

WATER QUALITY DATA PADRE ISLES AND CONTIGUOUS WATERS

June 13-14, 2023

June 19-20, 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

June 13, 2023. Day. Clear. Wind SSE 20 mph. 32.4 C.

June 14, 2023. Night. Wind SSE 10 mph. 26.1 C.

June 19, 2023. Day. Clear. Wind SE 20 mph. 33.3 C.

June 20, 2023. Night. Wind SSE 15 mph. 28.4 C.

Date	Time	Station	Temp. C	D.O. mg/l
6/13/2023	1930	1	31.1	7.9
	1640	2	30.4	5.1
	1940	3	33.3	9.4
	1810	4	31.7	8.4
	1650	5	31.5	4.8
	1710	6	31.3	5.3
	1730	7	31.2	5.8
	1825	8	31.6	9.5
	1840	9	31	8.3
	1850	10	31.7	8.4
	1900	11	31.3	7.9
	1915	12	30.5	6.4
	1800	13	31.1	7.2
1755	21	31.1	5.7	
1750	23	31.9	7.6	

All measurements taken one foot below the surface.

Date	Time	Station	Temp. C	D.O. mg/l
6/14/2023	650	1	28.1	5.7
	405	2	29.6	3.1
	700	3	29.2	5.4
	530	4	29.9	6.2
	415	5	30.3	3
	430	6	30	4.6
	450	7	30.2	3
	545	8	28.7	3.8
	600	9	30	5.4
	610	10	29.4	5.5
	620	11	27.5	6
	635	12	30.1	4
	520	13	29.9	5.3
	515	21	29.4	4.9
	510	23	30.2	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
6/13/2023	1930	1B	13	ND	0.004	ND
		1S		ND	0.001	ND
	1650	5B	11	0.004	0.001	0.051
		5S		0.007	0.003	0.075
	1710	6B	14	ND	0.013	ND
		6S		ND	ND	ND
	1825	8B	12	ND	ND	ND
		8S		ND	ND	ND
	1840	9B	13	ND	ND	ND
		9S		ND	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
6/19/2023	1820	21	31.7	5.5
	1830	23	31.8	5.9
6/20/2023	530	21	29.7	4
	540	23	30.4	4.3

