McCLELLAND ENGINEERS

Boring Number	Sample Number	Depth, ft	Weight of Dry Soil, gms (Total sample)	Percent Finer 0.375	#4	#10	#40	#200
86-206	23	70	97.24	100	99	99	93	15
86-206	26	85	113.04		100	99	87	16
86-206	29	96	43.97		100	99	91	46
86-207	11	24	115.72			100	91	30
86-207	14	35	75.61			100	80	3
86-207	17	55	100.17		100	99	72	8
86-207	21	76	38.59		100	99	75	45
86-208	5	8	133.70		100	99	71	7
86-208	8	16	35.96	100	99	94	80	66
86-208	12	24	29.29	100	97	92	64	34
86-208	15	30	97.27			100	76	2
86-208	18	45	119.30		100	99	56	2
86-208	21	60	89.73		100	98	40	7
86-208	23	70	125.15			100	91	6
86-208	27	81	81.23			100	99	4
86-208	29	84	29.60	100	99	95	70	35
86-208	33	95	71.36			100	99	6
86-209	6	10	116.39			100	97	7
86-209	10	24	31.53		100	93	61	30
86-209	13	35	97.58			100	86	7
86-209	16	50	119.79	100	99	93	14	4
86-209	22	78	74.92				100	73
86-209	23	80	101.93				100	55

RESULTS OF ABBREVIATED MECHANICAL SIEVE ANALYSES

PLATE 12

REPRODUCED AT GOVERNMENT EXPENSE

LOG OF BORING NO. 86-209

PROPOSED DOCK FACILITIES
BEAUMONT RESERVE FLEET
BEAUMONT, TEXAS

LOCATION : See Plate 1

SURFACE EL

DEPTH, FT	SYMBOL	SAMPLES		BLOWS PER FT	% PASSING NO. 200 SIEVE	UNIT DRY WT LB PER CU FT	WATER CONTENT, % (Plastic Limit / Natural / Liquid Limit; 20 40 60)	UNDRAINED SHEAR STRENGTH, KIPS PER SQ FT (0.5 1.0 1.5 2.0 2.5) / KILOPASCALS (25 50 75 100 125)	PENETROMETER
	1 J		Fill: Tan fine sand and very stiff black clay					⊠	4.5+
	2 J								
5	3 Q		- firm below 4'					⊠	1.0
	4 J								
	5 J								
10	6 J		Very loose gray fine sand						
15	7 J	X	Soft gray clay with organic material (* - 1 blow drove hammer 18-in.)	1*					
20	8 Q							◇	
	9 Q							◇	
	10 Q		Medium dense light gray fine sand					◇	
25	11 J	X	- very loose to 26'	1-1-1					
			- with clay pockets and organic material to 28'						
30	12 J	X	- with few clay seams 30' to 48'	10-11-13					
35	13 J	X		5-7-8					
40	14 J	X		10-11-18					
45	15 J	X		3-8-11					
			- loose 48' to 50' - fine to medium 48' to 53'						
50	16 J	X		2-2-3					

(Continued on Plate 7b)

JOB NO. : 0187-0500

SAMPLER : 3-in. Thin-walled Tube and 2-in. Split-barrel Sampler

DRILLING METHOD : Wet Rotary

STRENGTH LEGEND
- ● Unconfined Compression
- ▲ Unconsolidated-Undrained Triaxial Compression
- ✦ Miniature Vane
- (open symbols above indicate remolded tests)
- ◇ Torvane
- ⊠ Hand Penetrometer

McCLELLAND ENGINEERS

LOG OF BORING NO. 86-209 (Cont'd)

PROPOSED DOCK FACILITIES
BEAUMONT RESERVE FLEET
BEAUMONT, TEXAS

DEPTH, FT	SYMBOL	SAMPLES	(Continued from Plate 7a)	BLOWS PER FT	% PASSING NO. 200 SIEVE	UNIT DRY WT LB PER CU FT	WATER CONTENT, % (Plastic Limit — Natural — Liquid Limit; 20, 40, 60)	UNDRAINED SHEAR STRENGTH KIPS PER SQ FT (0.5, 1.0, 1.5, 2.0, 2.5) / KILOPASCALS (25, 50, 75, 100, 125)	PENETROMETER
			Medium dense light gray fine to medium sand						
			- fine below 53'						
55	17J			3-9-9					
			- dense 58' to 65'						
60	18J			10-18-18					
65	19J			9-19-22					
			- with clay layer 66' to 67'						
			- with organic material below 67'						
70	20J			10-10-10					
75	21J		Stiff light gray clay with sand pockets	7-7-5				⊠	2.0
			- very stiff below 75'						
	22Q							⊠	4.5+
80	23Q		- with sandy clay layer below 79'					⊠	4.5+
			Driller: C. Peltier Technician: J. McCoy Drilling Equipment: Truck-mounted Failing 36						
85									
90									
95									
100									

JOB NO.: 0187-0500
COMPLETION DEPTH: 80ft
DATE: January 2, 1987
DEPTH TO WATER IN BORING: 5.2' at low tide
CAVED AT: 5.9ft
DATE: January 2, 1987
ELAPSED TIME: 4 hours

SAMPLER: 3-in. Thin-walled Tube and 2-in. Split-barrel Sampler

DRILLING METHOD: Wet Rotary

STRENGTH LEGEND
- ● Unconfined Compression
- ▲ Unconsolidated-Undrained Triaxial Compression
- ✦ Miniature Vane
- (open symbols above indicate remolded tests)
- ⌖ Torvane
- ⊠ Hand Penetrometer

PROJECT: DOCK FACILITY, RESERVE FLEET, BEAUMONT, TX

TEST ASSIGNMENT SHEET

CONTRACT NO.: DACW 64-87-D-0001
DELIVERY ORDER NO. 0004
DATE: 1/20/87 ASSIGNED BY: KJH

BORING NO.	SAMPLE NO.	SAMPLE DEPTH	Visual Classification (0010)	Moisture Content Test (0016)	Unit Dry Weight Test (0017)	Unit Wet Weight Test (0018)	Specific Gravity of Solids Test (0019)	Liquid Limit Test (0020)	Plastic Limit Test (0021)	Bar Linear Shrinkage (0022)	Abbreviated Mechanical Analysis Test (0023)	Complete Mechanical Analysis Test (0024)	Hydrometer Analysis Test (0025)	Standard Compaction Test (0026)	Modified Compaction Test (0027)	Unconfined Compression Test (0028)	Torvane Shear (0029)	Soil Salinity (0030)	Remarks
86-209	1J	1-2	X	X															Tn Sd. & V.S. Bl. Cl.
"	2J	3-4	X	X															" "
"	3Q	4-5	X	X	X			X	X						X				" Med. Bl. Cl
"	4J	5-6	X	X															
"	5J	7-8	X	X															
"	6J	9-10	X	X						X									V.L. Gy. Sd.
"	7J	14-15	X	X															V. So. Gy. Cl. w/ Org. Mat. [SPT=1]
"	8Q	19-20	X	X	X			X	X						X				
"	9Q	21-22	X	X															
"	10Q	23-24	X	X						X									Med. D. Lt. Gy. Sd.
"	11J	25-26	X	X															V.L. " " "
"	12J	29-30	X	X															" " " w/ Cl. Poc. & Org. Mat.
"	13J	34-35	X	X						X									" " " w/ Cl. Sms.
"	14J	39-40	X	X															" " " "
"	15J	44-45	X	X															" " " w/ Cl. Sms.
"	16J	49-50	X	X						X									V.L. Lt. Gy. Sd.
"	17J	54-55	X	X															Med. D. Lt. Gy. Sd.
"	18J	59-60	X	X															D. Lt. Gy. Sd.
"	19J	64-65	X	X															" " "
"	20J	69-70	X	X															" " " w/ Org. Mat.
"	21J	74-75	X	X															S. Lt. Gy. Cl. w/ Sd. Poc.
86-209	22Q	77-78	X	X	X			X	X	X					X				V.S. " " " "

PROJECT: Dock Facility, Reserve Fleet, Beaumont, TX

TEST ASSIGNMENT SHEET

CONTRACT NO. : DACW64-87-D-0001

DELIVERY ORDER NO. 0004

DATE : _____ ASSIGNED BY : _____

BORING NO.	SAMPLE NO.	SAMPLE DEPTH	Visual Classification (0010)	Moisture Content Test (0016)	Unit Dry Weight Test (0017)	Unit Wet Weight Test (0018)	Specific Gravity of Solids Test (0019)	Liquid Limit Test (0020)	Plastic Limit Test (0021)	Bar Linear Shrinkage (0022)	Abbreviated Mechanical Analysis Test (0023)	Complete Mechanical Analysis Test (0024)	Hydrometer Analysis Test (0025)	Standard Compaction Test (0026)	Modified Compaction Test (0027)	Unconfined Compression Test (0028)	Torvane Shear (0029)	Soil Salinity (0030)	Remarks
86-209	23Q	79-80	X	X						X									V.S. Lt. Gy. Cl. w/ Sd. Ly.

BORING NUMBER	SAMPLE NUMBER/ TYPE	SAMPLE DEPTH (Feet)	VISUAL CLASSIFICATION	U S C	MOISTURE CONTENT (%)	UNIT DRY WEIGHT (pcf)	UNIT WET WEIGHT (pcf)	SPECIFIC GRAVITY OF SOLIDS	LIQUID LIMIT (%)	PLASTIC LIMIT (%)	BAR LINEAR SHRINKAGE (%)	ABBREVIATED MECHANICAL ANALYSIS	COMPLETE MECHANICAL ANALYSIS	HYDROMETER ANALYSIS	STANDARD COMPACTION TEST	MODIFIED COMPACTION TEST	UNDRAINED SHEAR STRENGTH (ksf)*	TORVANE SHEAR (ksf)	SOIL SALINITY (Parts per Thousand)
86-209	1J	1-2	Very stiff black clay w/vertical sand seams and organic matter	CH	54														
	2J	3-4	Brown silty fine sand	SM	13														
	3Q	4-5	Firm dark gray clay w/organic matter	CH	62	61			100	29							0.78		
	4J	5-6	Brown and dark brown fine sand	SP	22														
	5J	7-8	Gray fine sand w/roots	SP	25														
	6J	9-10	Gray fine sand	SP-SM	24							Plate 12							
	7J	14-15	Soft black clay w/organic matter	CH	125														
	8Q	19-20	Firm dark gray clay w/roots	CH	194	25			232	64							0.56		
	9Q	21-22	Soft gray clay w/organic matter	CH	158														
	10Q	23-24	Dark gray clayey sand w/ organic matter	SC	174							Plate 12							
	11J	25-26	Gray sandy clay	SC	19														
	12J	29-30	Brown fine sand	SP	22														
	13J	34-35	Brown clayey sand	SP-SM	21							Plate 12							
	14J	39-40	Brown fine sand	SP	23														
	15J	44-45	Brown fine sand	SP	20														
	16J	49-50	Brown fine sand	SP	20							Plate 12							
	17J	54-55	Firm gray clay w/sand seams	CH	31														
	18J	59-60	Gray silty sand	SM	24														
	19J	64-65	Gray silty sand	SM	21														
	20J	69-70	Gray silty sand	SM	19														
	21J	74-75	Stiff gray sandy clay	CL	18														
	22Q	77-78	Very stiff brown and brownish yellow clay w/ sand pockets	CL	18	113			41	13		Plate 12					384		
	23Q	79-80	Very stiff gray sandy clay	CL	17							Plate 12							

* Based on Unconfined Compression Test

SUMMARY OF TEST RESULTS

Delivery Order No. 0004
Proposed Dock Facilities
Beaumont Reserve Fleet

Boring Number	Sample Number	Depth, ft	Weight of Dry Soil, gms (Total sample)	Percent Finer				
				0.375	#4	#10	#40	#200
86-206	23	70	97.24	100	99	99	93	15
86-206	26	85	113.04		100	99	87	16
86-206	29	96	43.97		100	99	91	46
86-207	11	24	115.72			100	91	30
86-207	14	35	75.61			100	80	3
86-207	17	55	100.17		100	99	72	8
86-207	21	76	38.59		100	99	75	45
86-208	5	8	133.70		100	99	71	7
86-208	8	16	35.96	100	99	94	80	66
86-208	12	24	29.29	100	97	92	64	34
86-208	15	30	97.27			100	76	2
86-208	18	45	119.30		100	99	56	2
86-208	21	60	89.73		100	98	40	7
86-208	23	70	125.15			100	91	6
86-208	27	81	81.23			100	99	4
86-208	29	84	29.60	100	99	95	70	35
86-208	33	95	71.36			100	99	6
86-209	6	10	116.39			100	97	7
86-209	10	24	31.53		100	93	61	30
86-209	13	35	97.58			100	86	7
86-209	16	50	119.79	100	99	93	14	4
86-209	22	78	74.92				100	73
86-209	23	80	101.93				100	55

RESULTS OF ABBREVIATED MECHANICAL SIEVE ANALYSES