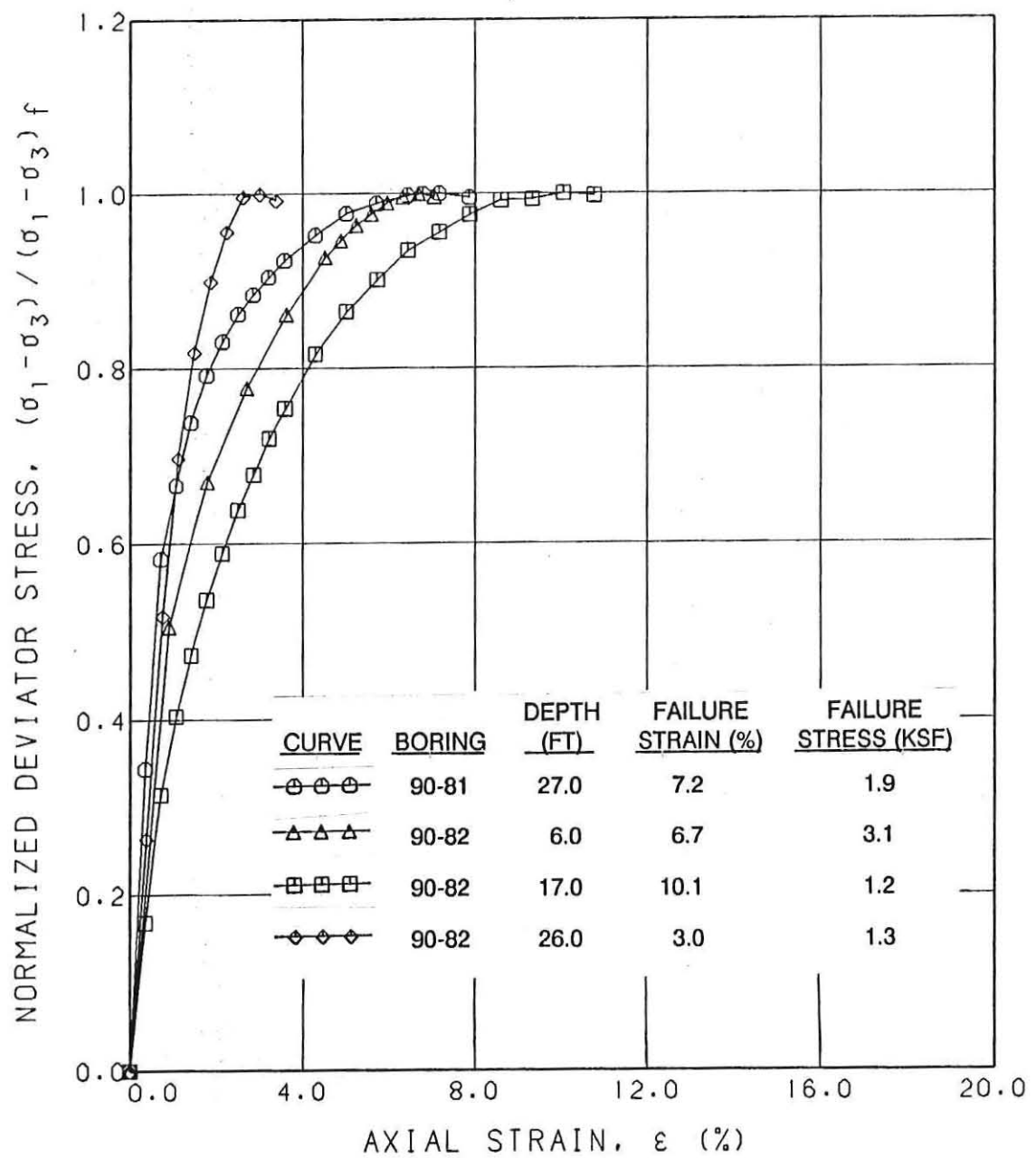
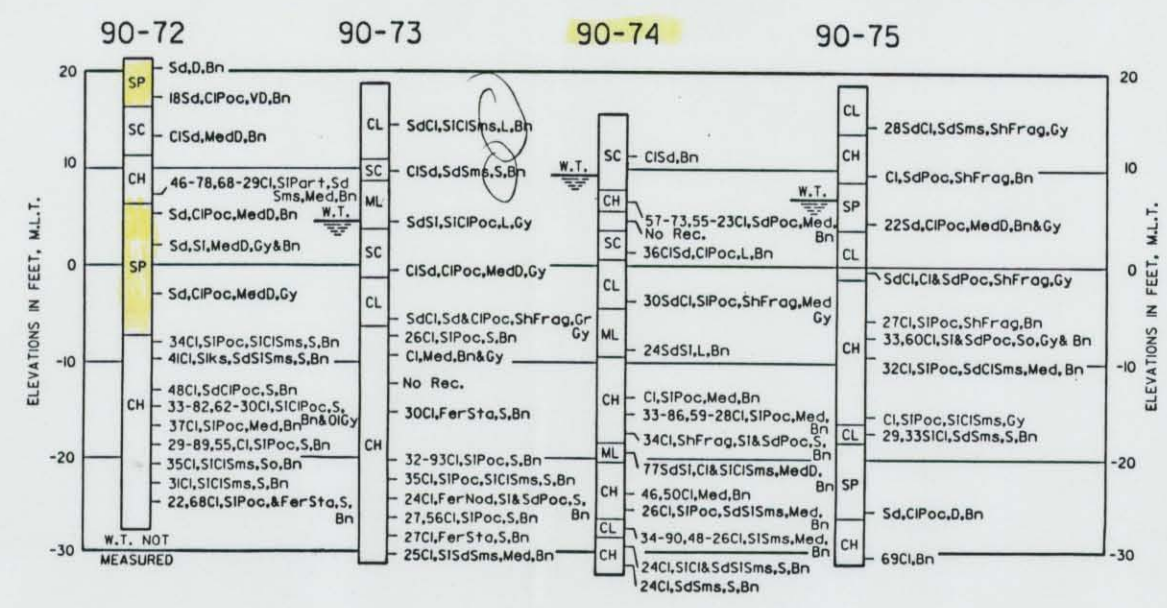


SUMMARY OF TEST RESULTS
Galveston District, Corps of Engineers
Delivery Order No. 0016
Brazos Island Harbor
Brownsville Ship Channel

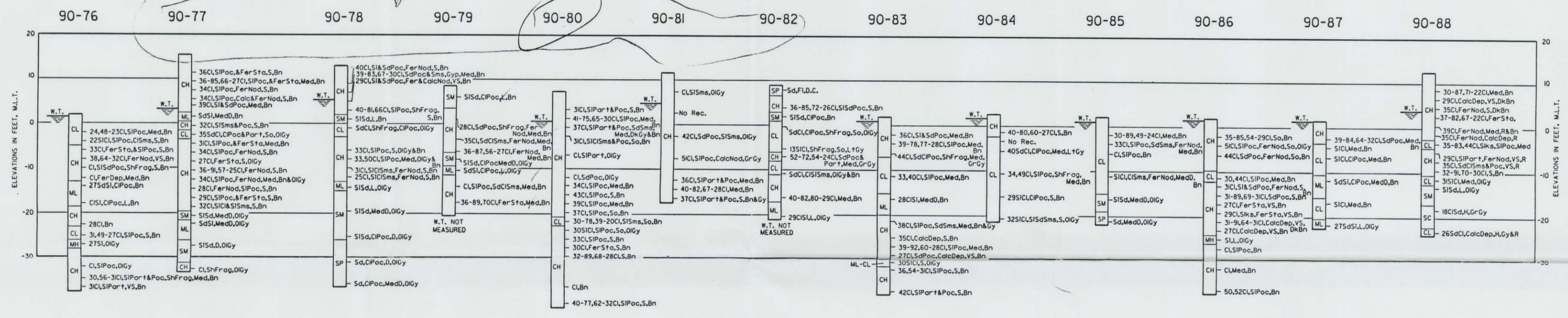
Boring Number	Sample Number	Sample Depth (ft)	Visual Classification	USCS	MC (%)	UDW (pcf)	LL	PL	PI	Gradation, % Passing Sieve No. 4 10 40 200	UNC Su (ksf)	TV Su (ksf)
90-81	1J	3.5-5	Olive gray CLAY w/silt seams	CH								
90-81	2J	13.5-15	Olive gray CLAY w/ sand pckts & silt sms	CH	42							
90-81	3J	18.5-20	Greenish gray CLAY w/si pckts, fe stns & calc nods	CH	51					98 96 94 91		
90-81	4Q	23-25	Firm brown CLAY w/silt parts & pckts and ferrous stns	CH	36							
90-81	5Q	25-27	Firm brown CLAY	CH	40	82	67	28		100	0.9	0.5
90-81	6Q	27-29	Stiff brown and gray CLAY w/ silt parts & pckts	CH	37							
90-82	1Q	4-6	Stiff brown CLAY w/ silty sand pckts	CH	36	85	72	26		100 99	1.6	0.6
90-82	2J	6-8	Brown fine SILTY SAND w/clay pckts & free water	SM								
90-82	3J	8.5-10	Olive gray SANDY CLAY w/clay pckts & shell frags	CL						100 94 64		
90-82	4J	13.5-15	Light gray SILTY CLAY w/ shell fragments	CL	13							
90-82	5Q	15-17	Firm greenish gray CLAY w/ sand pockets & partings	CH	52	72	54	24		97 94 88 84	0.6	0.3
90-82	6J	19.5-20	Olive gray & brown SANDY CLAY w/clayey silt seams	CL						100 96 59		
90-82	7Q	24-26	Firm brown CLAY	CH	40	82	80	29		100	0.7	0.5
90-82	8J	28.5-30	Olive gray CLAYEY SILT	ML	29							



STRESS-STRAIN CURVES
UNCONFINED COMPRESSION TEST



DISPOSAL AREA No. 2



DISPOSAL AREA No. 4

NOTES:

1. SOILS HAVE BEEN CLASSIFIED IN ACCORDANCE WITH MILITARY STANDARD 698B "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. FIGURES 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-UOW), (LL-PL), (B.L.S.)
3. BORINGS WERE DRILLED USING WET ROTARY DRILLING TECHNIQUES AND UNDISTURBED SAMPLES WERE RECOVERED WITH A 3-INCH DIAMETER THIN WALL SAMPLER WHERE COHESIVE MATERIALS WERE ENCOUNTERED. WHERE COHESIONLESS MATERIALS WERE ENCOUNTERED, DISTURBED SAMPLES WERE TAKEN WITH A SPLIT SPOON SAMPLER DURING PERFORMANCE OF STANDARD PENETRATION TESTING.
4. WATER TABLE LEVELS SHOWN ON BORING LOGS WERE DETERMINED AFTER DRILLING BORINGS BY MEASURING THE TOP OF FLUID LEVELS IN THE BORINGS. INASMUCH AS WET ROTARY DRILLING TECHNIQUES AND DRILLING MUD WERE USED TO DRILL THE HOLES, THE LEVEL OF DRILLING FLUIDS IN THE BORE HOLES MAY NOT HAVE STABILIZED TO THE LEVEL OF THE ACTUAL WATER TABLE. ADDITIONALLY, WATER TABLES IN THE FIELD ARE LIKELY TO FLUCTUATE DEPENDING ON WEATHER CONDITIONS. THEREFORE, SOME VARIATION SHOULD BE ANTICIPATED BETWEEN WATER TABLES INDICATED AND WATER TABLES ENCOUNTERED IN THE FIELD.

VISUAL CLASSIFICATIONS

Bn Brownish	Gr Green(ish)	R Reddish	Sta Stains)
Cdc Colorous	Gy Gray(ish)	Rec Recovery	Y Very
Cl Clayey	Gyp Gypsum	S Stiff	W.T. Water Table
D Dense	H Hard	Sh Shale	
D.C. Driller's	L Loose	Sh Shelly	
Classification	Lt Light	SI Silty	
Dep. Deposit(s)	Med Medium	Sls Silty	
Dk Dark	Nod Nodules	Sks Slickensides	
Fer Ferrous	Ol Olive	Sms Seams	
Fl Fine(s)	Port Particulate(s)	So Soft	
Frag Fragmental(s)	Poc Pocket(s)		

LABORATORY CLASSIFICATION

SP POORLY GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES.
 SM SILTY SANDS, SAND-SILT MIXTURES.
 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.
 MH INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS.
 CH INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS.

REVISION	DATE	DESCRIPTION	BY
OFFICE OF THE DISTRICT ENGINEER U.S. ARMY ENGINEER DISTRICT, GALVESTON CORPS OF ENGINEERS GALVESTON, TEXAS			
DRAWN BY P.B.S.		BRAZOS ISLAND HARBOR, TEXAS BROWNSVILLE CHANNEL DREDGING INSHORE REACH NO. 1 DISPOSAL AREAS Nos. 2 & 4 BORING LOGS	
CHECKED BY J.T.F.		SUBMITTED BY David Campbell DIST. ENGINEER	
APPROVED BY David Campbell DIST. ENGINEER		DATE MAY 1992	
Prepared under the direction of Brink P. Miller, Col., C.E. District Engineer			
SCALE AS SHOWN		SPEC. DATE	
DRAWING NUMBER F-6		SHEET 13 OF 17 FILE NO. RIO 901-204	