JOB NO. 55016 THINK SAFETY FIRST

BORING NO. CB-85-32

TYPE BORING: DISTURBED

LOCATION: CORPS OF ENGINEERS GALVESTON FACILITY

CONDITION	CONSISTENCY	COLOR	MATERIALS	CHARACTERISTICS
Lo - LOOSE M-De - MEDIUM DENSE De - DENSE	VSo - VERY SOFT So - SOFT Fm - FIRM St - STIFF VSt - VERY STIFF H - HARD	L - LIGHT D - DARK G - GRAY T - TAN R - RED Y - YELLOW Br - BROWN Bk - BLACK Bl - BLUE Gr - GREEN	Cl - CLAY, CLAYEY Si - SILTY, SILT Sa - SANDY, SAND Gv - GRAVELLY, GRAVEL Ls - LIMESTONE Sts - SILTSTONE Ss - SANDSTONE Lig - LIGNITE Sh - SHALE SAND ADJECTIVES: F - FINE, M - MEDIUM, Co - COARSE	Calc - CALCAREOUS Sh - SHALEY Lig - LIGNITIC Ch - CALICHE Org - ORGANIC Lam - LAMINATED Sls - SLICKENSIDED Sl - SLIGHTLY Sm(s) - SEAM(S) Fe - FERROUS

SOIL DESCRIPTION

TOP SOIL THICKNESS _____

SUR. ELEV _____

TEST ASSIGNMENT	SAMPLE NO.	PEN. RDG.	DEPTH, FT.	SAMPLES	CONSISTENCY OR CONDITION	COLOR	MINOR MATERIAL OR ADJECTIVE	PREDOMINANT MATERIAL	CHARACTERISTICS OR MODIFICATIONS	BLOWS PER FT.	LIQUID LIMIT	PLASTIC LIMIT	MOISTURE CONTENT, %	SHEAR STRENGTH, TSF PEN. - SHEAR	UNIT DRY WT. LB./CU. FT.
					FM	G	Sa	LL	W/SHELL FRAG						
	J-12		55												
	J-13		60						(CL)						
			65												
			70												
			75												
			80												
			85												
			90												
			95												
			100												

0.25 - .07 VSO; 0.50 - .15 SO; 0.75 - .23 SO; 1.00 - .31 FM; 1.25 - .39 FM; 1.50 - .46 FM; 1.75 - .56 ST; 2.00 - .62 ST; 2.25 - .69 ST; 2.50 - .78 ST; 2.75 - .85 ST; 3.00 - .93 ST; 3.25 - 1.01 VST; 3.50 - 1.08 VST; 3.75 - 1.16 VST; 4.00 - 1.24 VST; 4.25 - 1.32 VST; 4.5 - 1.40 VST; 4.5+ - 1.5 H

0.5 1.0 1.5

COMPLETION DEPTH: 60'
DATE: 2-13-85

DEPTH TO WATER: 11'
DATE: 2-14-85

JOB NO. 55016

BORING NO. 85-32

CREW: R. HARKER; E. GOLDING; F. SMITH

PLATE

JOB NO. 55016 THINK SAFETY FIRST

BORING NO. LB-85-32

TYPE BORING: DISTURBED

LOCATION: CORPS OF ENGINEERS GALVESTON FACILITY

CONDITION	CONSISTENCY	COLOR		MATERIALS		CHARACTERISTICS
Lo - LOOSE M-De - MEDIUM DENSE De - DENSE	VSo - VERY SOFT So - SOFT Fm - FIRM St - STIFF VSt - VERY STIFF H - HARD	L - LIGHT D - DARK G - GRAY T - TAN R - RED Y - YELLOW	Br - BROWN Bk - BLACK Bl - BLUE Gr - GREEN	Cl - CLAY, CLAYEY Si - SILTY, SILT Sa - SANDY, SAND Gv - GRAVELLY, GRAVEL Ls - LIMESTONE	Sls - SILTSTONE Ss - SANDSTONE Lig - LIGNITE SAND ADJECTIVES - F - FINE, M - MEDIUM, Co - COARSE	Sh - SHALE Calc - CALCAREOUS Sh - SHALEY Lig - LIGNITIC Ch - CALICHE Org - ORGANIC Lam - LAMINATED Sls - SLICKENSIDED Sl - SLIGHTLY Sm(s) - SEAM(S) Fe - FERROUS

TEST ASSIGNMENT	SAMPLE NO.	PEN. RDG.	DEPTH, FT.	SAMPLES	SOIL DESCRIPTION (TOP SOIL THICKNESS ____ SUR ELEV) CONSISTENCY OR CONDITION	COLOR	MINOR MATERIAL OR ADJECTIVE	PREDOMINANT MATERIAL	CHARACTERISTICS OR MODIFICATIONS	BLOWS PER FT.	LIQUID LIMIT	PLASTIC LIMIT	MOISTURE CONTENT, %	SHEAR STRENGTH, TSF PEN - SHEAR / PEN. - SHEAR (0.5, 1.0, 1.5)	UNIT DRY WT. LB./CU. FT.
	J-1				MDE	LT G	CL	SA							
	J-2		5						- W/CL SEAMS AND SHELL FRAGS. - FREE WATER AT 6'						
	J-3		10						- W/SHELL FRAG AND PETROCHEMICAL ODOR BELOW 10'						
	J-4		15												
	J-5		20												
	J-6		25						(SC)						
	J-7		30		FM	G	SA	CL	- W/SHELL FRAG AND PETROCHEMICAL ODOR						
	J-8		35												
	J-9		40						- W/SHELL FRAG.						
	J-10		45						- W/SHELL FRAG.						
	J-11		50						(CL)						

COMPLETION DEPTH: DEPTH TO WATER:
DATE: DATE:

JOB NO. ____

BORING NO. ____ CREW: ____

PLATE

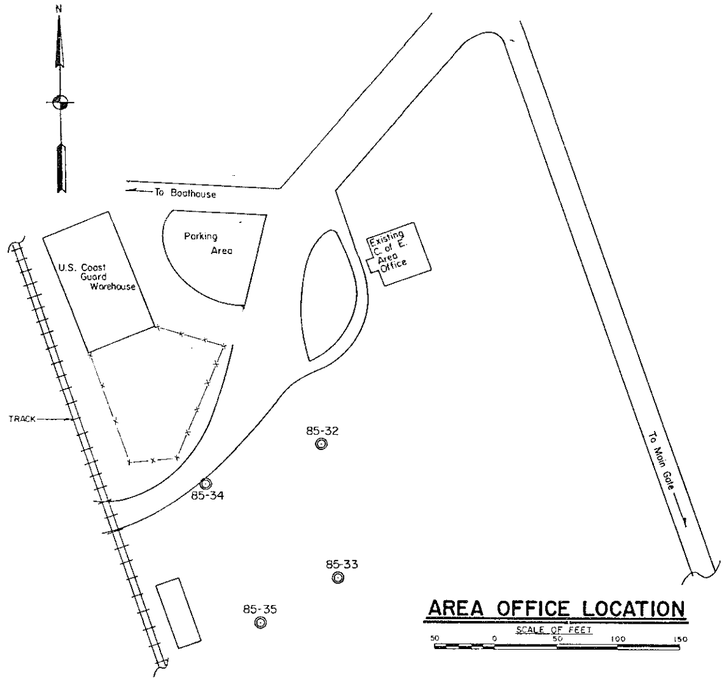
PROJECT: 55016 (COLE) Galveston

SUMMARY OF SOIL TESTS

BORING NO.	SAMPLE NO.	ELEV. OR DEPTH FEET	W %	ATTERBERG LIMITS LL	PL	PI	SL	SIEVE ANAL. % RETAINED #10	#40	#200			DRY UNIT WEIGHT LB/FT³	UNCONFINED COMPRESSION STRESS TSF	% STRAIN AT FAILURE	TRIAXIAL COMPRESSION TYPE	σ_3 TSF	$\sigma_1 - \sigma_3$ TSF		SOIL DESCRIPTION
55-32																				
	J-1	1																		medium dense clayey sand (SC)
	J-2	5																		medium dense clayey sand (SC) w/clay seams and shell fragments
	J-3	10																		medium dense clayey sand (SC) w/shell fragments and petrochem odor
	J-4	15																		Same as above
	J-5	20																		Same as above
	J-7	30																		Firm gray sandy clay (CL) w/shell fragment and petrochemical odor
	J-8	35																		Same as above
	J-9	40																		Firm gray sandy clay (CL) w/shell fragment
	J-10	45																		Same as above
	J-11	50																		Same as above
	J-12	55																		Same as above
	J-13	60																		Same as above

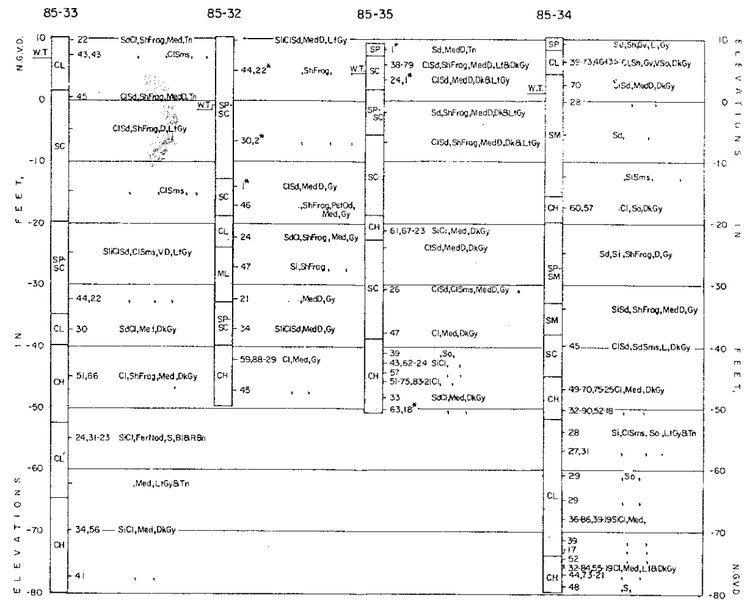
PLATE

NATIONAL SOIL SERVICES
HOUSTON, TEXAS

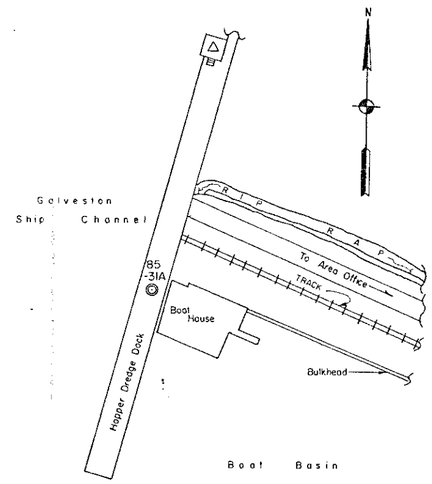


AREA OFFICE LOCATION

SCALE OF FEET
50 0 50 100 150



LOGS OF BORINGS



BOAT HOUSE LOCATION

SCALE OF FEET
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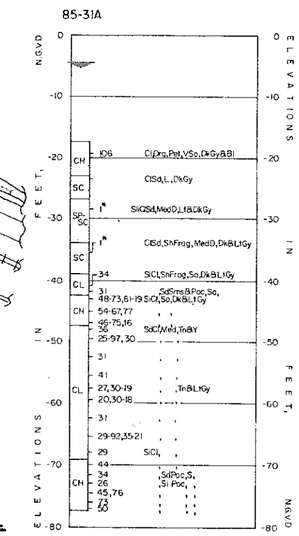
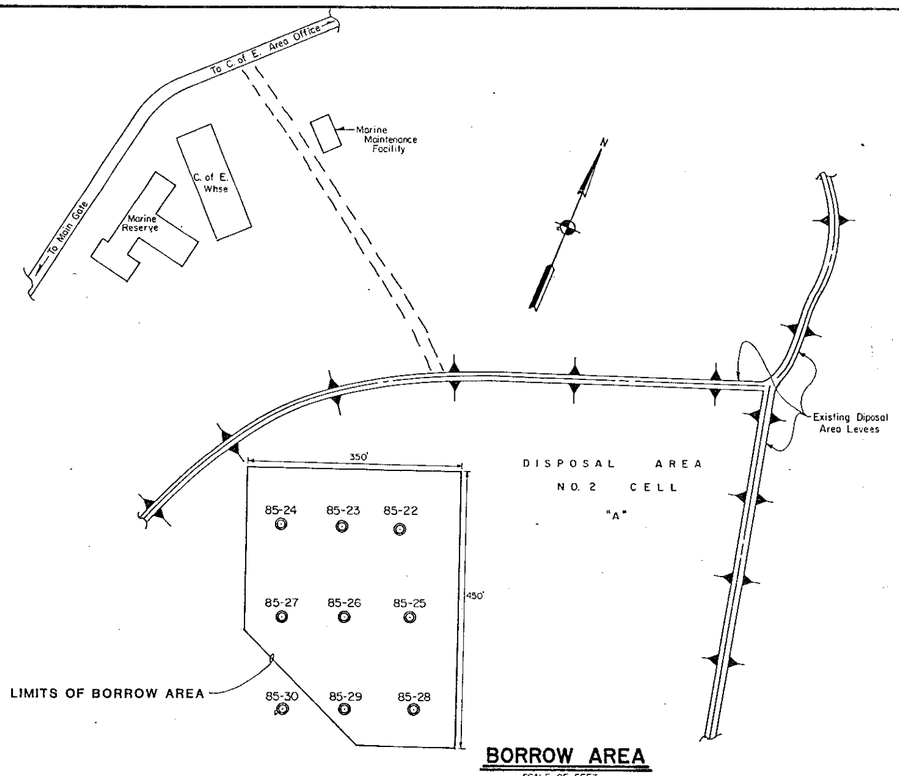
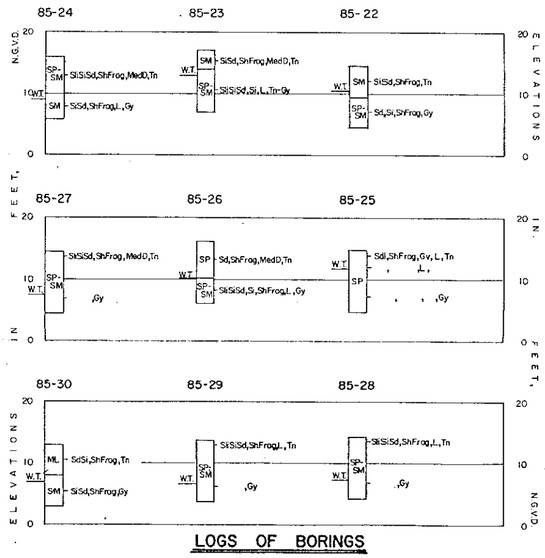


LOG OF BORING



BORROW AREA

SCALE OF FEET
100 0 100 200



LOGS OF BORINGS

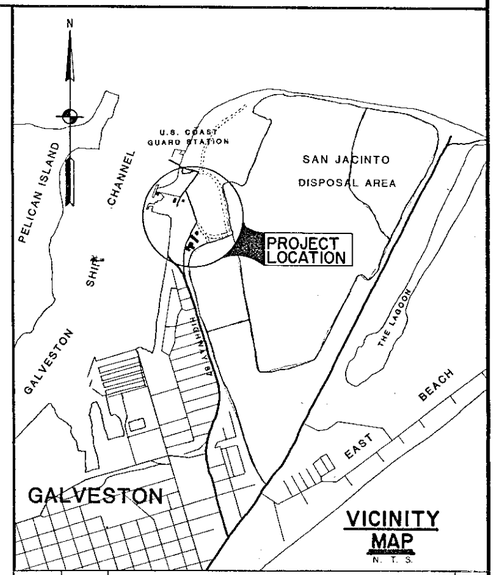
LABORATORY CLASSIFICATION

SP Poorly Graded Sands Or Gravelly Sands, Little Or No Fines.
SC Clayey Sands, Sand-Clay Mixtures.
ML Inorganic Silts And Very Fine Sands, With Slight Plasticity.
CL Inorganic Clays Of Low To Medium Plasticity, Lean Clays.
CH Inorganic Clays Of High Plasticity, Fat Clays.
SM Silty Sands, Sand-Silt Mixtures

NOTES:
1. SOILS HAVE BEEN CLASSIFIED IN ACCORDANCE WITH MILITARY STANDARD 619B "UNIFIED SOIL CLASSIFICATION SYSTEM FOR ROADS, AIRFIELDS, EMBANKMENTS AND FOUNDATIONS." CONSISTENCY OF SOILS SUCH AS SOFT, MEDIUM, HARD, LOOSE, DENSE, ETC., ARE RELATIVE TERMS BASED ON ESTIMATED UNDISTURBED SHEAR STRENGTH OF THE MATERIAL AS DETERMINED BY VISUAL CLASSIFICATION, POCKET PENETROMETER TESTS AND PENETRATION RESISTANCE DURING SAMPLING.
2. FIGURE TO THE RIGHT OF BORING LOGS ARE WATER CONTENTS IN PERCENT OF THE DRY WEIGHT, DRY DENSITY, LIQUID LIMIT, PLASTIC LIMIT, AND BAR LINEAR SHRINKAGE. (MC-UDW),(LL-PL),(B.L.S)*

VISUAL CLASSIFICATION

Bl	Black	Gv	Gravel or Gravelly	S	Stiff
Bn	Brown or Brownish			Sd	Sand or Sandy
		L	Loose	Sh	Shell or Shelly
Cl	Clay or Clayey	Lt	Light	Si	Silt or Silty
				Sm	Seam or Seams
D	Dense	Med	Medium	Sp	Soft
Dk	Dark				
		Nod	Nodules	Tn	Tan
Frag	Fragments	Od	Odor		
Fer	Ferrous	Poc	Pocket or Pockets	V	Very
		Pet	Petrochemical	W.T.	Water Table
		R	Red	Y	Yellow or Yellowish



VICINITY MAP

N. T. S.

REVISION	DATE	BY

OFFICE OF THE DISTRICT ENGINEER
U. S. ARMY ENGINEER DISTRICT, GALVESTON
CORPS OF ENGINEERS
GALVESTON, TEXAS

DRAWN BY:
TRACED BY:
CHECKED BY:
SUBMITTED BY:
CHIEF
APPROVED:
CHIEF DESIGN BRANCH

FT. POINT RESERVATION
GALVESTON, TEXAS

AREA OFFICE, BOATHOUSE AND BORROW AREA

BORING LOCATIONS AND LOGS

APPROVED:
CHIEF, ENGINEERING DIVISION
DATE:

SCALE:
DRAWING NUMBER
SHEET
FILE NO.

PLATE 1