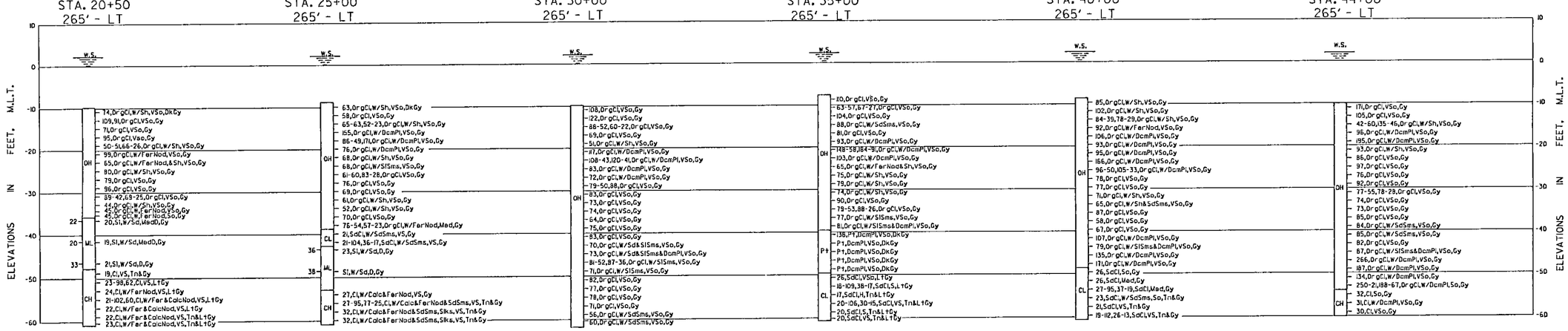


NOTES;

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,W,B.L.S.)• FIGURES TO THE LEFT OF BORING LOGS ARE BLOWS PER FOOT OF PENETRATION FROM STANDARD PENETRATION TESTING.
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.

VISUAL CLASSIFICATIONS:

Bn Brown(ish)	H Hard	R Red(dish)	Sms Seams
Calc Calcareous	L Loose	S Stiff	So Soft
Cl(ayley)	Lt Light	Sd Sand(y)	Tn Tan(nish)
D Dense	Mod Medium	Sh Shale(s)	V Very
Dcm Decomposed	Nod Nodules	Sl Silty	W.S. Water Surface
Dk Dark	Org Organic	Slks Slickensided	W/ With
Fer Ferrous	Pl Plants		
Gy Gray(ish)	Pt Peat		

LABORATORY CLASSIFICATIONS:

CH INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS.
CL INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, LEAN CLAYS.
ML INORGANIC SILTS AND VERY FINE SANDS, WITH SLIGHT PLASTICITY.
OH ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS.
Pt PEAT AND OTHER HIGHLY ORGANIC SOILS

REVISION	DATE	DESCRIPTION	BY

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

DRAWN BY: LAA
DESIGNED BY: LAA
CHECKED BY: L.G.S.M.
SUBMITTED BY:
CHIEF, SOILS DESIGN SECTION
APPROVED:
CHIEF, GEOTECH AND SURVEYS BRANCH

GULF INTRACOASTAL WATERWAY, TEXAS
PORT ARTHUR WATERWAY
BARGE MOORING FACILITIES

BORING LOGS

APPROVED:
CHIEF, ENGINEERING DIVISION
DATE: SEPT. 1994

1" = AS REQUIRED BY ENGINEER CIRCULAR NO. 1110-1-76)
SCALE: AS SHOWN
SPEC. DATE:

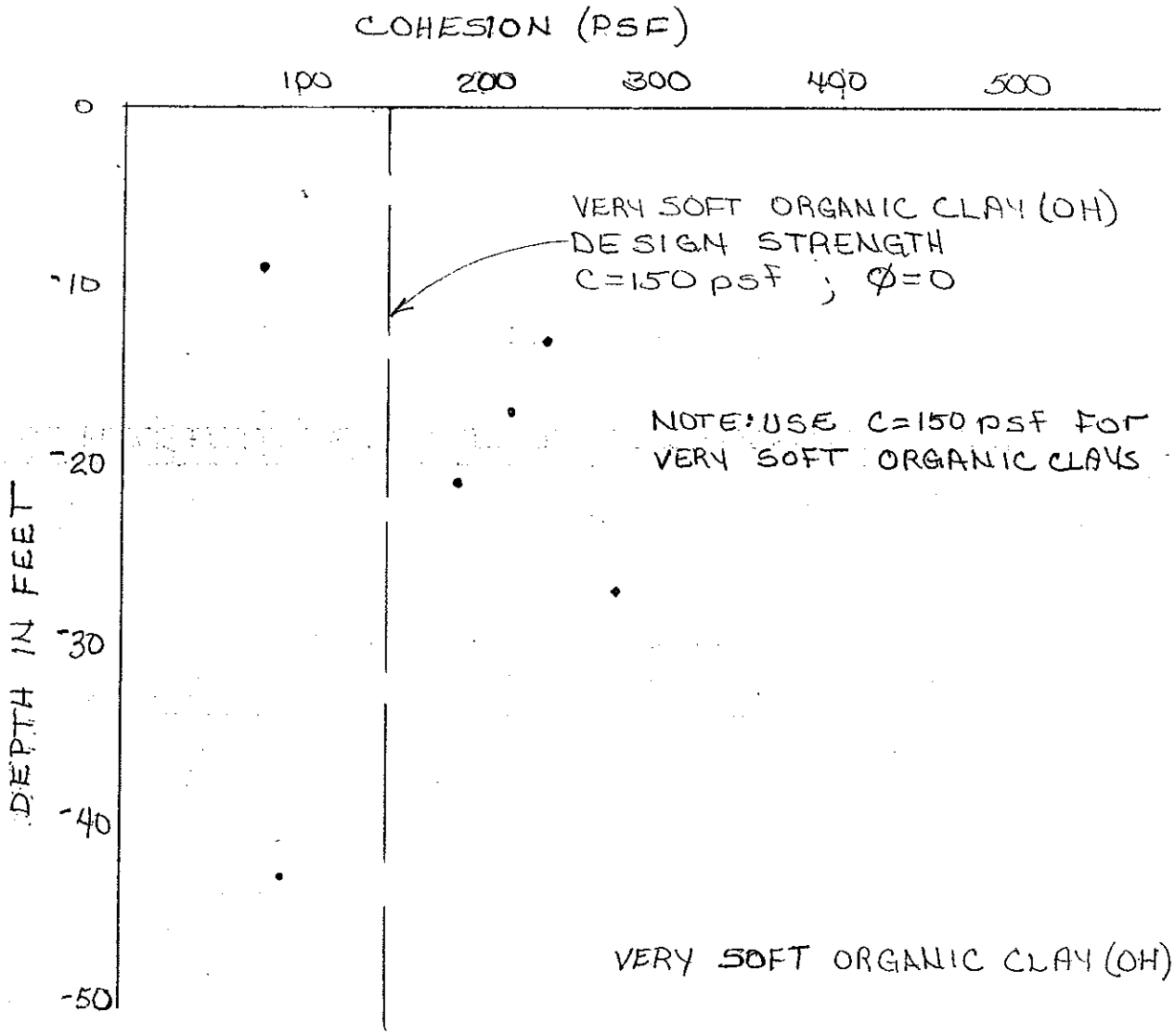
Prepared under the direction of
Robert B. Gatlin, Col., C.E.,
District Engineer

DRAWING NUMBER
F-1
SHEET 4 OF 7
FILE NO. IWW 1125-118

DESIGN FILE: e:\projects\iww\arthur\bj57\fridge
CREATED BY: Eugene
DATE: 24-AUG-1994
ATC: 13486

ENCL. NO. 2

BORING NO.	DEPTH	UNCONFINED	STRESS C	DESCRIPTION
94-27	8'-10'	160	[80]	VERY SOFT GRAY ORGANIC CLAY (OH) W/ SHELL
94-28	16'-18'	440	[220]	" " " " " (OH)
94-29	12'-14'	480	[240]	" " " " " W/ DECOMPOSED PLANT
94-30	26'-28'	560	[280]	" " " (OH)
94-32	20'-22'	380	[190]	" " " (OH)
94-32	42'-44'	180	[90]	" " " (OH), W/ DECOMPOSED PLANT

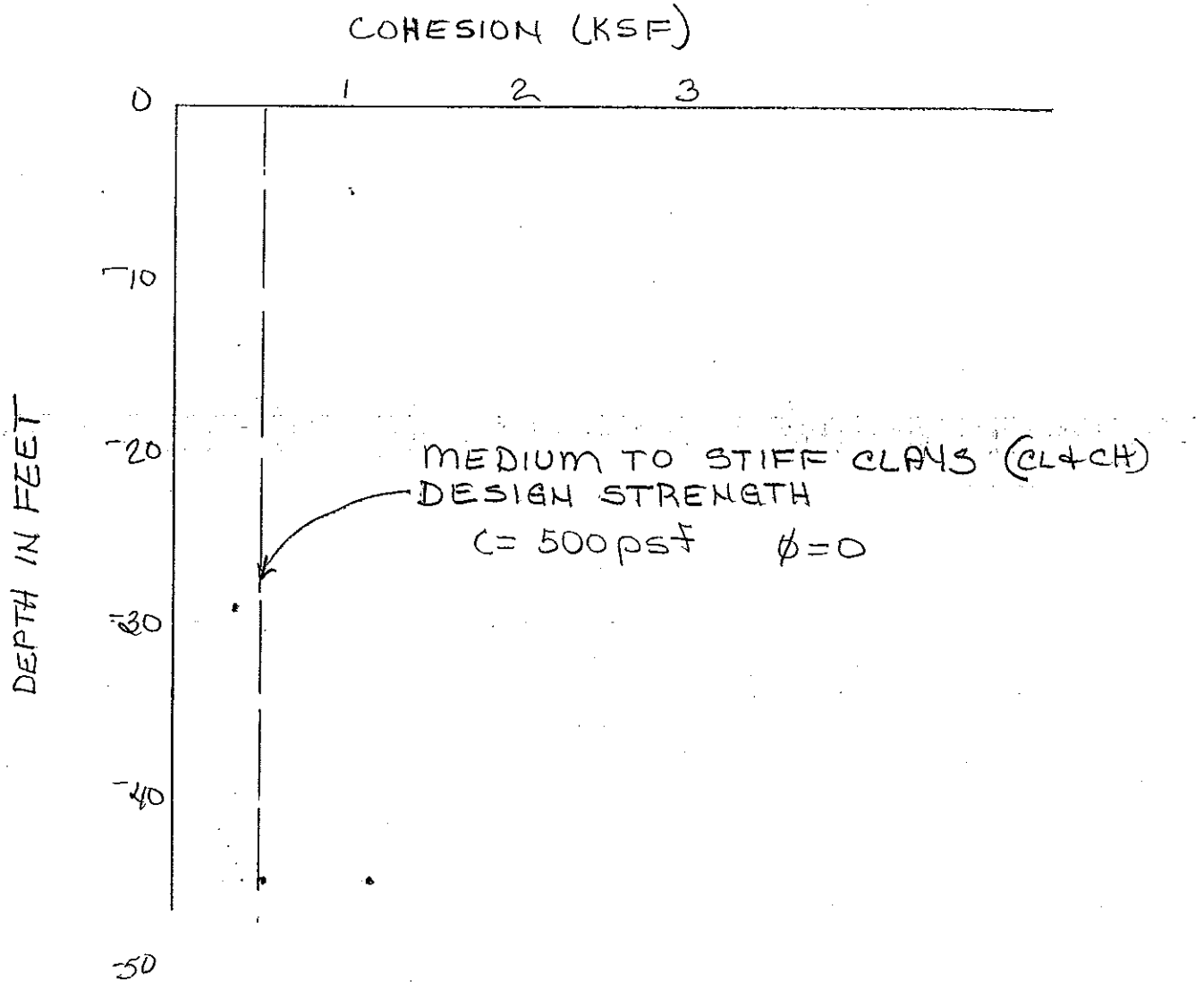


ENCL. NO. 3

BY [illegible] DATE 7/28/94 SUBJECT PORT ARTHUR GIWW-MOORING FACILITIES SHEET NO. 3 OF

CHKD. BY DATE JOB NO.

BORING NO.	DEPTH	UNCONFINED STRESS	C	DISCRIPTION
94-28	28'-30'	700	[350]	MEDIUM GRAY ORGANIC CLAY (OH) W/ FERRO NODULES
94-30	44'-46'	2280	[1140]	STIFF LIGHT GRAY SANDY CLAY (CL)
94-31	44'-46'	1060	[530]	MEDIUM GRAY SANDY CLAY (CL)



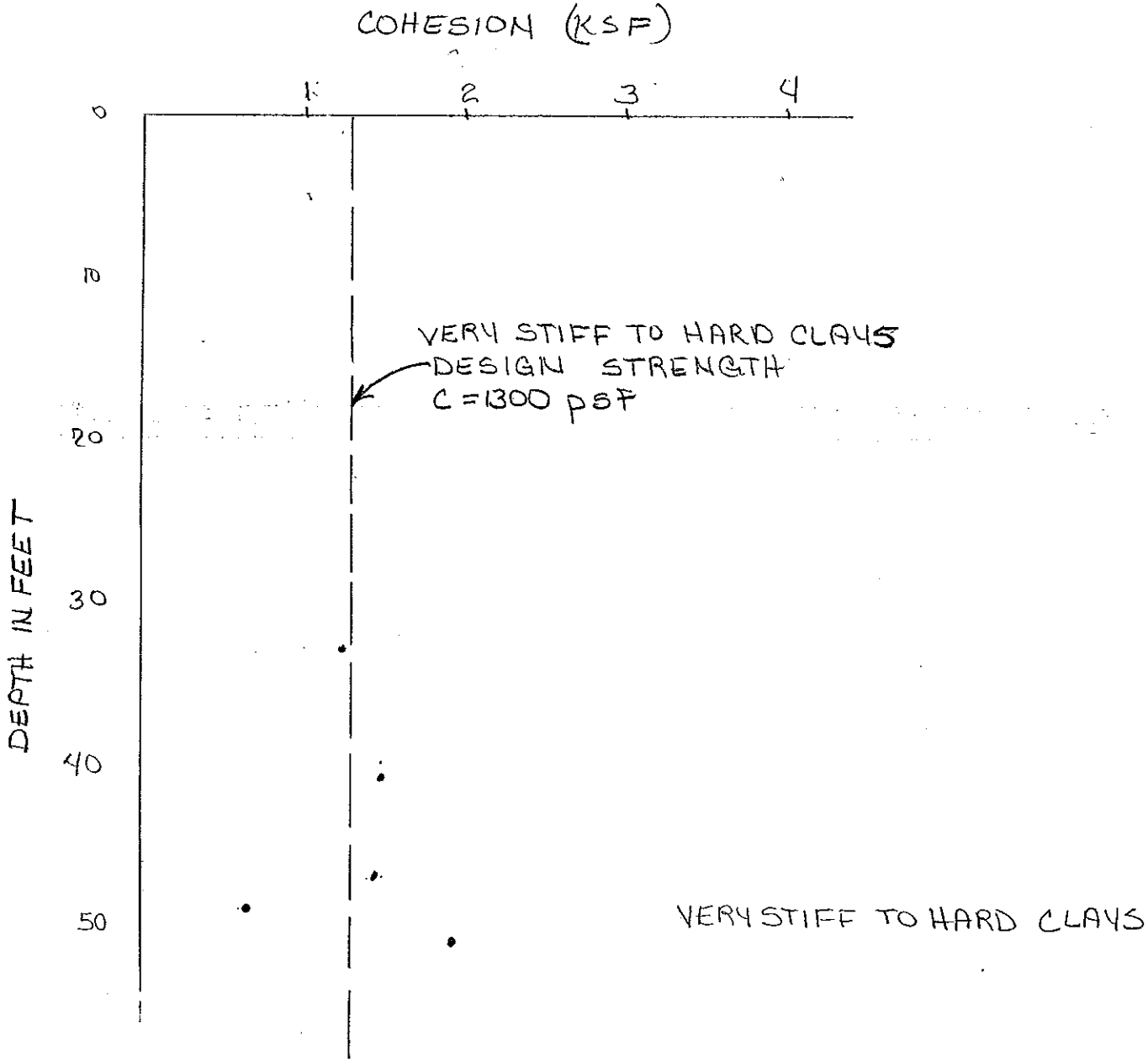
MEDIUM TO STIFF CLAY

ENCL. NO. 3

BY [illegible] DATE 7/28/94 SUBJECT PORT ARTHUR GIWW - MOORING FACILITIES SHEET NO. 4 OF

CHKD. BY DATE JOB NO.

BORING NO.	DEPTH	UNCONFINED STRESS	C	DESCRIPTION
94-27	40'-42'	2980	[1490]	VERY STIFF LT. GRAY CLAY
94-28	32'-34'	2520	[1260]	HARD GRAY SANDY CLAY W/ SAND SEAMS
94-28	46'-48'	2940	[1470]	VERY STIFF TAN & GRAY CLAY (CH) w/ calcareous nodules & sand seams
94-30	48'-50'	1320	[660]	TAN & LIGHT GRAY SANDY CLAY (CL)
94-31	50'-52'	3860	[1930]	TAN & GRAY SANDY CLAY (CL)



BY G.D.M. DATE 7/28/94 SUBJECT PORT ARTHUR GIWW - MOORING FACILITIES

CHKD. BY ____ DATE ____

ENCL. NO. 3

SHEET NO. 5 OF 5

JOB NO. ____