

WATER QUALITY DATA PADRE ISLES AND CONTIGUOUS WATERS

May 31-June 1, 2022
June 7-8, 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

May 31, 2022. Day. Sunny. Wind SE 25mph. 30.3 C.

June 1, 2022. Night. Wind SE 15 mph. 27.4 C.

June 7, 2022. Day. Sunny. Wind SE 20 mph. 32.4 C.

June 8, 2022. Night. Wind SE 10 mph. 29.4 C.

Date	Time	Station	Temp. C	D.O. mg/l
5/31/2022	1905	1	31.7	7.7
	1620	2	30.4	6.6
	1915	3	30.7	7.8
	1740	4	31.2	7.2
	1630	5	30.5	6.7
	1645	6	30.4	7.9
	1700	7	30.3	6.9
	1800	8	31.9	10.8
	1815	9	30.1	7.8
	1825	10	30.9	9.1
	1835	11	30.3	7.8
	1850	12	29.4	6.6
	1730	13	30.4	7.4
	1725	21	30.7	7.5
	1720	23	31.9	8

All measurements taken one foot below the surface.

Date	Time	Station	Temp. C	D.O. mg/l
6/1/2022	715	1	29.6	5.2
	430	2	28.8	3.4
	725	3	27.7	3.4
	555	4	29.1	6
	440	5	29.4	3.8
	455	6	29.1	5.5
	515	7	29.6	5.2
	615	8	28.8	4.3
	630	9	29	5.3
	640	10	28.7	3.5
	650	11	29.1	5.7
	705	12	28.8	5.3
	545	13	29.5	6
	540	21	29.1	5.1
	535	23	29.9	6.1

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
5/31/2022	1905	1B	12	0.011	ND	ND
		1S		0.007	0.005	ND
	1630	5B	10	0.007	0.004	ND
		5S		0.001	0.003	ND
	1645	6B	13	0.001	0.002	ND
		6S		0.001	0.002	ND
	1800	8B	11	0.009	ND	ND
		8S		0.009	ND	ND
	1815	9B	11	0.011	ND	ND
		9S		0.01	ND	ND
	1825	10B	13	0.005	ND	ND
		10S		0.004	ND	ND
	1835	11B	12	0.005	ND	ND
		11S		0.005	ND	ND

Date	Time	Station	Temp C	D.O.mg/l
6/7/2022	1730	21	30	7.7
	1740	23	30.4	8.1
6/8/2022	610	21	28.3	4.6
	620	23	29	5.5

