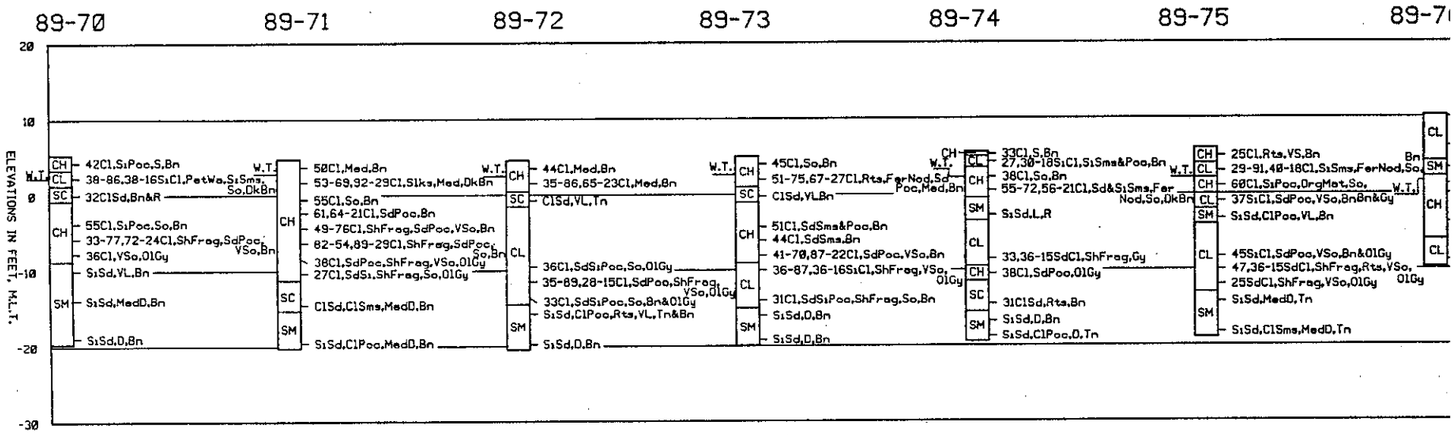
Hole No. 79-96

DRILLING LOG	DIVISION: Southwest	INSTALLATION: Galveston Dist	SHEET 1 OF 2 SHEETS

1. PROJECT: Colo. River Diverson Features
2. LOCATION (Coordinates or Station): 23+00
3. DRILLING AGENCY: U.S. Army Corps of Eng
4. HOLE NO. (As shown on drawing title and file number): 79-96
5. NAME OF DRILLER: Curtis
6. DIRECTION OF HOLE: ☑ VERTICAL ☐ INCLINED ______ DEG. FROM VERT.
7. THICKNESS OF OVERBURDEN
8. DEPTH DRILLED INTO ROCK
9. TOTAL DEPTH OF HOLE: 33^{5}
10. SIZE AND TYPE OF BIT: 3" Shelby Tube
11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
12. MANUFACTURER'S DESIGNATION OF DRILL: Marsh Buggy
13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED | UNDISTURBED
14. TOTAL NUMBER CORE BOXES
15. ELEVATION GROUND WATER: 0.0
16. DATE HOLE: STARTED 10.3.79 | COMPLETED 10.3.79
17. ELEVATION TOP OF HOLE
18. TOTAL CORE RECOVERY FOR BORING %
19. SIGNATURE OF INSPECTOR: [signature]

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
0° – 2^{5}			Gr. Sa. w/shell + Organic material	0.0	C-1	$0°$ to 17^{5} Sand + Sandy Clay. w/shell Some Clay Balls. V. Soft to Soft.
5^{0}			"	0.0	C-2	
10^{0}			Gr. Sa. w/shell		J-3	17^{5} to 33^{5} alternating Layers of Red Clay w/ cal. nod CALiche + Red Sandy Silty Clay Stiff to Hard.
12^{5}			Gr. Sa. w/shell + clay Balls.	.25	C-4	
15^{0}			Gr. Sa. Cl. w/shell		J-5	
17^{5}			"	0.0	C-6	
20^{0}			" Change Rd. Cl.	2.25	C-7	
22^{5}			Rd. Cl. w/cal. nod caliche	3.0	C-8	
25^{0}			" w/Layer of Sa. Silty Clay.	3.25	C-9	



LOGS OF BORINGS
DISPOSAL AREA NO. 3

NOTE : • INDICATES AUGER BORINGS.

NOTES:

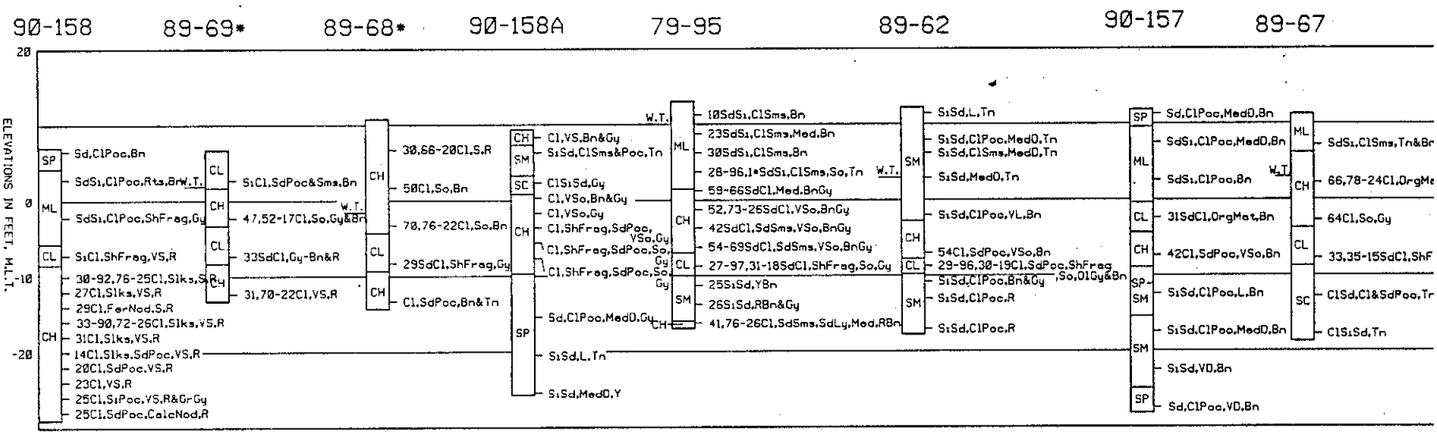
1. SOILS HAVE BEEN CLASSIFIED IN ACCORDANCE WITH MILITARY STANDARD 6198 "UNIFIED SOIL CLASSIFICATION SYSTEM FOR ROADS, AIRFIELDS, EMBANKMENTS AND FOUNDATIONS." CONSISTENCY OF SOILS SUCH AS SOFT, MEDIUM, HARD, LOOSE, DENSE, ETC., ARE RELATIVE TERMS BASED ON ESTIMATED UNDISTURBED SHEAR STRENGTH OF THE 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 89-59 THRU 89-62, 89-70 THRU 89-75 89-78, 79-98, 77-343 THRU 77-345, AND 79-95 THRU 79-97. 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. BORINGS 89-63, 89-66, 89-68, 89-69, 89-76, AND 89-77 WERE DRILLED USING A MECHANICAL AUGER AND BORING 88-67 WAS DRILLED USING WET ROTARY TECHNIQUES TO OBTAIN DISTURBED SAMPLES.
4. WATER TABLES LEVELS SHOWN ON BORING LOGS WERE DETERMINED AFTER DRILLING BORINGS BY MEASURING THE TOP OF FLUID LEVELS IN THE BORINGS. IN BORINGS WHERE 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 TIDE AND WEATHER CONITIONS. THEREFORE, SOME VARIATION SHOULD BE ANTICIPATED BETWEEN WATER TABLES INDICATED AND WATER TABLES ENCOUNTERED IN THE FIELD.

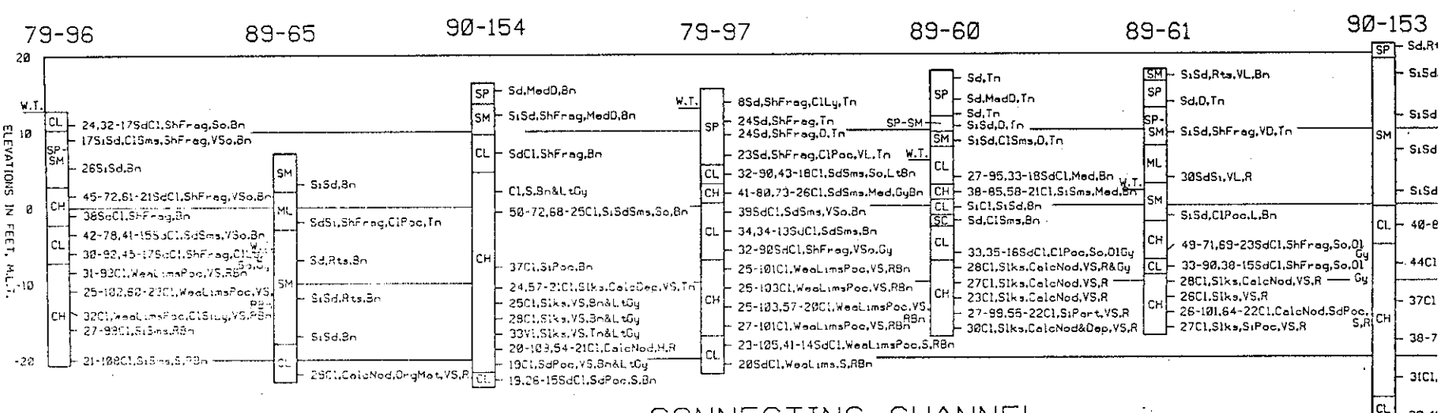
VISUAL CLASSIFICATIONS

Bn Brown(ish)	Ol Olive
Cl Clay(ey)	Org Organic
Calc Calcerous	Part Parting(s)
D Dense	Pet Petrolum
Dec Decayed	Poc Pocket(s)
Dep Deposit(s)	R Red(ish)
Dk Dark	Rts Root(s)
Fer Ferrous	S Stiff
Frag Fragment(s)	Sd Sand(y)
Gr Green(ish)	Sh Shell(y)
Gra Grass	Sl Silty
Gy Gray(ish)	Slks Slickensides
L Loose	Sm(s) Seams
Leav Leaves	So Soft
Lims Limestone	Tn Tan(ish)
Lt Light	V Very
Ly Layer(s)	Wa Waste
Mat Materials	Wd Wood(en)
Med Medium	Wea Weathered
Nod Nodules	Y Yellow(ish)

LABORATORY CLASSIFICATION

SP POORLY-GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES.
SM SILTY SANDS, SAND-SILT MIXTURES.
CH INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS.
CL INORGANIC CLAYS OF LOW TO MEDIUM PLASICITY, LEAN CLAYS.
ML INORGANIC SILTS AND VERY FINE SANDS, WITH SLIGHT PLASTICITY.
SC CLAYEY SANDS, SAND-SILT MIXTURES.
PT PEAT AND OTHER HIGHLY ORGANIC SOILS.





CONNECTING CHANNEL
LOGS OF BORINGS

Hole No. 79-96

DRILLING LOG	DIVISION	INSTALLATION	SHEET 2 OF 2 SHEETS

1. PROJECT	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station)	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY	12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number) 79-96	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED _____ DEG. FROM VERT.	15. ELEVATION GROUND WATER
7. THICKNESS OF OVERBURDEN	16. DATE HOLE — STARTED — COMPLETED
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE
9. TOTAL DEPTH OF HOLE	18. TOTAL CORE RECOVERY FOR BORING %
	19. SIGNATURE OF INSPECTOR

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
25° / 27.5			Rd. Cl. w/ Layer of Sandy Silty Cl.	3.25	C-10	
30°			Rd. Sandy Silty Clay. Weathered	3.00	C-11	
31°			Washed Away			
33.5			Rd. Clay w/ Layer of Sandy Silty Clay	1.25	C-12	

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. (TRANSLUCENT)

PROJECT HOLE NO.