

WATER QUALITY DATA PADRE ISLES AND CONTIGUOUS WATERS

Aug. 19-20, 2021

Aug. 26-27, 2021

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

Aug. 19, 2021. Day. Clear. Wind SE - 15 mph. 33.6 C.

Aug. 20, 2021. Night. Wind SE - 10 mph. 29.3 C.

Aug. 26, 2021. Day. Pt. cloudy. E - 10 mph. 34.3 C.

Aug. 27, 2021. Night. N - 10 mph. 25.9 C

Date	Time	Station	Temp. C	D.O. mg/l
8/19/2021	1905	1	31.3	8.8
	1615	2	30.5	5.2
	1915	3	32.6	9.4
	1740	4	32.3	10
	1625	5	31.1	5.3
	1640	6	31.3	6.2
	1700	7	31.3	4.3
	1800	8	32	9.6
	1815	9	30.6	7.1
	1825	10	31.5	8.4
	1835	11	31.2	8.4
	1850	12	31	6.5
	1730	13	31.3	7.9
	1725	21	31.1	7.7
	1720	23	31.9	8

All measurements taken one foot below the surface.

Date	Time	Station	Temp. C	D.O. mg/l
8/20/2021	710	1	30.6	5.5
	415	2	30.4	4.5
	720	3	30.1	6
	540	4	30.7	7.1
	425	5	30.4	4.5
	440	6	30.1	4.4
	500	7	30.4	4.5
	600	8	29	3.9
	620	9	30	5.7
	630	10	29.2	4.7
	640	11	29.9	6.1
	655	12	30	5
	530	13	30.1	6.5
	525	21	30	5.3
	520	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 0.007 mg/l for nitrate (NO₃-N) and nitrite (NO₂-N) nitrogen, and 0.010 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
8/19/2021	1905	1B	11	ND	ND	ND
		1S		0.007	ND	ND
	1625	5B	10	ND	ND	ND
		5S		ND	ND	ND
	1640	6B	13	ND	ND	ND
		6S		ND	ND	ND
	1800	8B	11	ND	ND	ND
		8S		ND	ND	ND
	1815	9B	11	0.007	ND	ND
		9S		0.007	ND	ND
	1825	10B	13	ND	ND	ND
		10S		ND	ND	ND
	1835	11B	11	ND	ND	ND
		11S		ND	ND	ND

Date	Time	Station	Temp C	D.O.mg/l
8/26/2019	1730	21	32.4	6.3
	1740	23	32.8	6.6
8/27/2019	605	21	31.4	5.2
	615	23	31.6	5.7

