

MLT + 2.2'
Water level 12'

TABLE 1

SUMMARY OF LABORATORY TEST RESULTS

PROJECT: Port Arthur Waterway
AEC 270-94
Contract No. DACW-64-94-M-4608

BORING NO. 94-27

S #	Depth (Feet)	PP (tsf)	SPT Blows per Foot	Visual Classification	MC (%)	UDW (pcf)	LL (%)	PL (%)	Mechanical Analysis % Passing					Torvac (tsf)	QU (tsf)
									#4	#10	#40	#100	#200		
1	0 - 2	0	V _{SO}	Dark gray organic clay (OH) w/shell	74										
2	2 - 4	0	V _{SO}	Gray organic clay (OH)	109		91							0.04	
3	4 - 6	0	V _{SO}	Gray organic clay (OH)	71										
4	6 - 8	0	V _{SO}	Gray organic clay (OH)	95									0.1	
5	8 - 10	0	V _{SO}	Gray organic clay (OH) w/shell	50	51	66	26	100	100	99.8	99.6	97.3	0.09	0.08
6	10 - 12	0	V _{SO}	Gray organic clay (OH) w/ferrous nodules	99									0.13	
7	12 - 14	0	V _{SO}	Gray organic clay (OH) w/ferrous nodules & shell	65										
8	14 - 16	0	V _{SO}	Gray organic clay (OH) w/shell	80									0.11	
9	16 - 18	0	V _{SO}	Gray organic clay (OH)	79										
10	18 - 20	0	V _{SO}	Gray organic clay (OH)	96										
11	20 - 22	0	V _{SO}	Gray organic clay (OH)	89	42	69	25	100	100	99.8	99.7	99.2	0.09	
12	22 - 24	0	V _{SO}	Gray organic clay (OH) w/shell	44										
13	24 - 25	0	Very Soft	Gray organic clay (OH) w/ferrous nodules	45										
13	25 - 26	0.5	Soft	Gray organic clay (OH) w/ferrous nodules	45										
14	26 - 27.5	Med D	22	Gray silt (ML) w/sand	20				99.3	99.2	99.2	98.1	61.5		
15	31 - 32.5	Med P	20	Gray silt (ML) w/sand	19										
16	36 - 37.5	Dense	33	Gray silt (ML) w/sand	21				100	100	99.9	99.5	73.6		

S#: Sample Number; PP: Pocket Penetrometer Reading; MC: Moisture Content; QU: Unconfined Compressive Strength

TABLE 1 (continued)

SUMMARY OF LABORATORY TEST RESULTS

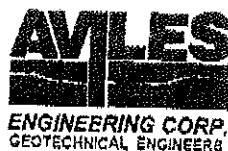
PROJECT: Port Arthur Waterway
 AEC 270-94
 Contract No. DACW-64-94-M-0608

BORING NO. 94-27

S #	Depth (Feet)	PP (tsf)	SPT Blows per Foot	Visual Classification	MC (%)	UDW (pcf)	LL (%)	PL (%)	Mechanical Analysis % Passing					Torvane (tsf)	QU (tsf)
									#4	#10	#40	#100	#200		
17	38 - 40	3.5	VS	Tan & gray clay (CH)	19										
18	40 - 42	2.25	VS	Light gray clay (CH)	23	98	62		100	100	99.9	99.8	97.1		1.49
19	42 - 44	3.25	VS	Light gray clay (CH) w/ferrous nodules	24										
20	44 - 46	3.25	VS	Light gray clay (CH) w/ferrous & calcareous nodules	21	102	60								
21	46 - 48	4.0	Hard	Light gray clay (CH) w/ferrous & calcareous nodules	22										
22	48 - 50	3.75	VS	Tan & light gray clay (CH) w/ferrous & calcareous nodules	22										
23	50 - 51	2.25	VS	Tan & light gray clay (CH) w/ferrous & calcareous nodules	23										

S#: Sample Number; PP: Pocket Penetrometer Reading; MC: Moisture Content; QU: Unconfined Compressive Strength

PROJECT NO. 270-94



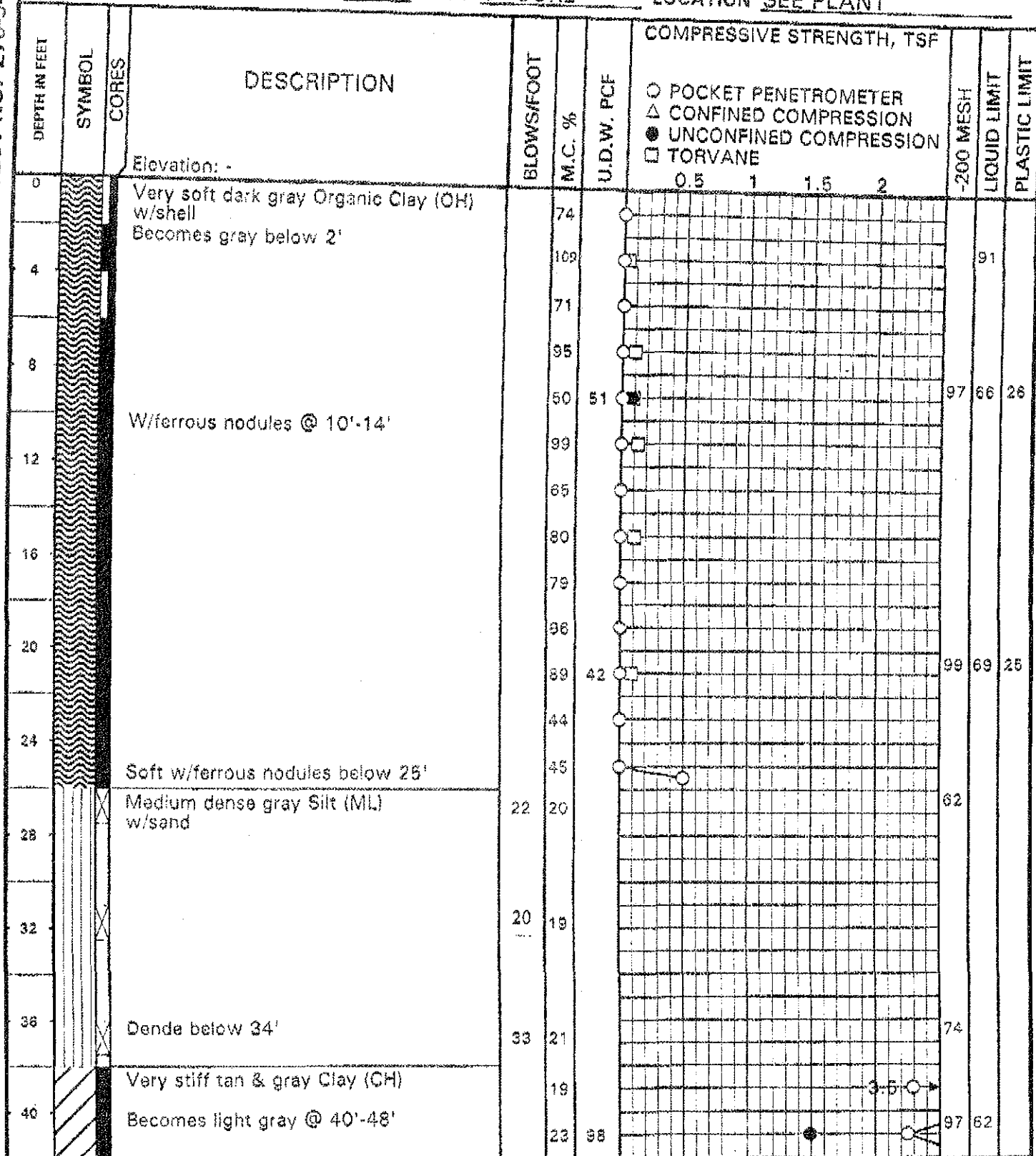
PROJECT: Port Authur Waterway

BORING 94-27

DATE MAY 25, 1994

TYPE 3" CORE

LOCATION SEE PLANT



BORING DRILLED TO _____ FEET WITHOUT DRILLING FLUID

WATER ENCOUNTERED AT _____ FEET WHILE DRILLING

WATER LEVEL AT _____ FEET AFTER _____ HOURS

DRILLED BY JH CHECKED BY QL LOGGED BY JH

PROJECT: Port Authur WaterwayBORING 94-27DATE MAY 25, 1994TYPE 3" CORELOCATION SEE PLANT

PROJECT NO. 270-94

DEPTH IN FEET	SYMBOL	CORES	DESCRIPTION	BLOWS/FOOT	M.C. %	U.D.W. PCF	COMPRESSIVE STRENGTH, TSF				200 MESH	LIQUID LIMIT	PLASTIC LIMIT
							○ POCKET PENETROMETER	△ CONFINED COMPRESSION	● UNCONFINED COMPRESSION	□ TORVANE			
			Elevation: -				0.5	1	1.5	2			
42			W/ferrous nodules below 42'	24						3.25	○		
46			W/calcareous nodules below 44'	21	102					3.25	○	60	
				22						4	○		
50			Becomes tan & light gray below 48'	22						3.75	○		
				23							○		
			Bottom @ 51'										
54			Driller: Dempsey Gearen										
			Logger: Wayne Sammons										
			Weather: Partly Cloudy, 80°F										
			Water Level: 12'										
			MLT: 2.2'										
58			Rig: D & R 75										
62													
66													
70													
74													
78													
82													

BORING DRILLED TO _____ FEET WITHOUT DRILLING FLUID

WATER ENCOUNTERED AT _____ FEET WHILE DRILLING

WATER LEVEL AT _____ FEET AFTER _____ HOURS

DRILLED BY JH CHECKED BY QL LOGGED BY JH

REVIEWED BY: _____ DATE _____
DATE _____

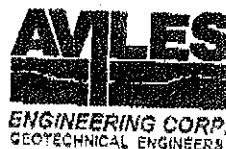
SUMMARY OF QUESTIONABLE
ERRONEOUS OR MISSING DATA
FOR

PROJECT: LABORATORY TESTING OF SOILS SAMPLES, CONTRACT NO. DACW64-93-M-0299 (GIWW - PT. ATRHUR)

BORING NO. SAMPLE NO. COMMENTS ON TEST RESULTS

Only one test was not performed - Borings No., 94-32, sample 3, Unconfined Compression Test was not performed because the contractor stated the sample was too short.

Boring 94-27	1	Description on Plate 2 indicates shell from samples 1 - 12, but it is only listed on sample 1,5,7,8,& 12 on Table 1.
	14-16	Plate 2 and Table 1 do not agree on description, should be either Sandy Silt or Silt w/sand Moisture contents are given but not ordered.
94-28	1	Table 2 states w/shell from 0-2 feet, Plate 3 does not.
	15	Table 2 states w/ferrous nodules from 28-30 feet, Plate 3 does not.
	20-23	Plate 3 states w/calcareous nodules, ferrous nodules & sand seams Table 2 does not show the sand seams for sample 20 or the calcareous and ferrous nodules for sample 23
	22	Plate 3 states slickensided below 50 feet. Table 2 shows slickensided from 48-50 and 50-52 feet.
94-30	9	Table 4 states w/shell from 16-22 feet, Plate 5 states shell from 18-22 feet.
94-31	1	Plate 6, beginning description should state w/shell 0-6 feet to agree with Table 5.
	3	Plastic limit performed not ordered,
	18	Table 5 states w/silt seams & decomposed plants, (Plate 7) states silt seams but not decomposed plants Plate 6 is for boring 94-31
94-32	22	Table 6 states LL 188, Plate 7 shows no LL value



PROJECT: Port Authur Waterway

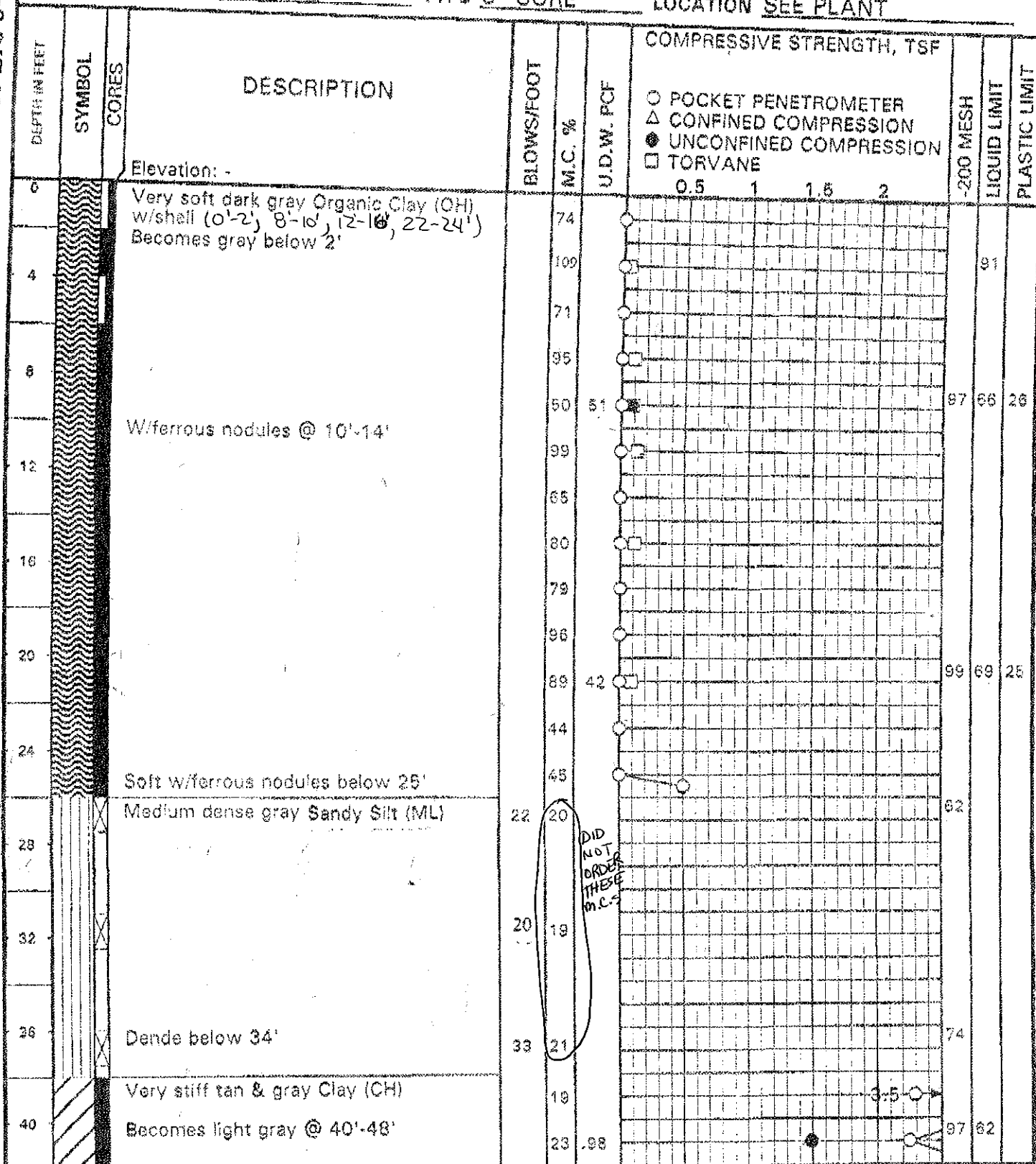
BORING 94-27

DATE MAY 25, 1994

TYPE 3" CORE

LOCATION SEE PLANT

PROJECT NO. 270-94

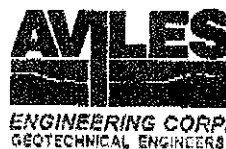


BORING DRILLED TO _____ FEET WITHOUT DRILLING FLUID

WATER ENCOUNTERED AT _____ FEET WHILE DRILLING

WATER LEVEL AT _____ FEET AFTER _____ HOURS

DRILLED BY DG CHECKED BY OL LOGGED BY WS

PROJECT: Port Authur WaterwayBORING 94-27DATE MAY 25, 1994TYPE 3" CORELOCATION SEE PLANT

PROJECT NO. 270-94

DEPTH IN FEET	SYMBOL	CORES	DESCRIPTION	BLOWS/FOOT	M.C. %	U.D.W. PCF	COMPRESSION STRENGTH, TSF				-200 MESH	LIQUID LIMIT	PLASTIC LIMIT
							○ POCKET PENETROMETER	△ CONFINED COMPRESSION	● UNCONFINED COMPRESSION	□ TORVANE			
			Elevation: -				0.5	1	1.5	2			
42			W/ferrous nodules below 42'	24						3.25 ○			
			W/calcareous nodules below 44'	21	102					3.25 ○		60	
46			46-48' Hand	22						4 ○			
			Becomes tan & light gray below 48'	22						3.75 ○			
50				23						○			
			Bottom @ 51'										
54			Driller: Dempsey Gearen										
			Logger: Wayne Sammons										
			Weather: Partly Cloudy, 80°F										
			Water Level: 12'										
			MLT: 2.2'										
58			Rig: D & R 75										
62													
6													

0 FEET WITHOUT DRILLING FLUID

ED AT FEET WHILE DRILLING

FEET AFTER HOURS

G! CHECKED BY OL

LOGGED BY

WS

LOG OF BORING

PROJECT: Port Arthur
FOR:

BORING NO: 94-27
LOCATION:

DATE: 5-25-94

JOB NO:

BORING TYPE 3" Core

DRILLER:

REPORT NO.

GROUND ELEV.:

Depth in Feet	Sample Type & No.	Symbol	Elevation in Feet	Blows / Foot	LEGEND	
					PEN.	DESCRIPTION OF STRATUM
						S-S Shelby Tube D-Denison Barrel P-Penetration Test J-Jar
						■ - Core ☒ - Penetration Sample □ - No Recovery
						▽ - Static Water Table ▼ - Hydrostatic Water Table
	S-1			0		Very soft G. SiCL Jar Sample
	S-2			0		Very soft G. SiCL
5	S-3			0		Very soft G. SiCL Jar Sample
	S-4			0		Very soft G. SiCL
	S-5			0		Very soft G. SiCL
10	S-6			0		Very soft G. SiCL
	S-7			0		Very soft G. SiCL w/shell, Wood
15	S-8			0		Very soft G. SiCL w/shell, Wood
	S-9			0		Very soft G. SiCL w/shell, Wood
	S-10			0		Very soft G. SiCL
20	S-11			0		Very soft G. SiCL
	S-12			0		Very soft G. SiCL
25	S-13			0		Very soft G. SiCL
				.50		Soft D.G. CL Si
	S-14		7/10/12			Medium Dense G. & T. SaSi Jar Sample
30						
	S-15		5/10/10			Medium Dense G. & T. SaSi Jar Sample
35						
	S-16		17/17/16			Dense G. & T. SaSi Jar Sample
40	S-17			3.5		Very stiff G. & T. SiCL
	S-18			2.25		Very stiff G. & T. CL w/cal. Nod.
	S-19			3.25		Very stiff G. & T. CL w/cal. Nod.
45	S-20			3.25		Very stiff G. & T. CL w/cal. Nod.

LOG OF BORING

PROJECT: Port Arthur
FOR:

BORING NO: 94-27
LOCATION:

DATE: 5-25-94
DRILLER:

JOB NO:

BORING TYPE 3" core

REPORT NO.

GROUND ELEV.:

LEGEND

S-Shelby Tube D-Danison Barrel P-Penetration Test J-Jar
■-Core □-Penetration Sample □-No Recovery
▽-Static Water Table ▼-Hydrostatic Water Table

PEN

DESCRIPTION OF STRATUM

40						
41	S-21			4.0		Very stiff G. & T. CL. W/Cal. Nod.
42	S-22			3.75		Very stiff G. & T. CL. W/Cal. Nod.
43	S-23			2.25		Very stiff G. & T. CL. W/Cal. Nod.
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100						

Rig : D & R 75
Driller : Dempsey Gearen
Logger : Wayne Sammons
Weather : Partly Cloudy 80° F
Water Level : 12'
MLT = +2.2'

STRESS vs STRAIN AEC 270-94

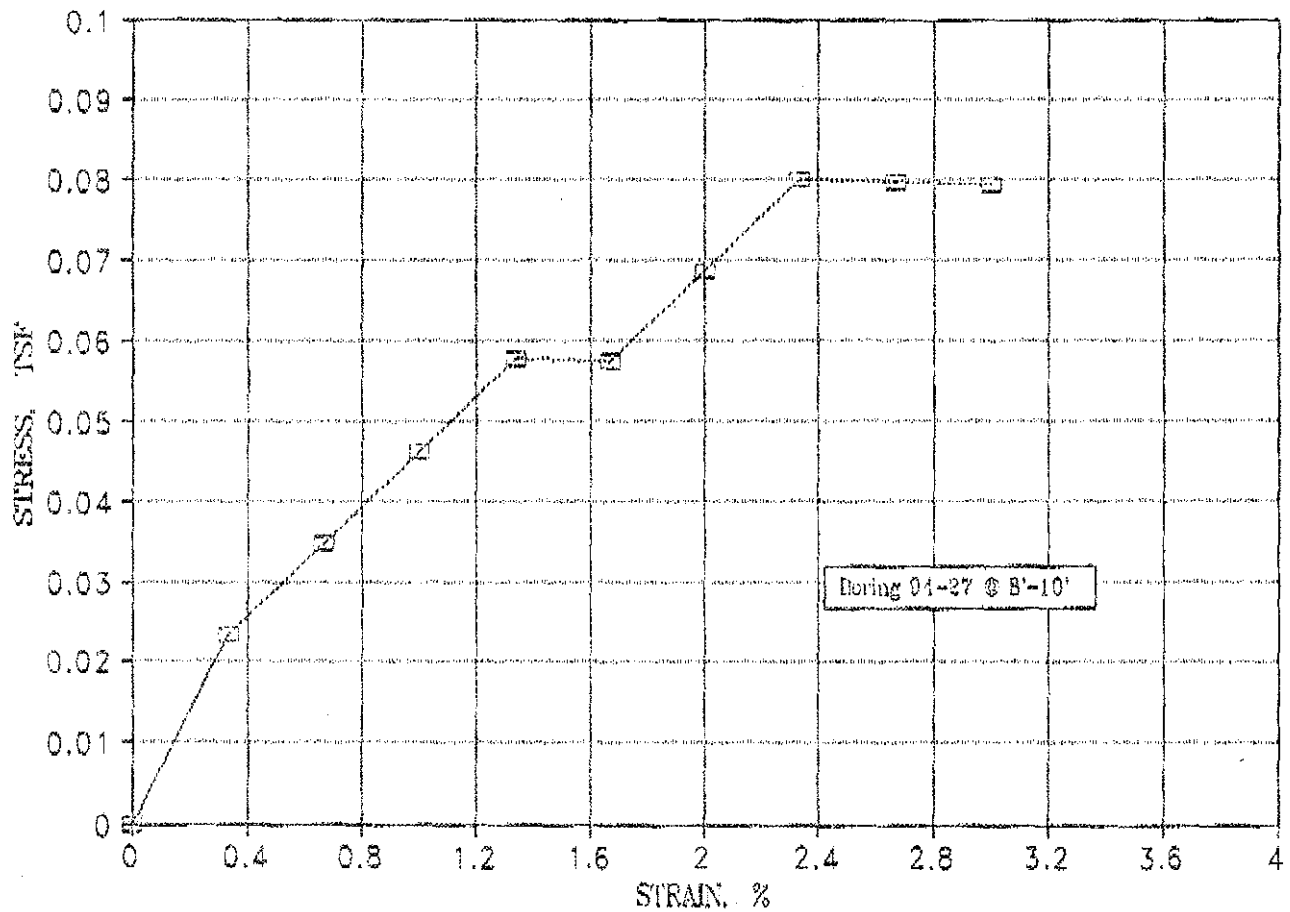


FIGURE 1

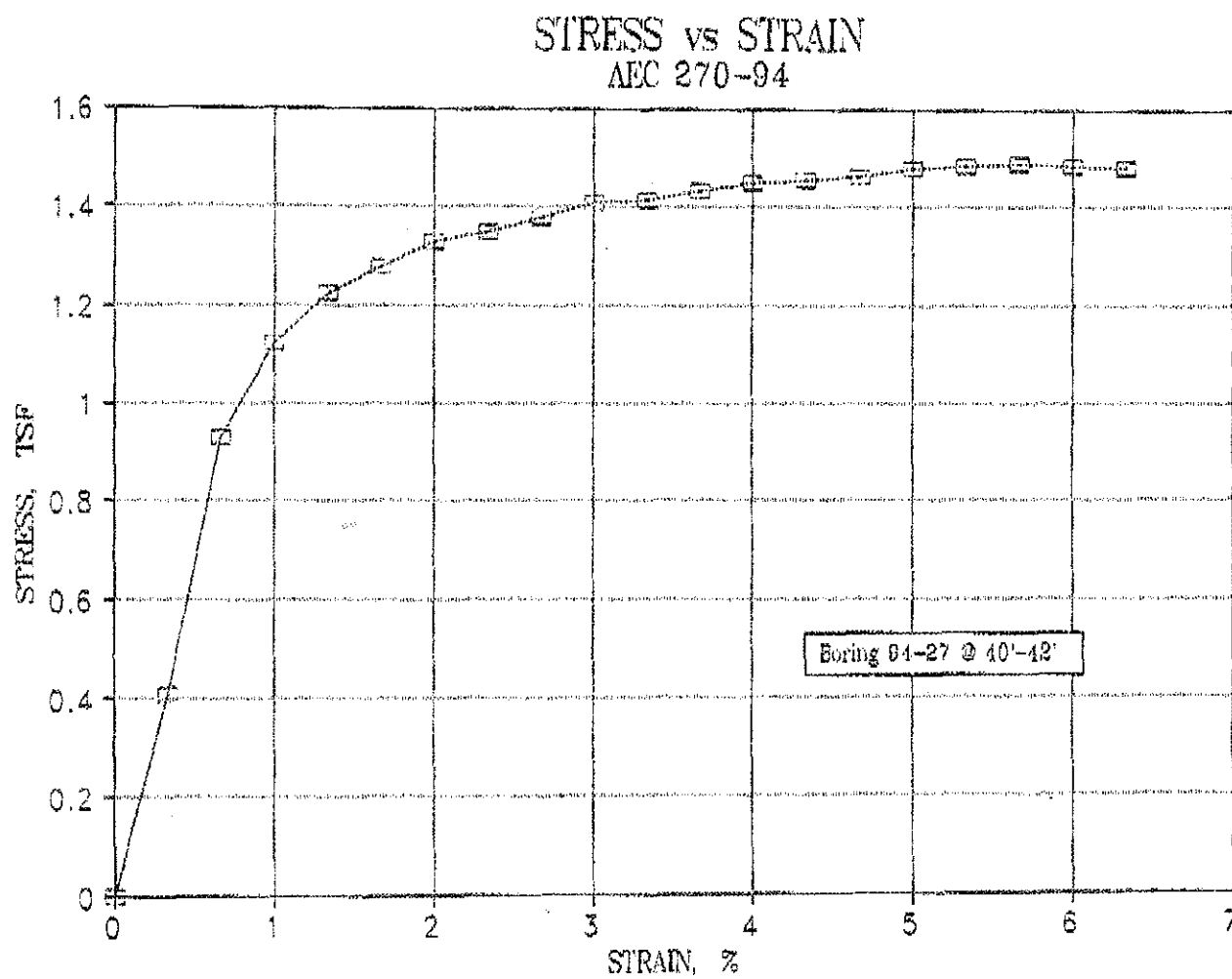


FIGURE 2