

# WATER QUALITY DATA PADRE ISLES AND CONTIGUOUS WATERS

Sept. 20-21, 2022  
Sept. 27-28, 2022

ATTN: PETER SCHAEFER, STDS. IMPLEMENTATION TEAM  
MC 150  
DEPARTMENT OF THE ARMY PERMIT 9009  
401CERTS@tceq.texas.gov

RUSSELL J. MIGET PhD  
6010 IDYLWOOD DRIVE  
CORPUS CHRISTI, TX 78412  
(361) 947-3288  
russell6104@att.net

## 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. 20, 2022. Day. Pt. Cloudy. Wind SE 10 mph. 33.7 C.

Sept. 21, 2022. Night. Wind NNW 5 mph. 26.4 C.

Sept. 27, 2022. Day. Pt. cloudy. Wind NE 15 mph. 32.4 C.

Sept. 28, 2022. Night. Wind N 10 mph. 25.3 C.

Date	Time	Station	Temp. C	D.O. mg/l
9/20/2022	1835	1	30.9	8
	1540	2	29.8	4.5
	1845	3	31.9	9.5
	1710	4	31.6	7.9
	1550	5	30.8	5.6
	1610	6	31.3	7.1
	1630	7	30.7	6
	1725	8	30.8	8.4
	1740	9	30.8	7.3
	1750	10	31.4	9.9
	1800	11	30.8	7.9
	1820	12	30.6	6.4
	1700	13	31.5	7.3
	1655	21	30.9	7.6
	1650	23	31.6	8.1

All measurements taken one foot below the surface.

Date	Time	Station	Temp. C	D.O. mg/l
9/21/2022	720	1	29.1	5.6
	430	2	29.3	3.3
	730	3	29.5	5.3
	555	4	30.3	6
	440	5	29.7	3.8
	455	6	29.8	4.6
	515	7	30.2	4.4
	615	8	29	3.7
	630	9	30.1	5.3
	640	10	30.2	5.4
	650	11	29.4	6
	705	12	29.6	5.5
	545	13	30.1	5.6
	540	21	29.4	5.4
	535	23	30.3	5.8

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
9/20/2022	1835	1B	13	0.005	ND	ND
		1S		0.006	0.004	ND
	1550	5B	11	0.001	0.011	ND
		5S		0.003	0.005	ND
	1610	6B	14	0.003	0.005	ND
		6S		0.002	ND	ND
	1725	8B	12	0.002	0.001	ND
		8S		0.002	0.001	ND
	1740	9B	13	0.001	ND	ND
		9S		0.001	ND	ND
	1750	10B	14	0.001	ND	ND
		10S		0.001	ND	ND
	1800	11B	13	0.001	ND	ND
		11S		0.001	ND	ND

Date	Time	Station	Temp C	D.O.mg/l
9/27/2022	1800	21	29.4	5.5
	1810	23	30.1	6.2
9/28/2022	640	21	28.8	4.3
	650	23	29.1	4.6

