

WATER QUALITY DATA PADRE ISLES AND CONTIGUOUS WATERS

May 28-29, 2020

June 4-5, 2020

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

5-28-2020. Day. Sunny. WSW - 10 mph. 33.4 C

5-29-2020. Night. N - 10-15 mph. 27.2 C

6-4-2020. Day. Pt.cloudy. SE - 10 mph. 33.2 C

6-5-2020. Night. SE - 5 mph. 29.7 C

Date	Time	Station	Temp. C	D.O. mg/l
5/28/2020	1755	1	29.5	9
	1515	2	28.6	2.9
	1805	3	30.3	8.4
	1640	4	30.6	8.3
	1525	5	29.7	6.8
	1540	6	30.8	8.4
	1600	7	29.9	7.7
	1700	8	30.3	10.3
	1715	9	28.8	7.7
	1725	10	29.9	9.4
	1735	11	29.9	8.2
	1740	12	28.7	6.8
	1630	13	29.9	8.4
	1620	21	29.5	7.6
	1625	23	29.9	8.2

All measurements taken one foot below the surface.

Date	Time	Station	Temp. C	D.O. mg/l
5/29/2020	700	1	27.6	4.6
	400	2	27.8	3.4
	710	3	27.5	2.3
	530	4	28.5	5.1
	410	5	29.1	4.5
	425	6	29.2	6.2
	445	7	29.1	5.4
	550	8	28.3	3.9
	610	9	28.4	5
	620	10	28.3	5
	630	11	28.4	5.2
	645	12	27.9	5.1
	520	13	28.7	5.7
	510	21	28.4	5.4
	505	23	29	5.2

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 0.007 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
5/28/2020	1755	1B	11	0.01	0.007	ND
		1S		ND	0.007	ND
	1525	5B	10	0.015	0.012	ND
		5S		0.016	ND	ND
	1540	6B	13	0.007	0.01	ND
		6S		0.011	ND	ND
	1700	8B	11	ND	0.007	ND
		8S		0.01	ND	ND
	1715	9B	12	ND	ND	ND
		9S		ND	ND	ND
	1725	10B	13	ND	0.014	ND
		10S		ND	ND	ND
	1735	11B	11	0.007	ND	ND
		11S		0.01	ND	ND

Date	Time	Station	Temp C	D.O.mg/l
6/4/2020	1735	21	31.2	8.7
	1745	23	31.4	8.9
6/5/2020	525	21	29.5	5.3
	535	23	29.8	5.5



