

# WATER QUALITY DATA PADRE ISLES AND CONTIGUOUS WATERS

May 15-16, 2023

May 22-23, 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**

May 15, 2023. Day. Cloudy. Wind NNE 10 mph. 27.3 C.

May 16, 2023. Night. Wind WNW 5 mph. 25.5 C.

May 22, 2023. Day. Clear. Wind SSW 10 mph. 31.3 C.

May 23, 2023. Night. Wind N 5 mph. 27.4 C.

Date	Time	Station	Temp. C	D.O. mg/l
5/15/2023	1905	1	27.7	6
	1610	2	27.6	3.7
	1915	3	27.8	7.4
	1735	4	27.6	5.6
	1620	5	27.4	4.4
	1635	6	27.7	6.8
	1655	7	27.9	5.9
	1755	8	27.2	8.5
	1815	9	27.6	8.6
	1825	10	27.6	8.6
	1835	11	27.1	7.1
	1850	12	27.1	6.9
	1725	13	27.4	7.1
	1720	21	27.8	7.7
1715	23	28	7.7	

All measurements taken one foot below the surface.

Date	Time	Station	Temp. C	D.O. mg/l
5/16/2023	700	1	26.4	4.1
	415	2	27.2	2.9
	710	3	26.6	5.2
	535	4	27.1	4.3
	425	5	26.7	3.7
	440	6	27.2	5.8
	500	7	27.4	5.8
	550	8	25.9	3.9
	610	9	26.1	6.5
	620	10	26.2	5.4
	630	11	26.6	6.9
	645	12	26.5	4.3
	525	13	26.7	6
	520	21	26.8	5.8
	515	23	27.2	6.4

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
5/15/2023	1905	1B	13	0.012	0.001	ND
		1S		0.021	0.004	ND
	1620	5B	11	0.03	0.02	0.075
		5S		0.034	0.014	0.075
	1635	6B	14	0.021	0.005	ND
		6S		0.019	0.007	ND
	1755	8B	12	0.006	ND	ND
		8S		0.006	ND	ND
	1815	9B	13	0.003	0.001	ND
		9S		0.003	0.001	ND
	1825	10B	14	ND	ND	ND
		10S		ND	ND	ND
	1835	11B	13	0.005	ND	ND
		11S		0.006	ND	ND

Date	Time	Station	Temp C	D.O.mg/l
5/22/2023	1800	21	29.3	8
	1810	23	29.5	8.1
5/23/2023	615	21	27.9	5.2
	630	23	28.2	5.7

