

Project No. 03-859-026

Client: United States Army Corps of Engineers

Project: Matagorda Ship Channel; Contract No. DACW64-03-D-0008; Delivery Order No. 0026

Boring No.	Sample Number	Sample Depth (ft)	Soil Description	USCS	Water Content (%)	Liquid Limit	Plastic Limit	Plast. Index	Finer than #200 Sieve (%)
04-188									
	2	5-6.5	Light gray and tan POORLY GRADED SAND with SILT; traces of shell	SP	18.9				
	3	10-11.5	Light gray and tan WELL GRADED SAND with shells	SW	15.5	NV	NP	NP	2.4
	5	20-21.5	Gray SILTY SAND	SM	22.0				
	6	25-26.5	Gray and light gray WELL GRADED SAND with GRAVEL	SW	9.7				1.9
04-189									
	3	10-11.5	Gray SILTY SAND	SM	24.2				
	5	20-21.5	Gray and light gray SILTY SAND; mostly shell	SM	15.4				
	8	35-36.5	Gray and light gray POORLY GRADED SAND with GRAVEL	SP	14.0	NV	NP	NP	1.4
04-190									
	2	5-6.5	Gray and tan SILTY SAND	SM	19.0				
	4	15-16.5	Gray WELL GRADED SAND with GRAVEL	SW	19.9	NV	NP	NP	2.4
	6	25-26.5	Gray SILTY SAND with shells	SM	24.7				
04-191									
	3	10-11.5	Tan SILTY SAND with shells	SM	22.5				
	4	15-16.5	Tan POORLY GRADED SAND	SP	17.9				1.0
	5	20-21.5	Light gray and gray SILTY SAND with shells	SM	23.7				
04-192									
	1	0-1.5	Tan SANDY SILT with GRAVEL	ML	1.7				
	3	10-11.5	Gray POORLY GRADED SAND; traces of shells	SP	20.6				2.7
	6	25-26.5	Gray POORLY GRADED SAND	SP	24.1				3.2
04-193									
	2	5-6.5	Gray SILTY SAND	SM	26.8				
	6	25-26.5	Gray WELL GRADED SAND with GRAVEL and SHELLS	SW	11.8				3.3
04-194									
	3	10-11.5	Gray POORLY GRADED SAND with SILT; traces of shell	SP-SM	29.2	NV	NP	NP	9.2
	5	20-21.5	Gray POORLY GRADED SAND with SILT	SP-SM	22.8				
	7	30-31.5	Gray POORLY GRADED SAND with SILT	SP-SM	20.9				
04-195									
	2	5-6.5	Gray POORLY GRADED SAND	SP	26.6	NV	NP	NP	3.0
	4	15-16.5	Gray SILTY SAND	SM	25.7				
	6	25-26.5	Gray POORLY GRADED SAND with SILT	SP-SM	21.7				
04-196									
	4	15-16.5	Gray SILTY SAND	SM	21.1				
	7	30-31.5	Gray SILTY SAND; clay pockets and traces of shells	SM	20.0				
	9	40-41.5	Gray SANDY SILT; traces of shells	ML	26.9				
04-197									
	2	5-6.5	Gray SILTY SAND; traces of shells	SM	26.4	NV	NP	NP	14.9
	4	15-16.5	Gray SILTY SAND	SM	21.3				
	7	30-31.5	Gray SILTY SAND	SM	19.9				
04-198									
	2	5-6.5	Gray SILTY SAND	SM	23.6				47.5
	3	10-11.5	Gray SILTY SAND; traces of shells	SM	18.4				

Our letters and reports are for the exclusive use of the CLIENT. This document shall not be reproduced, except in full, without our prior written approval.

TOLUNAY-WONG  ENGINEERS, INC.

The graph displays the grain size distribution of a sample. The y-axis represents the percentage of material finer than a given grain size, ranging from 0 to 100. The x-axis represents the grain size in millimeters on a logarithmic scale, ranging from 200 mm to 0.001 mm. The curve shows that approximately 85% of the sample is finer than 4.75 mm, and about 14% is finer than 0.075 mm.

Grain Size (mm)	Percent Finer (%)
200	100
100	100
75	100
60	100
40	100
30	100
25	100
20	100
15	100
12.5	100
10	100
7.5	100
6.0	100
4.75	99
3.75	85
3.0	67
2.5	57
2.0	47
1.5	14
1.18	1
0.85	0
0.75	0
0.60	0
0.50	0
0.425	0
0.375	0
0.30	0
0.25	0
0.20	0
0.15	0
0.125	0
0.10	0
0.075	0
0.060	0
0.050	0
0.0425	0
0.0375	0
0.030	0
0.025	0
0.020	0
0.015	0
0.0125	0
0.010	0
0.0075	0
0.0060	0
0.0050	0
0.00425	0
0.00375	0
0.0030	0
0.0025	0
0.0020	0
0.0015	0
0.00125	0
0.0010	0

[illegible]

SOIL DATA					
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	DESCRIPTION	USCS
○	04-191	4	15-16.5	Tan POORLY GRADED SAND	SP

**Tolunay-Wong
Engineers, Inc.**

Project No.: 03-859-026