	ND	ND	ND
		10S		ND	ND	ND
	1900	11B	13	ND	ND	ND
		11S		ND	ND	ND

Date	Time	Station	Temp C	D.O.mg/l
7/17/2023	1815	21	32.8	5.8
	1825	23	32.7	5.6
7/18/2023	525	21	31.2	4.2
	535	23	31.6	4.3



Google earth