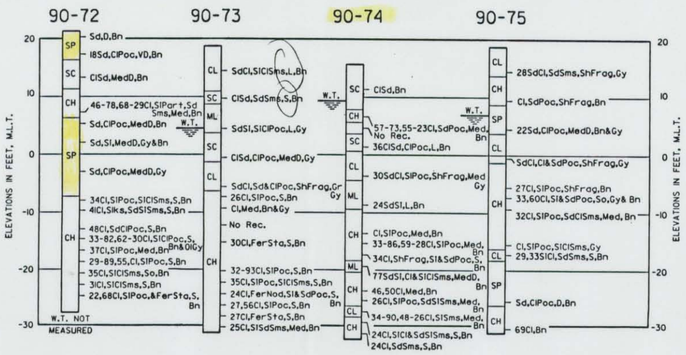
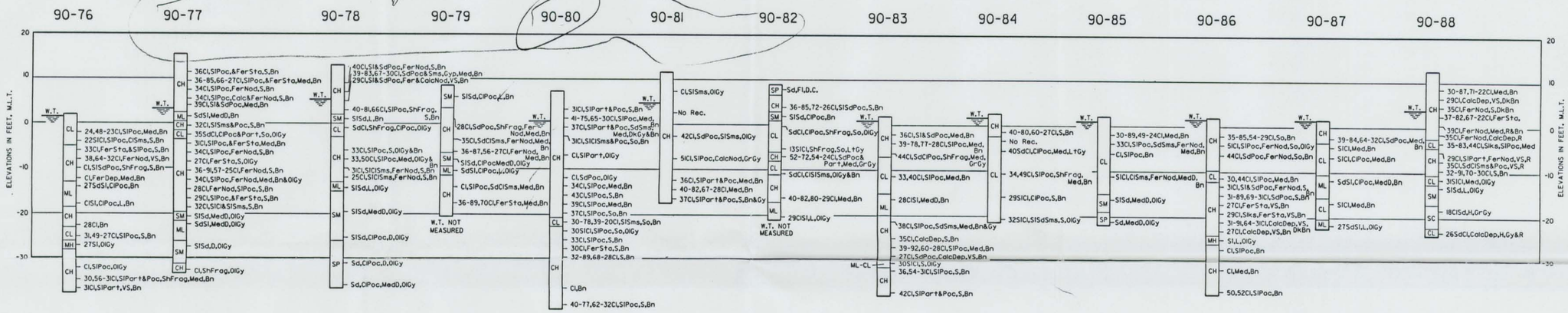


DISPOSAL AREA No. 2



DISPOSAL AREA No. 4

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. 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-UDW),(LL-PL),(B.L.S.)*
3. BORINGS WERE DRILLED USING WET ROTARY DRILLING TECHNIQUES AND UNDISTURBED SAMPLES WHERE 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 Brown(ish)	Gr Green(ish)	R Red(dish)	Sta Stain(s)
Calc Calcareous	Gy Gray(ish)	Rec Recovery	V Very
Cl Clay(ey)	Gyp Gypsum	S Stiff	W.T. Water Table
D Dense	H Hard	Sd Sand(y)	
D.C. Driller's Classification	L Loose	Sl Shale	
Dep Deposit(s)	Lt Light	Sh Shell(y)	
Dk Dark	Med Medium	Sl Silty	
Fer Ferrous	Nod Nodules	Slks Slickensides	
Fl Fine(s)	Ol Olive	Sms Seams	
Frag Fragment(s)	Part Particle(s)	So Soft	
	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.
TRACED BY:
CHECKED BY: J.T.F.
SUBMITTED BY: David S. Campbell, CHIEF, SOILS OR DESIGN SECTION
APPROVED: David S. Campbell, CHIEF, DESIGN & SURVEY BRANCH
APPROVED: for E. W. Whitley, CHIEF ENGINEERING DIVISION
DATED: MAY 1992

BRAZOS ISLAND HARBOR, TEXAS
BROWNSVILLE CHANNEL
DREDGING INSHORE REACH NO. 1
DISPOSAL AREAS Nos. 2 & 4
BORING LOGS

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

U.S. ARMY CORPS OF ENGINEERS

BORING NO. 92-10 DATE: BEGIN 3-20-92 PAGE 1 / 1
JOB NO. 146535 COMPLETE 3-20-92 Thin Walled Tube
PROJECT Brownsville Disp. Area #4 ☑ 3" ☐ 6"
LOCATION " Ship Channel
ELEVATION OF HOLE
MANUFACTURER'S DESIGNATION OF DRILL RIG ARDCO-C-1000
GROUNDWATER: DEPTH Dry ft., ELEV. ____ ft., at end of Drilling
WEATHER P.C. - Warm - Windy
DRILLER D. Mitchell LOGGER J. Beag

DEPTH, FEET	SAMPLE	SAMPLE NO.	PEN./TORVANE SPT.-BLOW COUNT	COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS
0		1	1.0	TAN GRAY	Clay	Stiff		
		2	.25	"	"	Very Soft		
5	X	3	1/1/1	TAN	Sand	very Loose		Sand at 4'
		4	.5	TAN	Clay	Md.stiff		Cl. at 6'
		5	.25	GRAY TAN	"	Soft		
10								Bottom of 92-10 10'
15								
20								
25								
30								
35								

Project : Disposal Areas Nos.2 and 4 for Brownsville Ship Channel
Brownsville, Texas
Contract No. DACW64-92-D-0001 Delivery order No. 0008

SUMMARY OF LABORATORY TEST RESULTS

Boring No. 92-10

S #	Depth (ft)	P P (tsf)	SPT Blows per Foot	Visual Classification	U S C	M c (%)	Dry Unit Wt (pcf)	Wet Unit Wt (pcf)	L L (%)	P L (%)	Mechanical Analysis % Passing					Torvane Shear Strength (tsf)	q u (tsf)
											#4	#10	#40	#100	#200		
1	0-2	2.50		Gray,Clay,Very stiff	CH	33.3	86.3	115.1	64								
2	2-4	2.50		Gray,Clay,Very stiff	CH	35.3											
3	4.5-6		2	Gray,Sand,Very loose,Silty	S M						100.0	100.0	100.0	98.7	38.8		
4	6-8	0.50		Brown,Clay,Medium stiff	CH	40.9			58								
5	8-10	0.50		Brown,Clay,Medium stiff	CH	38.0											

S # : Sample Number, P P : Pocket Penetrometer Reading, U S C : Unified Soil Classification, M c : Moisture Content
q u : Unconfined Compressive Strength, W O H : Weight of hammer, W O P : Weight of pipe