

WATER QUALITY DATA PADRE ISLES AND CONTIGUOUS WATERS

Oct. 19-20, 2022

Oct. 24-25, 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

Oct. 19, 2022. Day. Clear. Wind N 5 mph. 23.8 C.

Oct. 20, 2022. Night. Wind N 10 mph. 16.8 C.

Oct. 24, 2022. Day. Pt. cloudy. Wind SSE 30 mph. 29.4 C.

Oct. 25, 2022. Night. Wind NW 10 mph. 21.4 C.

Date	Time	Station	Temp. C	D.O. mg/l
10/19/2022	1750	1	19.9	9.1
	1500	2	20.3	6.9
	1800	3	21.7	11.5
	1625	4	21.7	8.2
	1510	5	22.8	5.9
	1525	6	24.8	5.8
	1545	7	24	7
	1640	8	18.7	10.6
	1700	9	19.5	8.6
	1710	10	20.4	8.7
	1720	11	19.6	9.3
	1735	12	22.1	7.7
	1615	13	21.5	8.5
	1610	21	20.8	8.8
	1605	23	21.9	8.5

All measurements taken one foot below the surface.

Date	Time	Station	Temp. C	D.O. mg/l
10/20/2022	700	1	18.2	7.9
	400	2	20.3	6
	700	3	17.2	7.7
	520	4	20.7	6.7
	410	5	23.8	5.5
	425	6	23.6	4.8
	440	7	22.6	6.8
	540	8	17	8.4
	600	9	18.1	7.8
	610	10	18.6	7.5
	620	11	18.3	7.6
	635	12	20.7	7.4
	510	13	20.3	7.1
	505	21	19.7	7.6
	500	23	20.8	7.2

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 ($\text{NO}_3\text{-N}$) and nitrite ($\text{NO}_2\text{-N}$) nitrogen, and 0.016 mg/l for phosphate phosphorus ($\text{PO}_4\text{-P}$). 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)	$\text{NO}_3\text{-N}$	$\text{NO}_2\text{-N}$	$\text{PO}_4\text{-P}$
10/19/2022	1750	1B	13	0.008	0.004	ND
		1S		0.007	0.001	ND
	1510	5B	11	0.009	0.011	0.042
		5S		0.01	0.012	0.026
	1525	6B	14	0.008	0.01	0.036
		6S		0.005	0.009	0.033
	1640	8B	12	0.003	0.001	ND
		8S		0.003	0.001	ND
	1700	9B	13	0.001	0.001	ND
		9S		0.001	0.001	ND
	1710	10B	14	0.001	0.001	ND
		10S	ND		0.001	ND
	1720	11B	13	0.001	ND	ND
		11S		0.001	ND	ND

Date	Time	Station	Temp C	D.O.mg/l
10/24/2022	1730	21	23.3	7.9
	1740	23	24.1	8.1
10/25/2022	640	21	22.3	7.5
	650	23	23	7.3

