

WATER QUALITY DATA PADRE ISLES AND CONTIGUOUS WATERS

Oct. 16-17, 2023

Oct. 23-24, 2023

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. 16, 2023. Day. Clear. Wind N 15-20 mph. 24.9 C.

Oct. 17, 2023. Night. Wind N 5 mph. 13.1 C.

Oct. 23, 2023. Day. Clear. Wind SE 30 mph. 31.1 C.

Oct.24, 2023. Night. Wind SE 20 mph. 28.4 C.

Date	Time	Station	Temp. C	D.O. mg/l
10/16/2023	1810	1	21.9	9.4
	1530	2	22.5	7.6
	1820	3	22.2	10.8
	1645	4	23.8	8.1
	1540	5	23.3	8.6
	1555	6	24.3	7.5
	1620	7	24	7.8
	1705	8	21.5	11
	1720	9	21.4	10.1
	1730	10	21.4	9.7
	1740	11	21.4	9.2
	1755	12	23.4	7.4
	1635	13	22.9	8.8
	1630	21	22.7	9.1
	1625	23	22.6	9.5

All measurements taken one foot below the surface.

Date	Time	Station	Temp. C	D.O. mg/l
10/17/2023	705	1	19.7	7.2
	410	2	21.2	6.5
	715	3	19.1	7.6
	535	4	22.3	6.5
	420	5	22	7.2
	435	6	23.3	10.8
	455	7	23.1	6.2
	550	8	18.6	7.8
	615	9	19.5	7.7
	625	10	20.1	8.2
	635	11	19.4	7.7
	650	12	21.8	6.1
	525	13	21.5	7.3
	520	21	21	7.6
	515	23	21.5	7.7

All measurements taken one foot below the surface

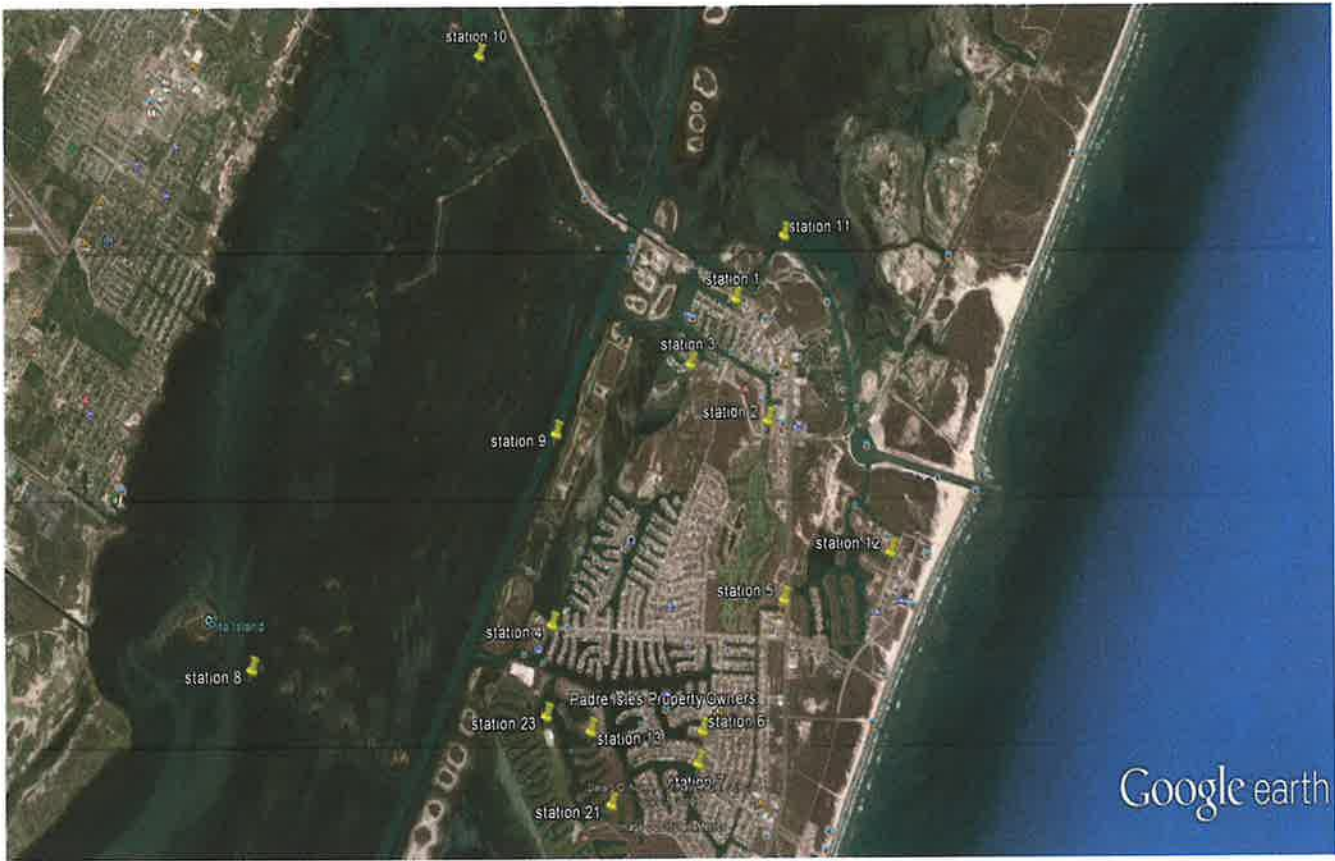
NUTRIENTS

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
10/16/2023	1810	1B	13	0.008	0.001	ND
		1S		0.004	0.001	ND
	1540	5B	11	0.005	0.001	ND
		5S		0.014	0.008	ND
	1555	6B	14	0.006	0.015	ND
		6S		ND	0.001	ND
	1705	8B	12	0.001	ND	ND
		8S		0.001	ND	ND
	1720	9B	13	ND	ND	ND
		9S		ND	ND	ND
	1730	10B	14	0.002	ND	ND
		10S		0.002	ND	ND
	1740	11B	13	0.001	ND	ND
		11S		0.001	ND	ND

Date	Time	Station	Temp C	D.O.mg/l
10/23/2023	1750	21	26	8.6
	1800	23	25.9	9
10/24/2023	630	21	26.3	6.7
	640	23	27	6.8



Google earth