

# WATER QUALITY DATA PADRE ISLES AND CONTIGUOUS WATERS

Sept. 5-6, 2023  
Sept. 11-12, 2023

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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

Sept. 5, 2023. Day. Clear. Wind SE 20 mph. 32.8 C.

Sept. 6, 2023. Night. Wind SE 5 mph. 28.6 C.

Sept. 11, 2023. Day. Sunny. Wind E 10 mph. 35.3 C.

Sept.12, 2023. Night. Wind N 5 mph. 31.4 C.

Date	Time	Station	Temp. C	D.O. mg/l
<b>9/5/2023</b>	<b>1935</b>	<b>1</b>	<b>31</b>	<b>8.3</b>
	1630	2	30.3	4.9
	1945	3	33.3	10.4
	1810	4	32.2	8.5
	1640	5	31.7	6.8
	1700	6	32	6.8
	1725	7	31.4	6.1
	1830	8	32	9.9
	1845	9	31.5	8.1
	1855	10	32.2	8.5
	1905	11	31.7	8.7
	1920	12	31.4	6.1
	1800	13	31.3	7.3
	1750	21	31.6	8.4
	1745	23	32.2	8.3

All measurements taken one foot below the surface.

Date	Time	Station	Temp. C	D.O. mg/l
<b>9/6/2023</b>	<b>650</b>	<b>1</b>	<b>29.5</b>	<b>5.7</b>
	400	2	29.3	2.5
	700	3	30.1	6.4
	525	4	30.6	5.8
	410	5	30.8	4.8
	425	6	30.3	4
	445	7	30.9	4.7
	540	8	29	3.8
	600	9	30.4	6.1
	610	10	30	5.5
	620	11	30	5.9
	635	12	30.4	5
	515	13	30.2	5.6
	510	21	30.2	5.3
	505	23	30.5	5.5

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 (NO<sub>3</sub>-N) and nitrite (NO<sub>2</sub>-N) nitrogen, and 0.016 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
9/5/2023	1935	1B	13	0.012	ND	ND
		1S		0.009	ND	ND
	1640	5B	11	0.005	ND	ND
		5S		0.002	ND	ND
	1700	6B	14	0.005	0.004	ND
		6S		0.005	ND	ND
	1830	8B	12	0.003	ND	ND
		8S		0.003	ND	ND
	1845	9B	13	0.002	ND	ND
		9S		0.002	ND	ND
	1855	10B	14	0.005	ND	ND
		10S		0.004	ND	ND
	1905	11B	13	0.003	ND	ND
		11S		0.003	ND	ND

Date	Time	Station	Temp C	D.O.mg/l
9/11/2023	1850	21	32.4	8.2
	1900	23	33	8.1
9/12/2023	600	21	30	4.9
	610	23	30.3	5.1

