PITTSBURGH TESTING LABORATORY

3281 N.W. 7th STREET MIAMI 35, FLORIDA

AS A MUTUAL PROTECTION TO CLIENTS, THE PUBLIC AND OURSELVES, ALL REPORTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS, AND AUTHORIZATION FOR PUBLICATION OF STATEMENTS, CONCLUSIONS OR EXTRACTS FROM OR REGARDING OUR REPORTS IS RESERVED PENDING OUR WRITTEN APPROVAL

TEST BORING REPORT

P-1

CLIENT Canaveral Port Authority, Cocoa, Florida ORDER No. MA-1432

PROJECT Test Borings in Westerly Port of the Port Authority REPORT No. 1

LOCATION Shown on location plat, drawn by Gee & Jensen Consulting Engrs. West Palm Beach, Florida property HOLE No. (Sheet 2 of 3) 1

DRILLER Gaultney & Chapman DRILL No. 10 DATE STARTED 11-18-56

DATE COMPLETED 11-23-56

GROUND ELEVATION Established @ 100.0'

		DESCRIPTION OF MATERIALS	Sample Number	Hammer Blows on Sampler	Penetration Foot	Hammer Blows on Casing
		Soft Grey Clay (Shelby) 2	137	Press	36.0	
			135	2	37.0	
					38.0	
					39.0	
					40.0	
			140	2	41.0	
					42.0	
43.0'	10.5'				43.0	
					44.0	
		Medium tan fine sand with shell fragments			45.0	
			146	13	46.0	
					47.0	
					48.0	
49.0'	6.0'				49.0	
					50.0	
		(Medium)	151	14	51.0	
		Grey fine silty sand with shell			52.0	
					53.0	
					54.0	
					55.0	
		2			56.0	
		(Shelby)	157	Press	57.0	
		(Loose)	158	8	58.0	
					59.0	
					60.0	
		2			61.0	
		(Shelby)	162	Press	62.0	
		(Medium)	163	11	63.0	
64.5'	15.5'				64.0	
		4			65.0	
		Stiff Grey sandy clay (Shelby)	167	Press	66.0	
			169	9	67.0	
					68.0	
					69.0	
					70.0	
			171	10	71.0	

Scale: ____" = 1 foot

Hammer weight: Casing — lbs. Spoon 140 lbs.

Hammer drop: Casing — ins. Spoon 30 ins.

Sampler size 1 3/8 I.D. 2 " O.D. Std. Pene.

Casing size: — " I.D. — " O.D. Type Drilling Mud

Water level: 2.5 ' below surface at 8:00 date 11-19-56

As a mutual protection to the owners and ourselves, the engineer in the owner's behalf shall check this report with the samples submitted prior to the purchase of property, or designing of structures

PITTSBURGH TESTING LABORATORY

BY Jas. Hamlin

PITTSBURGH TESTING LABORATORY

3281 N.W. 7th STREET MIAMI 35, FLORIDA

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TEST BORING REPORT

P-1

CLIENT Canaveral Port Authority, Cocoa, Florida — ORDER No. MA-1432

PROJECT Test borings in Westerly Port of the Port Authority Property — REPORT No. 1

LOCATION Shown on location plat drawn by Gee & Jensen consulting engineers, West Palm Beach, Florida — HOLE No 1 (Sheet 3 of 3)

DATE STARTED 11-18-56

DRILLER Gaultney & Chapman — DRILL No. 10 — DATE COMPLETED 11-23-56

GROUND ELEVATION Established @ 100.0'

Depth	Elev.	DESCRIPTION OF MATERIALS	Sample Number	Hammer Blows on Sampler	Penetration Feet
		Grey sandy clay			72.0
73.0'	8.5'				73.0
					74.0
		Loose Grey Silty sand			75.0
			176	5	76.0
					77.0
					78.0
					79.0
					80.0
			181	4	81.0
					82.0
					83.0
					84.0
					85.0
			186	4	86.0
					87.0
					88.0
					89.0
					90.0
			191	4	91.0
					92.0
					93.0
					94.0
					95.0
			196	5	96.0
					97.0
98.0'	25.0'				98.0
		Medium tan silty sand with flintrock fragments			99.0
			1101	15	100.0
101.0'	3.0'				101.0
		End of Boring			

Scale _____ " 1 foot

Hammer weight: Casing ____ lbs. Spoon 140 lbs.

Hammer drop. Casing — ins. Spoon 30 ins.

Sampler size 1 3/8 I.D. 2 " O.D. Std. Pene.

Casing size: — " I.D. — " O.D Type Drilling Mud

Water level. 2.5 ' below surface at B.O.U. date 11-19-56

As a mutual protection to the owners and ourselves, the engineer in the owner's behalf shall check this report with the samples submitted prior to the purchase of property, or designing of structures

PITTSBURGH TESTING LABORATORY

BY J. W. Hallee

PITTSBURGH TESTING LABORATORY

3281 N.W. 7th STREET MIAMI 35, FLORIDA

22

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P-3

TEST BORING REPORT

CLIENT Canaveral Port Authority, Cocoa, Florida ORDER No. PA-1432

PROJECT Test Borings in the Easterly Part of the Port Authority Property 1

LOCATION Shown on Location Plat - drawn by Geo. W. Jenson Consulting Engineers, West Palmbeach, Florida HOLE No. 3 (Sheet 1 of 3)

DATE STARTED 11-30-56

DRILLER Gaultney & Chapman DRILL No. 10 DATE COMPLETED

GROUND ELEVATION 29.5' Referred to Boring #1

Depth	Elev.	Description of Materials	Sample Number	Hammer Blows on Sampler	Penetration Inches	Hammer Blows on Casing
		Loose grey medium sand			1.0	
					2.0	
3.5'	3.5'		301	4	3.0	
					4.0	
		Loose grey clayey sand			5.0	
		1 (Shelby)			6.0	
			307	Press	7.0	
			308	5	8.0	
8.0'	5.5'				9.0	
		Loose grey medium silty sand			10.0	
					11.0	
		2 (Shelby)			12.0	
			312	Press	13.0	
			313	4	14.0	
					15.0	
			316	3	16.0	
					17.0	
					18.0	
					19.0	
					20.0	
					21.0	
		3 (Shelby)	322	Press	22.0	
			323	3	23.0	
					24.0	
24.0'	15.0'				25.0	
		Soft grey sandy clay	326	3	26.0	
					27.0	
					28.0	
					29.0	
					30.0	
			331	-	31.0	
32.0'	3.0'				32.0	
					33.0	
					34.0	
					35.0	

Scale _____" = 1 foot

Hammer weight: Casing — lbs. Spoon 140 lbs.

Hammer drop Casing — ins. Spoon 30 ins.

Sampler size 1 3/8 I.D. 2 " O.D. Standard

Casing size: — " I.D. — " O.D Type ~~Drilling~~ ~~Mud~~

Water level: ~~2.0~~ ' below surface at ~~12.00~~ date ~~12-2-56~~

As a mutual protection to the owners and ourselves the engineer in the owner's behalf shall check this report with the samples submitted prior to the purchase of property, or designing of structures

PITTSBURGH TESTING LABORATORY

BY G. W. Noller

PITTSBURGH TESTING LABORATORY

3281 N.W. 7th STREET MIAMI 35, FLORIDA

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TEST BORING REPORT

P-3

CLIENT Canaveral Port Authority, Cocoa, Florida ORDER No. A-1432

PROJECT Test Borings in the Westerly Part of the Port Authority Property BORING No. 1

LOCATION Shown on Location Plat - drawn by Lee W. Jelcoh HOLE No. 3 (Sheet 2 of 3)

Consulting Engineers, West Palm Beach, Florida DATE STARTED 11-30-56

DRILLER Gaultney & Chapman DRILL No. 10 DATE COMPLETED 12-2-56

GROUND ELEVATION		DESCRIPTION OF MATERIALS	Sample Number	Hammer Blows on Sampler	Penetration Feet
20.5'		Referred to Boring #1			
		Soft Grey Clay	340	3	36.0
					37.0
					38.0
					39.0
					40.0
			341	3	41.0
					42.0
					43.0
					44.0
					45.0
		4 (Shelby)	347	Press	46.0
					47.0
			348	3	48.0
48.5'	16.5'				49.0
					50.0
		Very loose to medium grey to tan medium to fine sand with some cemented particles			51.0
			352	Press	52.0
		5 (Shelby)	353	2	53.0
					54.0
					55.0
			356	14	56.0
					57.0
					58.0
					59.0
					60.0
			361	5	61.0
					62.0
					63.0
					64.0
					65.0
			366	12	66.0
					67.0
					68.0
					69.0
					70.0

Scale _____ " 1 foot

Hammer weight Casing - lbs. Spoon 140 lbs.

Hammer drop. Casing - ins. Spoon 30 ins.

Sampler size 1 3/8 I.D. 2 " O.D. [illegible]

Casing size - " I.D. - " O.D Type Drilling [illegible]

Water level: 2.0 below surface at 10:00 date 11-3-56

As a mutual protection to the owners and ourselves, the engineer in the owner's behalf shall check this report with the samples submitted prior to the purchase of property, or designing of structures

PITTSBURGH TESTING LABORATORY

BY [signature]

PITTSBURGH TESTING LABORATORY

3281 N.W. 7th STREET MIAMI 35, FLORIDA

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TEST BORING REPORT

P-3

CLIENT Canaveral Port Authority, Cocoa, Florida ORDER No. 54-1432

PROJECT Test Borings in the Westerly Part of the Port Authority property PAGE No. 1

LOCATION shown on Location Plat - drawn by Geo. Jenson Consulting Engineers, West Palm Beach, Florida HOLE No. 3 (Sheet 3 of 3)

DATE STARTED 11-30-56

DRILLER Gaultney - Chapman DRILL No. 10 DATE COMPLETED 12-2-56

GROUND ELEVATION 99.5' Referred to Boring #1

Depth	Elevation	Description of Materials	Sample Number	Number Blows on Sampler	Penetration Feet	Hammer Blows on Casing
		Very Loose to medium grey to tan medium to fine sand with some cemented particles	371	14	71.0	
					72.0	
					73.0	
73.5'	26.0'				74.0	
					75.0	
		Loose tan fine silty sand	376	4	76.0	
					77.0	
					78.0	
					79.0	
					80.0	
			381	3	81.0	
					82.0	
					83.0	
					84.0	
					85.0	
			386	3	86.0	
					87.0	
					88.0	
					89.0	
89.5'	16.0'		391	10	90.0	
					91.0	
		Medium tan cemented sand			92.0	
					93.0	
					94.0	
					95.0	
			396	12	96.0	
					97.0	
					98.0	
					99.0	
					100.0	
101.0'	11.5'		3101	14	101.0	

Scale _____ " 1 foot

Hammer weight Casing — lbs Spoon 140 lbs.

Hammer drop. Casing — ins Spoon 30 ins.

Sampler size 1 3/8 I.D. 2 " O.D. Standard

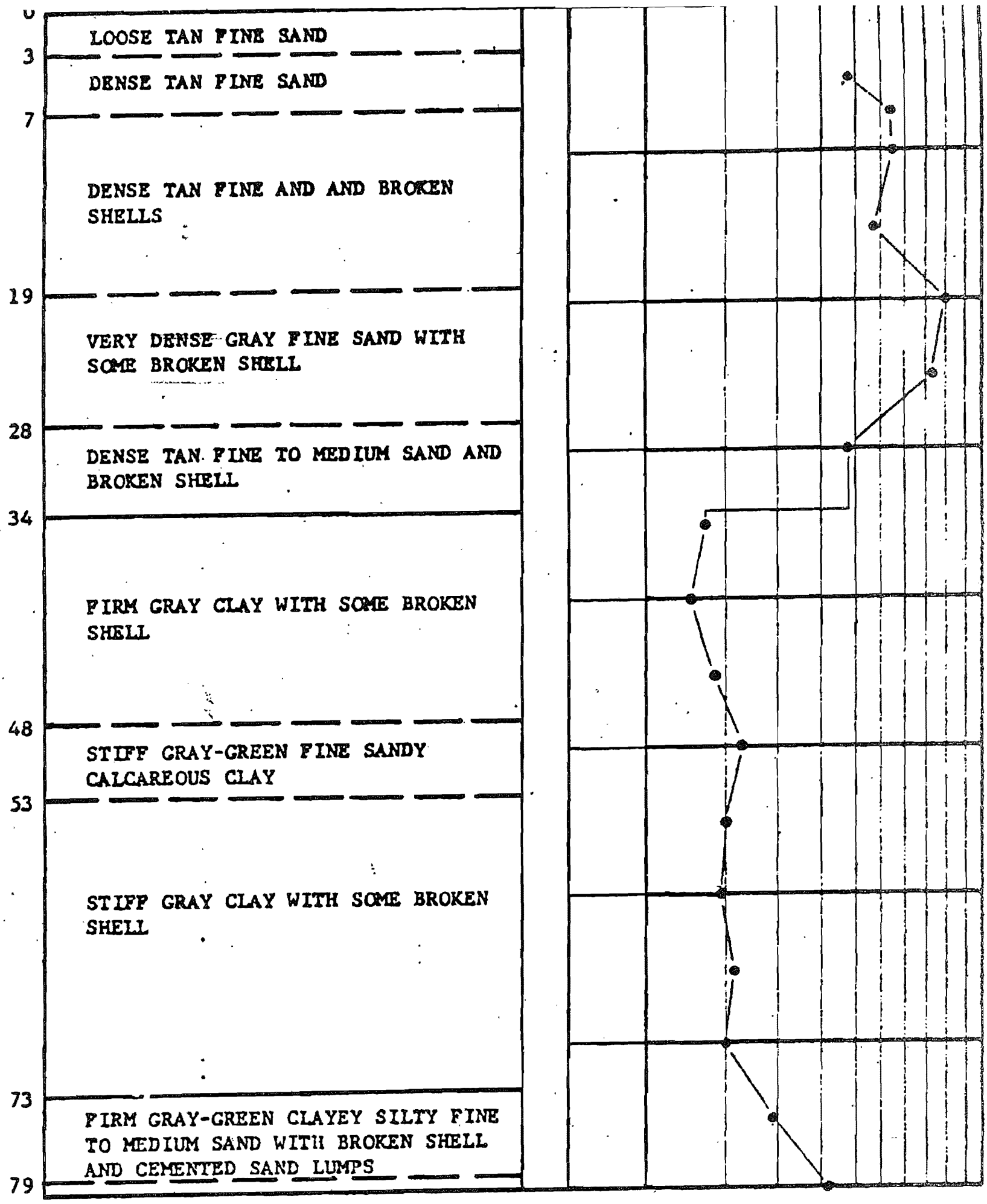
Casing size: — " I.D. — " O.D Type Drilling Mud

Water level: 2.0 below surface at 12:00 date 12-3-56

As a mutual protection to the owners and ourselves, the engineer in the owner's behalf shall check this report with the samples submitted prior to the purchase of property or designing of structures

PITTSBURGH TESTING LABORATORY

BY C. W. Hoollee



(30)

TEST BORING RECORD

PENETRATION IS THE NUMBER OF BLOWS OF 140 LB. HAMMER FALLING 30 IN. REQUIRED TO DRIVE 1.5 IN. SAMPLER 1 FT.

UNDISTURBED SAMPLE

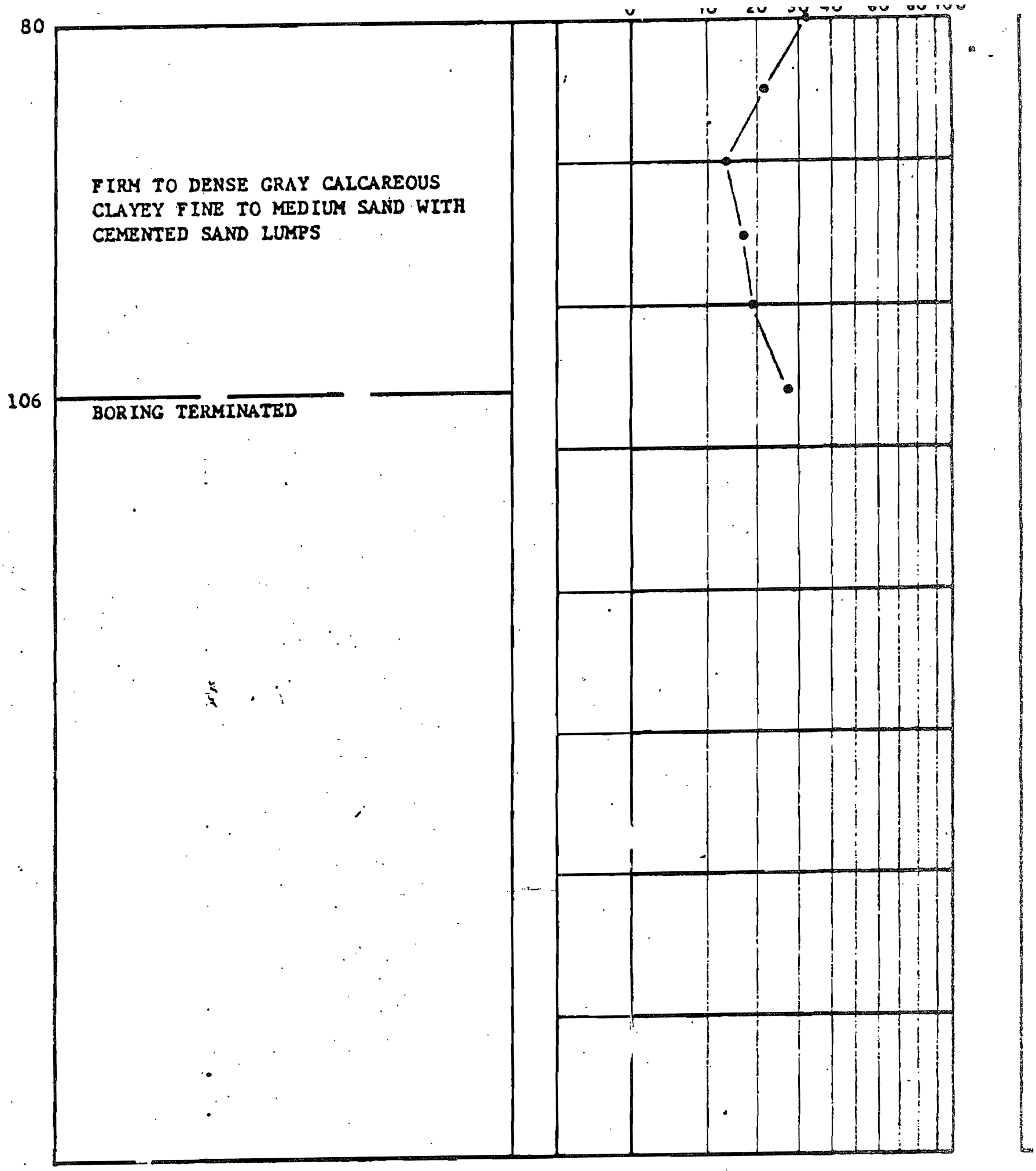
|50| % ROCK CORE RECOVERY

WATER TABLE

BORING NO B-3 (continued)

JOB NO T-588

LAW ENGINEERING TESTING CO. 34



TEST BORING RECORD

PENETRATION IS THE NUMBER OF BLOWS OF 140 LB. HAMMER FALLING 30 IN. REQUIRED TO DRIVE 1.5 IN. SAMPLER 1 FT.

UNDISTURBED SAMPLE

|50| % ROCK CORE RECOVERY

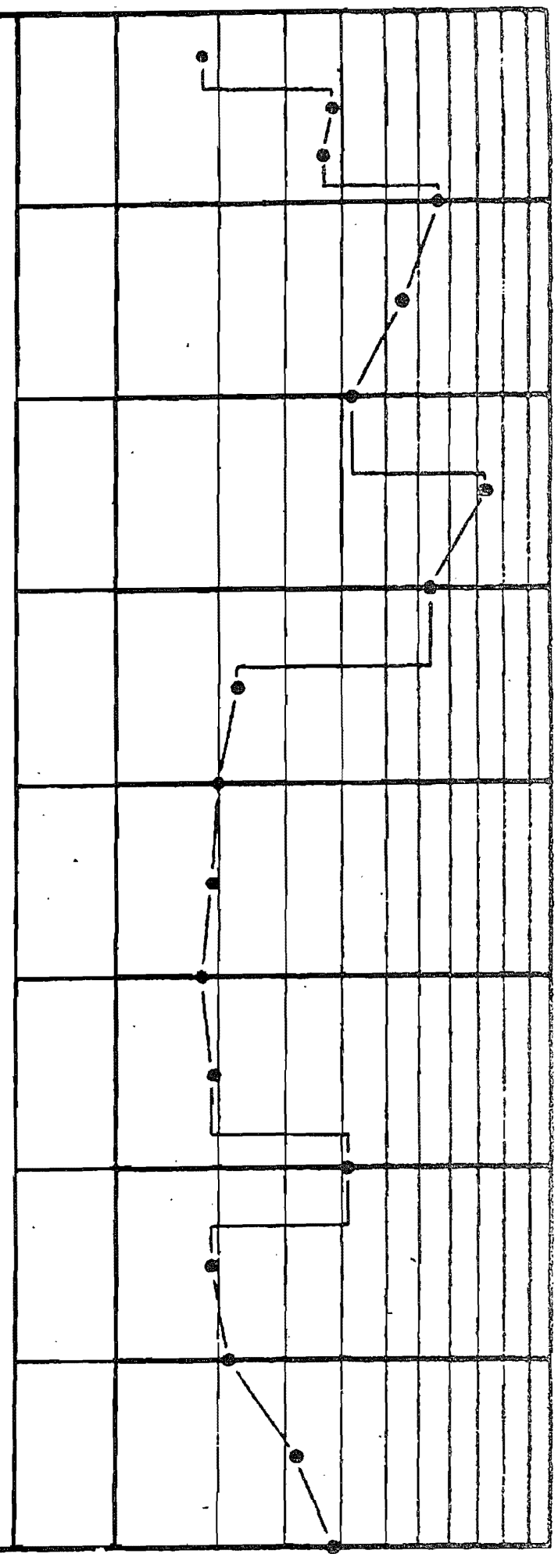
WATER TABLE

BORING NO B-3

JOB NO T-588

LAW ENGINEERING TESTING CO.

0	LOOSE GRAY FINE SAND WITH SOME *
2	LOOSE BROWN FINE TO MEDIUM SAND.**
4	FIRM TAN FINE TO MEDIUM SAND WITH SOME BROKEN SHELL
9	VERY DENSE TAN FINE SAND
14	DENSE TAN FINE TO MEDIUM SAND AND BROKEN SHELL
17	DENSE GRAY FINE SAND WITH SOME BROKEN SHELL
24	VERY DENSE GRAY FINE TO MEDIUM SAND AND BROKEN SHELL
34	STIFF GRAY CLAY WITH SOME BROKEN SHELLS
58	DENSE GRAY-GREEN ALTERNATE SEAMS OF FINE SANDY CLAY AND FINE SAND
63	LOOSE GRAY-GREEN CLAYEY FINE SAND AND BROKEN SHELLS
68	FIRM GRAY-GREEN SILTY FINE SAND
78	



* BROKEN SHELL

** WITH SOME BROKEN SHELL

PENETRATION IS THE NUMBER OF BLOWS OF 140 LB. HAMMER FALLING 30 IN. REQUIRED TO DRIVE 1.5 IN. SAMPLER 1 FT.

UNDISTURBED SAMPLE

|50| % ROCK CORE RECOVERY

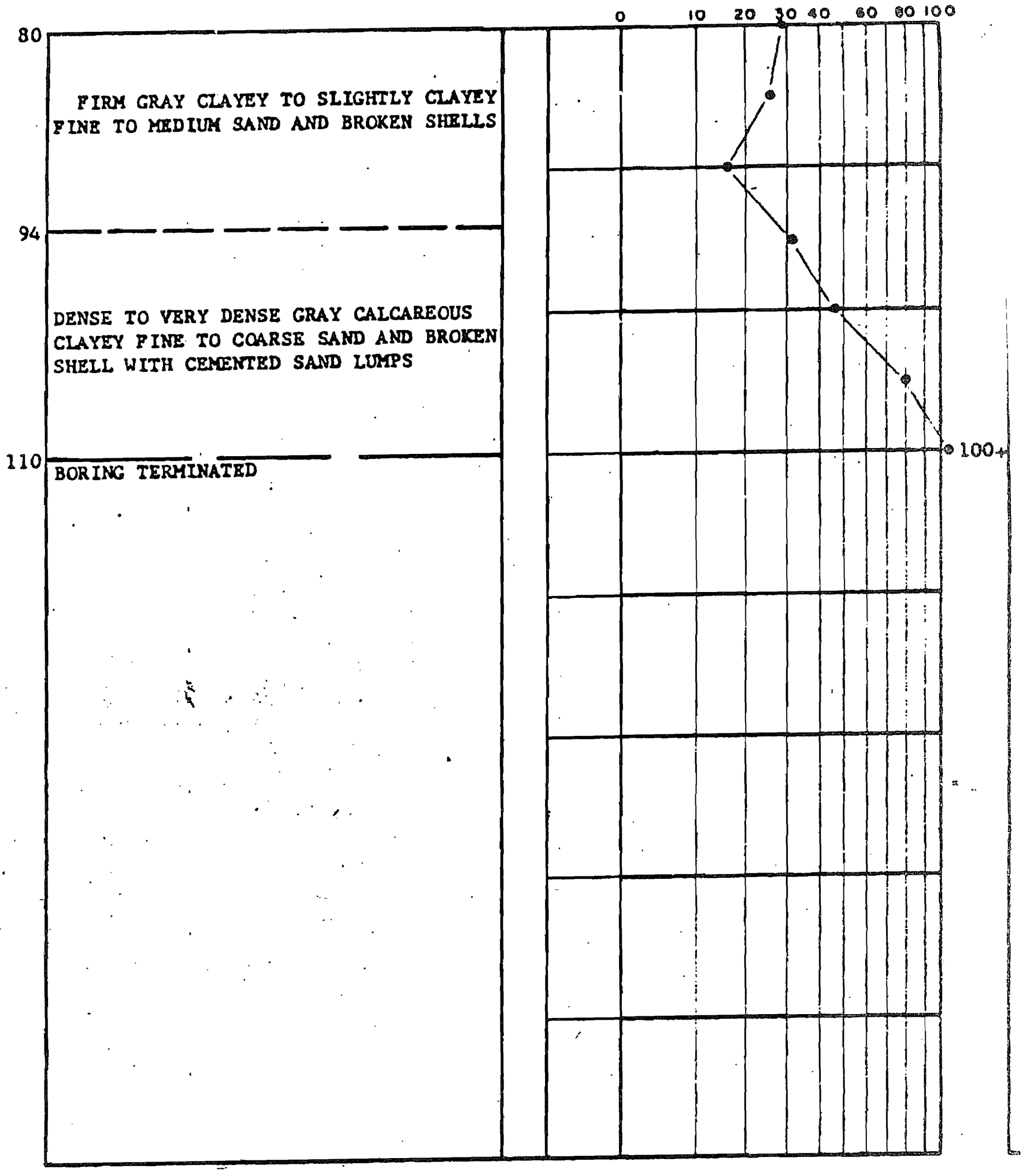
WATER TABLE

TEST BORING RECORD

BORING NO B-4 (continued)

JOB NO T-588

LAW ENGINEERING TESTING CO.



TEST BORING RECORD

PENETRATION IS THE NUMBER OF BLOWS OF 140 LB. HAMMER FALLING 30 IN. REQUIRED TO DRIVE 1.5 IN. SAMPLER 1 FT.

UNDISTURBED SAMPLE

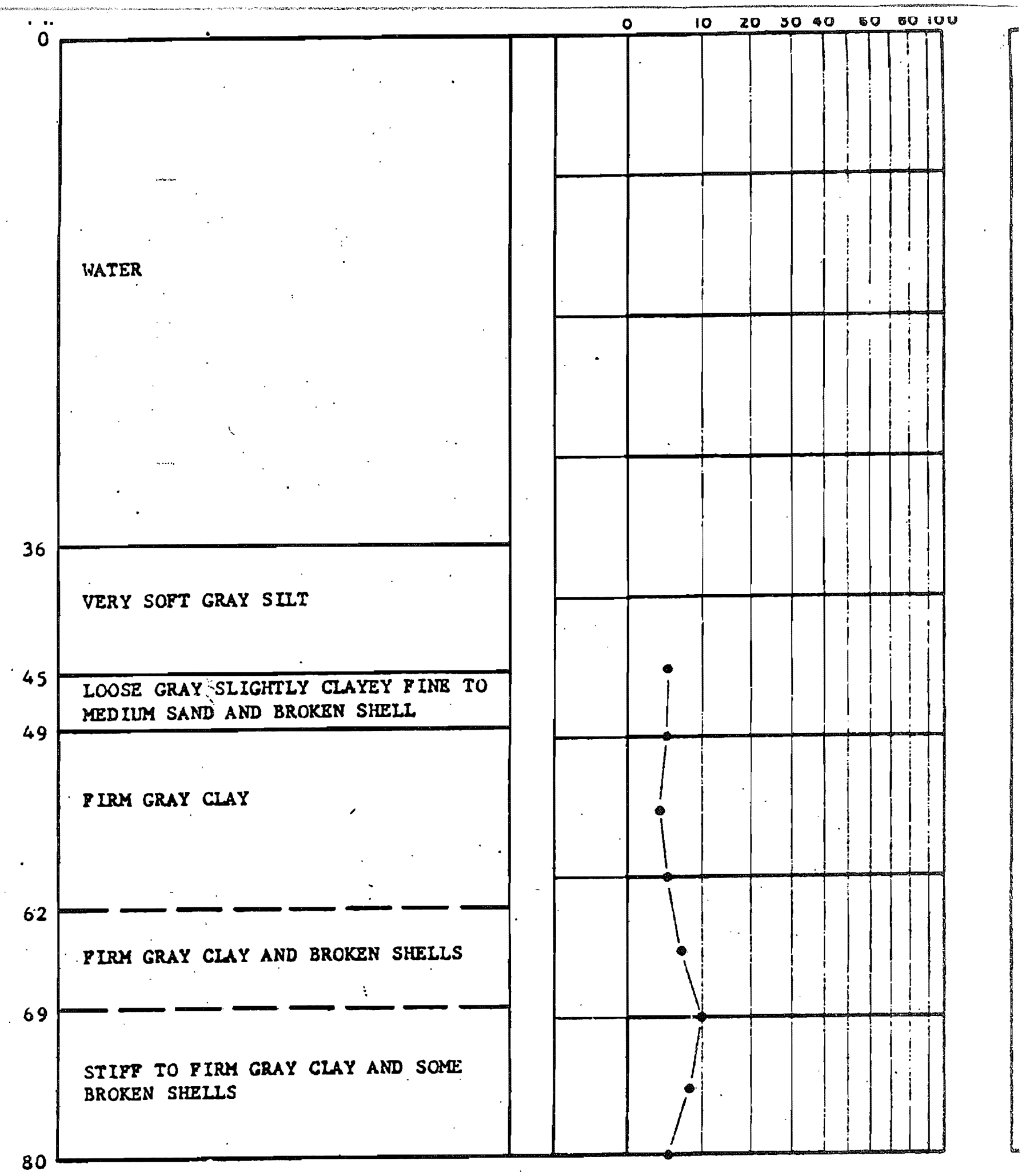
|50| % ROCK CORE RECOVERY

WATER TABLE

BORING NO B-4

JOB NO T-588

LAW ENGINEERING TESTING CO



NOTE: WATER DEPTH MEASURED AT 3:00 P.M. 9/29/59.

TEST BORING RECORD

PENETRATION IS THE NUMBER OF BLOWS OF 140 LB. HAMMER FALLING 30 IN. REQUIRED TO DRIVE 1.5 IN. SAMPLER 1 FT.

BORING NO B-5 (continued)

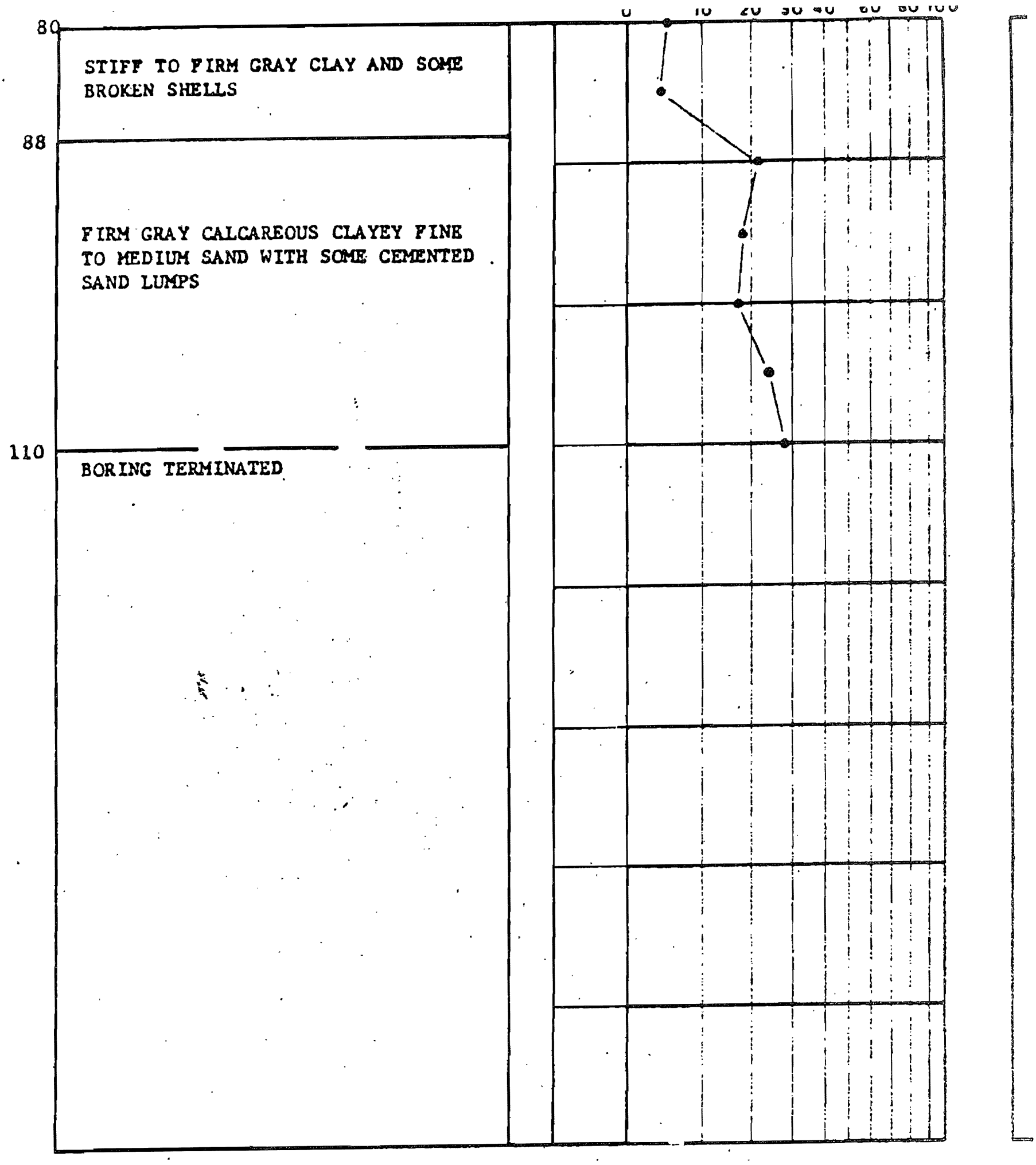
JOB NO T-588

UNDISTURBED SAMPLE

|30| % ROCK CORE RECOVERY

WATER TABLE

LAW ENGINEERING TESTING CO.



TEST BORING RECORD

PENETRATION IS THE NUMBER OF BLOWS OF 140 LB. HAMMER FALLING 30 IN. REQUIRED TO DRIVE 1.5 IN. SAMPLER 1 FT.

UNDISTURBED SAMPLE

|50| % ROCK CORE RECOVERY

WATER TABLE

BORING NO B-5

JOB NO T-588

LAW ENGINEERING TESTING CO.

(33)

HOLE NO. CN #1

DEPARTMENT OF THE ARMY
DIVISION Corps of Engineers
INSTALLATION Jacksonville, Florida

DRILLING LOG

1. PROJECT: Canaveral Harbor
SHEET 1 OF
2. LOCATION (Coordinates or Station): Sta: B17+00
X - 627,414
Y - 1,481,971
Rge: 460
3. DRILLING AGENCY: Corps of Engineers
4. HOLE NO. (As shown on drawing title and file No.): Canaveral Harbor CN #1
5. NAME OF DRILLER: C. R. Mason
6. DIRECTION OF HOLE: [X] VERTICAL [ ] INCLINED; DEGREES WITH VERTICAL
7. THICKNESS OF OVER-BURDEN
8. DEPTH DRILLED INTO ROCK
9. TOTAL DEPTH OF HOLE 95
10. SIZE AND TYPE OF BIT: See Remarks
11. DATUM FOR ELEVATION SHOWN (TBM or MSL): MSL
12. MANUFACTURER'S DESIGNATION OF DRILL: Sprague & Henwood
13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN: DISTURBED; UNDISTURBED
14. TOTAL NO. CORE BOXES: 1
15. ELEV. GROUND WATER
16. DATE HOLE: STARTED 4/4/56; COMPLETED 4/5/56
17. ELEV. TOP OF HOLE: +12.9
18. TOTAL CORE RECOVERY FOR BORING (%): 73.0%
19. SIGNATURE OF ~~INSPECTOR~~ Geologist: Charles Y. Brobston

ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOVERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth weathering, etc., if significant)	Blows/Ft	
+12.9	0.0					Bit & Barrel		+1
			SP-SAND, fn/med, quartz & shell, tan	40	1	2" Spoon	8 15 19 30 23	
			About +0.1-Exposure of soft coquina 100' to the SW & west but did not detect in CB.	64	2	" "	3 15 22 24 30	
				70	3	" "	10 22 50 89 114	
				68	4	" "	Wash 26 42 80 124	
-10.1	23.0			100	5	" "	19 96 172 314 386	-12
-13.4	26.3		SP-SM-SAND, fine, slightly calc, qtz & shell, 5% consolidated				Wash	
-13.9	26.8		SHELL, sand	76	6	" "	21	
-15.7	28.6		SP-SAND, fn/med, qtz & shell		7		30 40 48	-17
			SP-SM-SAND, fine, silty (calc) slightly shelly w/thin beds of shell and medium sand	54	8	" "	7 32 60 70 74	-22
-23.4	36.3			30	9	" "	25 118	
			SM-SAND, fine, silty, slightly shelly, gry, slightly calc.				Spoon grouted	
-27.1	40.0						Drove Casing	-27
	60							

ENG FORM 1 FEB 51 1836 (Supersedes ENG Form 1836, 1 Jan 50, 1 May 50, Which May Be Used Until Stocks Are Exhausted)

PROJECT Canaveral Harbor HOLE NO. CN #1

U. S. GOVERNMENT PRINTING OFFICE

HOLE NO. CN #1

DRILLING LOG (Continuation) INSTALLATION Corps of Engineers Jacksonville, Florida	1. PROJECT Canaveral Harbor	SHEET 2 OF 3
	2. LOCATION (Coordinates or Station) E = 621,414 N = 1,491,971	Sta: 217+00 Rge: 460

ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOVERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)
-27.1	40.0					Bit & Barrel Blo/ft -27.1
-30.9	43.8		ML-SILT, very slightly shelly, gry	60	10	2" Undstm 3 4 6 8 5 -32.1
			CL-CLAY, silty, very slightly shelly, slightly organic	100	11	" " 1½ 1/2 3 3 4 -37.1
				100	12	Wt. of hammer " " 2 3 4 6 -42.1
				100	13	Wt. of hammer " " 2 3 5 5 -47.1
-49.9	62.0			100	14 15	" " 2 5 7 10 27 -52.1
-51.3	64.2		SM-SAND, organic, very fine, silty			
			SM-SAND, very fine, silty	20	16	" " 14 10 12 20 22 -57.1
			very silty, very shelly from -57.1 to -62.9	80	17	" " 2 3 3 3 4 -62.1
			slightly shelly from -62.9	40	18	" " 5 15 16 19 37 -67.1
-72.1	85.0			100	19	" " 10 13 29 51 76 -72.1

HOLE NO. CN #1

DRILLING LOG *(Continuation)*
Corps of Engineers
INSTALLATION ~~Jacksonville, Florida~~

1. PROJECT: Canaveral Harbor
SHEET 3 OF 3

2. LOCATION (Coordinates or Station): Sta: 217 +00
X - 627,414
Y - 1,191,971
Rec: 460

ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (description)	% CORE RECOVERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)	
-72.1	85.0					Lt & Barrel Bls/Ft	-72
-72.2	85.0						6
			ML-SILT, sandy	00	20	2" Spoon	6
							6
							7
							13
				00	21	" "	2
							3
							7
							9
-82.1	95.0						14
						136# Hammer w/36" Drop used 0.0/45.0	
						350# Hammer w/18" Drop used 45.0/65.0	
						350# Hammer w/21" Drop used 65.0/[illegible]	
	10						

ENG FORM 1 FEB 51 1836a (Supersedes ENG Form 1836a, 1 Jan 50, 1 MAY 50, which may be used until Stocks Are Exhausted)

PROJECT Canaveral Harbor HOLE NO. CN #1

(39)

HOLE NO. CN #7

DEPARTMENT OF THE ARMY
DIVISION Corps of Engineers
INSTALLATION Jacksonville, Florida

DRILLING LOG

1. PROJECT: Canaveral Harbor
SHEET OF
2. LOCATION (Coordinates or Station): X - 621,189 Sta. 219+50; Y - 1,431,960; Rge. 450
3. DRILLING AGENCY: Corps of Engineers
4. HOLE NO. (As shown on drawing title and file No.): Canaveral Harbor CN #7
5. NAME OF DRILLER: George Lineberger
6. DIRECTION OF HOLE: [X] VERTICAL [ ] INCLINED; DEGREES WITH VERTICAL
7. THICKNESS OF OVER-BURDEN
8. DEPTH DRILLED INTO ROCK
9. TOTAL DEPTH OF HOLE: 35.5'
10. SIZE AND TYPE OF BIT: See Remarks
11. DATUM FOR ELEVATION SHOWN (TBM or MSL): MSL
12. MANUFACTURER'S DESIGNATION OF DRILL: Longyear
13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED; UNDISTURBED
14. TOTAL NO. CORE BOXES: 1
15. ELEV. GROUND WATER: -1.5
16. DATE HOLE: STARTED 4/7/56; COMPLETED 4/9/56
17. ELEV. TOP OF HOLE: -26.5
18. TOTAL CORE RECOVERY FOR BORING (%): 61%
19. SIGNATURE OF Geologist: John C. Bowman, Jr.

ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (description)	% CORE RECOVERY	BOX OR SAMPLE NO.	REMARKS (drilling time, water loss, depth of weathering, etc., if significant)
-26.5	0.0					Bit & Barrel Blo/Ft -28.
			OL-SILT, organic, blk.	0		2" Spoon Settled
						Lost sample -31.
				0		Drove Casing Wash Boring -34.
-34.5	8.0		CH-CLAY, grn.	50	1 1A	2" Spoon Settled 2 2 4 -36
				100	2 2A	" " Pushed 2 Wt. of hammer 2 -44.
				0		Wash boring -45.
				100	3 3A	2" Spoon Pushed 2 3 8 -50
-52.0	25.5			50	4 4A	" " Pushed 5 10 15 17 -55.
			ML-SILT, slightly sandy, slightly shelly			
			shelly below -53.1	90	5 5A	" " 6 2 3 3 2 -60.
			shelly, slightly clayey below -58.1	100	6 6A	" " 3 2 -62.
-62.0	35.5					250# Hammer w/21" Drop used on Spoon

ENG FORM 1 FEB 51 1836 (Supersedes ENG Form 1836, 1 Jan 50, 1 May 50, Which May Be Used Until Stocks Are Exhausted)

PROJECT Canaveral Harbor HOLE NO. CN #7

U. S. GOVERNMENT PRINTING OFFICE

(46)

HOLE NO. CN #8

DEPARTMENT OF THE ARMY
DIVISION Corps of Engineers
INSTALLATION Jacksonville, Florida

DRILLING LOG

1. PROJECT Canaveral Harbor, CN #8 — SHEET 1 OF 2
2. LOCATION (Coordinates or Station) x - 826,986 y - 1,402,154 Sta: 221+27 Rge: 645
3. DRILLING AGENCY Corps of Engineers
4. HOLE NO. (As shown on drawing title and file No.) Canaveral Harbor : CN #8
5. NAME OF DRILLER George Lineberger
6. DIRECTION OF HOLE: [X] VERTICAL [ ] INCLINED — DEGREES WITH VERTICAL
7. THICKNESS OF OVER-BURDEN
8. DEPTH DRILLED INTO ROCK
9. TOTAL DEPTH OF HOLE 53.28'
10. SIZE AND TYPE OF BIT
11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL
12. MANUFACTURER'S DESIGNATION OF DRILL Sprague & Henwood
13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
14. TOTAL NO. CORE BOXES 1
15. ELEV. GROUND WATER
16. DATE HOLE — STARTED 4/28/56 — COMPLETED 4/29/56
17. ELEV. TOP OF HOLE -27.30
18. TOTAL CORE RECOVERY FOR BORING (%) 30%
19. SIGNATURE OF INSPECTOR Geologist John C. Bowman, Jr.

ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOVERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)
-27.30	0.0					Bit & Barrel Bls/Ft -27
-33.40	6.10		OL-SILT, organic, blk.(?)	0		Seated casing - could not retain sample. At -33.40 attempted Shelby. -33
-47.73	20.43		CH-CLAY, grn.	0		Wash boring to -36.00 Dry boring to -37.83 -37
				100		Shelby Tube #1 -39
				0		Wash Boring to -43.00 Dry Boring to -44.03 -44
				100		Shelby Tube #2 -45
			SM-SAND, fine, silty, grn.	70	1 2	Wt. of hammer 2" Spoon 4 10 20 20 -51
				0		Wash Boring to -53.83 Dry Boring to -54.83 -54
			poss. 20% consolidated below -54.83	100	3	Attempted Shelby - Would not press - Drove -56
			no consolidation, shelly, slightly clayey below -56.84	40	4	Wt. of hammer 2" Spoon 3 4 4 3 -61
				0		Dry Boring -62
			some shell, below -62.33	100	5	Attempted Shelby - Would not press - Drove -64
				0		Wash Boring -65
				0		Settled 2" Spoon Settled Lost Sample 6 15 20 -70
				0		2" Spoon 8 Lost Sample 8 -72
73.57				0		Dry Boring

ENG FORM 1 OCT 55 1836 PREVIOUS EDITIONS MAY BE USED UNTIL EXHAUSTED. PROJECT Canaveral Harbor HOLE NO. CN #8

HOLE NO. CN #8

DRILLING LOG (Continuation)	1. PROJECT Canaveral Harbor - CN #8	SHEET 2 OF 2
INSTALLATION Corps of Engineers Jacksonville, Florida	2. LOCATION (Coordinates or Station) X - 826,[illegible] Y - 1,[illegible] Sta: 221+27 Rge: 645	

ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOVERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)	
-73.57						Fit & Barrel Bls/Ft	-73.57
-74.5	27.2		See Sheet #1				
				100	6 7	Attempted Shelby - Drove	-75.58
			ML-SILT, slightly clayey, shelly, grn.	80	8	2" Spoon	Settled 4 4 5 6
-80.58	53.28						-80.58
						Drilled 5" Casing down	
						250# Hammer w/21" Drop used on Spoon	
	10						

ENG FORM 1 FEB 51 1836a (Supersedes ENG Form 1836a, 1 Jan 40, 1 MAY 50, which May Be Used Until Stocks Are Exhausted)

PROJECT Canaveral Harbor HOLE NO. CN #8

(19)

HOLE NO. H-3

DEPARTMENT OF THE ARMY
DIVISION [illegible]
INSTALLATION Jacksonville, Florida

DRILLING LOG

1. PROJECT Canaveral Harbor	SHEET 1 OF 1
2. LOCATION (Coordinates or Station) Sta: 87+50 Rge: 50'	
3. DRILLING AGENCY Corps of Engineers	
4. HOLE NO. (As shown on drawing title and file No.) Canaveral Harbor #3	5. NAME OF DRILLER E. S. Hayes

6. DIRECTION OF HOLE			7. THICKNESS OF OVER-BURDEN	8. DEPTH DRILLED INTO ROCK	9. TOTAL DEPTH OF HOLE
☒ VERTICAL	☐ INCLINED	DEGREES WITH VERTICAL			5'

10. SIZE AND TYPE OF BIT	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	12. MANUFACTURER'S DESIGNATION OF DRILL
2" Spoon	MSL	

13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN		14. TOTAL NO. CORE BOXES	15. ELEV. GROUND WATER	16. DATE HOLE STARTED	COMPLETED
DISTURBED	UNDISTURBED	0	+4.2	12/2/55	12/2/55

17. ELEV. TOP OF HOLE	18. TOTAL CORE RECOVERY FOR BORING (%)	19. SIGNATURE OF INSPECTOR
-25.8	20%	Geologist. John C. Beaman, Jr.

ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOVERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)
-25.8	0.0		SP-SAND, dry/wet, tan, slightly silty,			Bit & Barrel Blo/Ft -25.8
-25.3	0.5		OL-CLAY, sandy, dry/moist.			
-26.6	1.0				1	Soft - Settled w/weight of rods
			SP-SAND, fine, dry/wet	20	2	2" Spoon
					3	
-30.8	5.0					-30.8

ENG Form 1 OCT 55 (Ex-3) PREVIOUS EDITIONS MAY BE USED UNTIL EXHAUSTED

PROJECT Canaveral Harbor HOLE NO. 3

(50)

HOLE NO. H-4

DEPARTMENT OF THE ARMY
DIVISION Corps of Engineers
INSTALLATION Jacksonville, Florida

DRILLING LOG

1. PROJECT Canaveral Harbor
SHEET 1 OF 1
2. LOCATION (Coordinates or Station) X - Y - Sta: 130+00 Rge: 650'
3. DRILLING AGENCY Corps of Engineers
4. HOLE NO. (As shown on drawing title and file No.) Canaveral Harbor #4
5. NAME OF DRILLER E. S. Hayes
6. DIRECTION OF HOLE: [X] VERTICAL [ ] INCLINED DEGREES WITH VERTICAL
7. THICKNESS OF OVER-BURDEN
8. DEPTH DRILLED INTO ROCK
9. TOTAL DEPTH OF HOLE 8'
10. SIZE AND TYPE OF BIT 2" Spoon
11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
12. MANUFACTURER'S DESIGNATION OF DRILL
13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
14. TOTAL NO. CORE BOXES 0
15. ELEV. GROUND +4.5 WATER MLW
16. DATE HOLE: STARTED 12/1/55 COMPLETED 12/1/55
17. ELEV. TOP OF HOLE -24.5
18. TOTAL CORE RECOVERY FOR BORING (%) 62%
19. SIGNATURE OF ~~INSPECTOR~~ Geologist John C. Bowman, Jr.

ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOVERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)
-24.5	0.0					Bit & Barrel Bls/Ft -24.5
			CH-CLAY, gry/grn.	62	1 2	2" Spoon Soft - Settled w/weight of rods
-30.0	5.5					
			SP-SAND, fine, gry/grn.			
-32.5	8.0					-32.5

ENG FORM 1 OCT 55 1836 PREVIOUS EDITIONS MAY BE USED UNTIL EXHAUSTED

PROJECT Canaveral Harbor HOLE NO. 4

(51)

HOLE NO. H-5

DEPARTMENT OF THE ARMY
DIVISION Corps of Engineers
INSTALLATION Jacksonville, Florida

DRILLING LOG

1. PROJECT Canaveral Harbor
SHEET 1 OF 1
2. LOCATION (Coordinates or Station) Sta: 136+00 Rge: 300'
X –
Y –
3. DRILLING AGENCY Corps of Engineers
4. HOLE NO. (As shown on drawing title and file No.) Canaveral Harbor #5
5. NAME OF DRILLER E. S. Hayes
6. DIRECTION OF HOLE: [X] VERTICAL [ ] INCLINED DEGREES WITH VERTICAL
7. THICKNESS OF OVER-BURDEN
8. DEPTH DRILLED INTO ROCK
9. TOTAL DEPTH OF HOLE 7.5'
10. SIZE AND TYPE OF BIT 2" Spoon
11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
12. MANUFACTURER'S DESIGNATION OF DRILL
13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
14. TOTAL NO. CORE BOXES 0
15. ELEV. GROUND WATER +3.6
16. DATE HOLE: STARTED 11/30/55 COMPLETED 11/30/55
17. ELEV. TOP OF HOLE -25.4
18. TOTAL CORE RECOVERY FOR BORING (%) 13%
19. SIGNATURE OF INSPECTOR Geologist John C. Bowman, Jr.

ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOVERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)
-25.4	0.0					Bit & Barrel Bls/Ft -25
			CH-CLAY, very slightly sandy gry/grn.	13	1	2" Spoon Soft Settled w/weight of rods
-32.9	7.5					-32
						1 Mason Jar Sample MLW (-25.4/-32.9)

ENG FORM 1838, 1 OCT 55 PREVIOUS EDITIONS MAY BE USED UNTIL EXHAUSTED. PROJECT Canaveral Harbor HOLE NO. 5

HOLE NO. CH-16

DEPARTMENT OF THE ARMY

DIVISION: Corps of Engineers

INSTALLATION: Jacksonville, Florida

DRILLING LOG

1. PROJECT: Canaveral Harbor, Turning Basin & Channel

SHEET 1 OF 1

2. LOCATION (Coordinates or Station): X = 527,720; Y = [illegible]; Sta: 116+30; Rec: 150'

3. DRILLING AGENCY: Corps of Engineers

4. HOLE NO. (As shown on drawing title and file No.): CH-1

5. NAME OF DRILLER: W. L. Roper

6. DIRECTION OF HOLE: [X] VERTICAL [ ] INCLINED; DEGREES WITH VERTICAL

7. THICKNESS OF OVER-BURDEN

8. DEPTH DRILLED INTO ROCK

9. TOTAL DEPTH OF HOLE: 47.0'

10. SIZE AND TYPE OF BIT: [illegible]

11. DATUM FOR ELEVATION SHOWN (TBM or MSL)

12. MANUFACTURER'S DESIGNATION OF DRILL: Longyear

13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED; UNDISTURBED

14. TOTAL NO. CORE BOXES

15. ELEV. GROUND WATER

16. DATE HOLE: STARTED 3/1/51; COMPLETED 3/15/51

17. ELEV. TOP OF HOLE: +12.

18. TOTAL CORE RECOVERY FOR BORING (%): 65%

19. SIGNATURE OF INSPECTOR: Recorder M. E. Gross

ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOVERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)
+12.0			Ground Elevation			Bit & Barrel. Bls/Ft.
-12.1			SAND, fine, brown			
+11.2			SAND, medium/fine, yellow	100		Recovered w/shovel
			SAND, coarse, brown			
+ 7.0				100	Jar #3	2" Spoon
+ 6.7			SAND, fine, white			
			SAND & SHELL, coarse, yellow			
				70	Box #3	" "
				100	Box #2	" "
				100	Box #1	" "
			SAND & SHELL, medium/fine			
				100	Jar #6	" "
				85	Box #1	" "
-17.5						
-16.5			SAND, fine, grey			
			SAND & SHELL, medium/fine, grey/tan	[illegible]	Jar #8	" "
-37.5				0	Box #1	" "
-37.5			SAND, medium/fine, grey			
-37.5			SAND, fine, grey, silty			
			CLAY, grey	100	Jar. #10 11	" "
-47.0						

HOLE NO. CH-19

DEPARTMENT OF THE ARMY
DIVISION Corps of Engineers
INSTALLATION Jacksonville, Florida

DRILLING LOG

1. PROJECT Canaveral Harbor
Turning Basin & Channel

SHEET 1 OF 1

2. LOCATION (Coordinates or Station)
X - 529,120
Y - 1,481,685
Sta: 99+95
Bge: 150'

3. DRILLING AGENCY
Corps of Engineers

4. HOLE NO. (As shown on drawing title and file No.)
CH-19

5. NAME OF DRILLER
W. D. Roppel

6. DIRECTION OF HOLE
[X] VERTICAL [ ] INCLINED
DEGREES WITH VERTICAL

7. THICKNESS OF OVER-BURDEN

8. DEPTH DRILLED INTO ROCK

9. TOTAL DEPTH OF HOLE 47.0

10. SIZE AND TYPE OF BIT
2" Spoon

11. DATUM FOR ELEVATION SHOWN (TBM or MSL)

12. MANUFACTURER'S DESIGNATION OF DRILL
Longyear

13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN
DISTURBED
UNDISTURBED

14. TOTAL NO. CORE BOXES

15. ELEV. GROUND WATER

16. DATE HOLE
STARTED 3/16/51
COMPLETED 3/15/51

17. ELEV. TOP OF HOLE
+12.0

18. TOTAL CORE RECOVERY FOR BORING (%) 87%

19. SIGNATURE OF ~~INSPECTOR~~ Recorder
M. E. Gross

ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOVERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)
+12.0			Ground Elevation			Bit & Barrel Blo/Ft. +12.0
+10.5			SAND, fine, grey	100	Jar #1	Recovered w/shovel +10.5
			SAND & SHELL, medium/fine, tan	62	Jar #2	2" Spoon
				62	Box #1	" "
				50	Box #1	" "
-4.4			SAND, fine, grey	100	Box #1	" "
				100	Box #1	" "
				100	Box #1	" "
				100	Box #1	" "
				100	Box #1	" "
-32.0			CLAY & SHELL, grey	100	Jar #4	" " CH 19
-34.0						

Charles R. Hopper

HOLE NO. CH-20

DEPARTMENT OF THE ARMY
DIVISION Corps of Engineers
INSTALLATION Jacksonville, Florida

DRILLING LOG

1. PROJECT Canaveral Harbor Turning Basin and Channel
SHEET 1 OF 1
2. LOCATION (Coordinates or Station) Sta: 84+99.52 x = 830,610 y = 1,481,690 Rge: 150'
3. DRILLING AGENCY Corps of Engineers
4. HOLE NO. (As shown on drawing title and file No.) CH-20
5. NAME OF DRILLER W. D. Roppel
6. DIRECTION OF HOLE: [X] VERTICAL [ ] INCLINED DEGREES WITH VERTICAL
7. THICKNESS OF OVER-BURDEN
8. DEPTH DRILLED INTO ROCK
9. TOTAL DEPTH OF HOLE 47.0'
10. SIZE AND TYPE OF BIT 2" Spoon
11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
12. MANUFACTURER'S DESIGNATION OF DRILL Longyear
13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
14. TOTAL NO. CORE BOXES
15. ELEV. GROUND WATER
16. DATE HOLE: STARTED 3/19/51 COMPLETED 3/19/51
17. ELEV. TOP OF HOLE +12.0
18. TOTAL CORE RECOVERY FOR BORING (%) 86%
19. SIGNATURE OF INSPECTOR Recorder M. E. Gross

ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOVERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)
+12.0						Bit & Barrel Bls/Ft +12.0
+10.5			SAND, fine, brown	100	Jar #1	Recovered w/shovel +10.5
			SAND & SHELL, medium/fine, yellow	60	Jar #2	2" Spoon
				60	Box #1	" "
+0.9						
0.0			SAND, fine, grey			0
			SAND & SHELL, coarse, grey	68	Jar #4	" "
-5.0						
			SAND & SHELL, medium/fine, grey	100	Jar #5	" "
-9.3						-10
			SAND, fine, grey	94	Box #1	" "
						-15
				100	Box #1	" "
				100	Box #1	" "
				100	Box #1	" "
-32.3				100	Box #1	" " CH-20
-34.0			CLAY, Grey w/shells			

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DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT: Canaveral Harbor Extension
2. LOCATION (Coordinates or Station): Stn. 241+60 Rge. 250 CHANNEL
3. DRILLING AGENCY: Corps of Engineers
4. HOLE NO. (As shown on drawing title and file number): CB-CHE-1
5. NAME OF DRILLER: J. King
6. DIRECTION OF HOLE: ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.
7. THICKNESS OF OVERBURDEN:
8. DEPTH DRILLED INTO ROCK:
9. TOTAL DEPTH OF HOLE: 4.5'
10. SIZE AND TYPE OF BIT: See remarks
11. DATUM FOR ELEVATION SHOWN (TBM or MSL): MLW
12. MANUFACTURER'S DESIGNATION OF DRILL: Sprague & Henwood 40-C
13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED: ; UNDISTURBED:
14. TOTAL NUMBER CORE BOXES: 1
15. ELEVATION GROUND WATER: Tidal
16. DATE HOLE: STARTED 11-12-71; COMPLETED 11-12-71
17. ELEVATION TOP OF HOLE: -36.9
18. TOTAL CORE RECOVERY FOR BORING: 70 %
19. ~~SIGNATURE OF INSPECTOR~~ GEOLOGIST: J. Gentile

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
-36.9	0.0					BIT OR BARREL -36.9 Bls/0.5 ft.
-38.4	1.5		SILT, slightly sandy, soft, slightly clayey, gray (ML)	59	1	SPLIT SPOON pushed -38.4
			CLAY, [illegible] gray, soft (CL)	66	2	" " pushed -39.9
-41.4	4.5			86	3	" " pushed -41.4
						140# hammer with 30" drop used on 2.0' split spoon. (1-3/8" I.D. X 2" O.D.)

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE.

PROJECT: Canaveral Harbor Extension | HOLE NO. CB-CHE-1 1A

(57)

DRILLING LOG	PROPERTY: South Atlantic	INSTALLATION: Jacksonville District	SHEET 1 OF 2 SHEETS

1. PROJECT: Canaveral Harbor Extension
2. LOCATION (Coordinates or Station): Sta. 251+60 Rge. -100 CHANNEL
3. DRILLING AGENCY: Corps of Engineers
4. HOLE NO. (As shown on drawing title and file number): CB-CHE-2
5. NAME OF DRILLER: J. King
6. DIRECTION OF HOLE: [X] VERTICAL [ ] INCLINED ____ DEG. FROM VERT.
7. THICKNESS OF OVERBURDEN:
8. DEPTH DRILLED INTO ROCK:
9. TOTAL DEPTH OF HOLE: 45.0'
10. SIZE AND TYPE OF BIT: See remarks
11. DATUM FOR ELEVATION SHOWN (TBM or MSL): MLW
12. MANUFACTURER'S DESIGNATION OF DRILL: Sprague & Henwood 40-C
13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED: ; UNDISTURBED:
14. TOTAL NUMBER CORE BOXES: 2
15. ELEVATION GROUND WATER: Tidal
16. DATE HOLE: STARTED 12-7-71 COMPLETED 12-7-71
17. ELEVATION TOP OF HOLE: +5.0
18. TOTAL CORE RECOVERY FOR BORING: 51 %
19. GEOLOGIST: J. Gentile

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g	
+5.0	0.0					BIT OR BARREL +5.0 Blo/0.5 ft.	
+0.5	4.5		SAND, fine to medium quartz, slightly shelly, clean tan (SP) 0-12% Silt	26	1	SPLIT SPOON +3.5	1 6 14
				33	2	" " +2.0	6 14 26
				40	3	" " +0.5	5 12 9
-3.5	8.5		SAND, fine, quartz, silty, slightly clayey, gray, slightly shelly, (SM) 12-49% Silt	40	4	" " -1.0	4 4 3
				33	5	" " -2.5	3 2 2
				46	6	" " -4.0	3 5 20
-5.5	10.5		bed of slightly silty (SP) sand -3.5 to -5.5	20	7	" " -5.5	5 20 31
				33	8	" " -7.0	3 9 8
				40	9	" " -8.5	4 9 12
				46	10	" " -10.0	3 6 7
				40	11	" " -11.5	5 12 11
-13.0	18.0			40	12	" " -13.0	3 13 20
			bed of clean, tight, slightly shelly, (SP) sand -13.0 to -16.5	33	13	" " -14.5	7 18 25

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

PROJECT: Canaveral Harbor Extension HOLE NO. CB-CHE-2

DRILLING LOG (Cont Sheet) | ELEVATION TOP OF HOLE +5.0 | Hole No. CB-CHE-2

PROJECT: Canaveral Harbor Extension | INSTALLATION: Jacksonville District | SHEET 2 OF 2 SHEETS

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g	
						BIT OR BARREL	
						-14.5 Blo/0.5 ft.	
				46	14	SPLIT SPOON	10 26 30
						-16.0	
-16.5	21.5			26	15	" "	9 15 12
						-17.5	
				40	16	" "	3 7 8
-19.0	24.0					-19.0	
			SILT, slightly clayey, slightly sandy, gray (ML)	53	17	" "	3 1 3
						-20.5	
				53	18	" "	2 3 7
-22.0	27.0					-22.0	
			CLAY, gray, slightly silty (CH)	66	19	" "	1 2 2
						-23.5	
				100	20	" "	2 3 3
						-25.0	
				100	21	" "	4 4 3
						-26.5	
				86	22	" "	pushed 1 2
						-28.0	
				97	23	" "	1 2 3
						-29.5	
				100	24	" "	2 4 5
						-31.0	
				60	25	" "	pushed 1 3
						-32.5	
				66	26	" "	3 4 2
						-34.0	
				46	27	" "	3 4 4
						-35.5	
				64	28	" "	1 1 2
						-37.0	
				66	29	" "	2 2 2
						-38.5	
				0		" "	2 2 3
-40.0	45.0					-40.0	
						140# hammer with 30" drop used on 2.0' split spoon. (1-3/8" I.D. X 2" O.D.)	

ENG FORM JAN 67 1836-A

PROJECT: Canaveral Harbor Extension | HOLE NO. CB-CHE-2

(28)

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT: Canaveral Harbor Extension
2. LOCATION (Coordinates or Station): Stn. 261+60 Rge. 250 CHANNEL
3. DRILLING AGENCY: Corps of Engineers
4. HOLE NO. (As shown on drawing title and file number): CB-CHE-3
5. NAME OF DRILLER: J. King
6. DIRECTION OF HOLE: [X] VERTICAL [ ] INCLINED ____ DEG. FROM VERT.
7. THICKNESS OF OVERBURDEN:
8. DEPTH DRILLED INTO ROCK:
9. TOTAL DEPTH OF HOLE: 18.0'
10. SIZE AND TYPE OF BIT: See remarks
11. DATUM FOR ELEVATION SHOWN (TBM or MSL): MLW
12. MANUFACTURER'S DESIGNATION OF DRILL: Sprague & Henwood 40-C
13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED: ; UNDISTURBED:
14. TOTAL NUMBER CORE BOXES: 1
15. ELEVATION GROUND WATER: Tidal
16. DATE HOLE: STARTED 11-16-71; COMPLETED 11-16-71
17. ELEVATION TOP OF HOLE: -22.8
18. TOTAL CORE RECOVERY FOR BORING: 66 %
19. GEOLOGIST: J. Gentile

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-22.8	0.0					BIT OR BARREL -22.8 Bls/0.5 ft.
			SAND, fine, quartz, silty to slightly silty, gray, [illegible] (SM)	40	1	SPLIT SPOON pushed -24.3
				46	2	" " pushed -25.8
				40	3	" " pushed -27.3
-28.8	6.0			40	4	" " pushed -28.8
			CLAY, soft, [illegible] gray (CH)	46	5	" " pushed -30.3
				67	6	" " pushed -31.8
				79	7	" " pushed -33.3
				93	8	" " pushed -34.8
				93	9	" " pushed -36.3
				23	10	" " pushed -37.8
				86	11	" " pushed -39.3
-40.8	18.0			86	12	" " pushed -40.8
						140# hammer with 30" drop used on 2.0' split spoon (1-3/8" I.D. X 2" O.D.)

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

PROJECT: Canaveral Harbor Extension | HOLE NO. CB-CHE-3

(59)

DRILLING LOG	INSTALLATION: South Atlantic	INSTALLATION: Jacksonville District	SHEET 1 OF 3 SHEETS

1. PROJECT: Canaveral Harbor Extension
2. LOCATION (Coordinates or Station): Sta. 271+60 Rge. -50 CHANNEL
3. DRILLING AGENCY: Corps of Engineers
4. HOLE NO. (As shown on drawing title and file number): CB-CHE-4
5. NAME OF DRILLER: J. King
6. DIRECTION OF HOLE: [X] VERTICAL [ ] INCLINED _____ DEG. FROM VERT.
7. THICKNESS OF OVERBURDEN
8. DEPTH DRILLED INTO ROCK
9. TOTAL DEPTH OF HOLE: 46.5'
10. SIZE AND TYPE OF BIT: See remarks
11. DATUM FOR ELEVATION SHOWN (TBM or MSL): MLW
12. MANUFACTURER'S DESIGNATION OF DRILL: Sprague & Henwood 40-C
13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED: ; UNDISTURBED:
14. TOTAL NUMBER CORE BOXES: 2
15. ELEVATION GROUND WATER: Tidal
16. DATE HOLE: STARTED 12-6-71; COMPLETED 12-7-71
17. ELEVATION TOP OF HOLE: +6.6
18. TOTAL CORE RECOVERY FOR BORING: 43%
19. GEOLOGIST: J. Gentile

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
+6.6	0.0					BIT OR BARREL +6.6 Bls/0.5 ft.
			SAND, fine to medium, quartz, shelly, clean, tan, (SP))	20	1	SPLIT SPOON +5.1 3 5 8
				26	2	" " +3.6 4 6 5
+2.1	4.5			26	3	" " +2.1 3 7 7
			SAND, fine to medium, quartz, silty, gray, slightly clayey, slightly shelly (SM)	20	4	" " +0.6 2 5 4
				[illegible] 53	5	" " -0.9 4 3 4
				53	6	" " -2.4 4 4 4
-2.9	9.5			33	7	" " -3.9 3 6 8
			SAND, fine to medium, quartz, slightly silty, slightly shelly, gray (SP)	40	8	" " -5.4 3 10 8
				26	9	" " -6.9 3 8 10
				26	10	" " -8.4 3 13 15
				20	11	" " -9.9 8 12 18
-11.4	18.0			0		" " -11.4 10 8 12
			SAND, fine to medium, quartz, silty, slightly clayey, slightly shelly, gray (SM)	40	12	" " -12.9 2 2 2

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

PROJECT: Canalveral Harbor Extension | HOLE NO: CB-CHE-4

DRILLING LOG (Cont Sheet) | ELEVATION TOP OF HOLE +6.6 | Hole No. CB-CHE-4

PROJECT Canaveral Harbor Extension | INSTALLATION Jacksonville District | SHEET 2 OF 3 SHEETS

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
						BIT OR BARREL
						-12.9 Blo/0.5 ft.
				40	13	SPLIT SPOON, 2 4 15
						-14.4
				66	14	" " 10 13 15
						-15.9
				66	15	" " 4 3 4
						-17.4
				33	16	" " 1 1 3
						-18.9
				53	17	" " 8 9 13
						-20.4
				33	18	" " 4 2 4
-21.9	22.5					-21.9
			SAND, fine to medium, quartz (SP)	20	19	" " 12 19 26
						-23.4
				0		" " 15 21 30
-24.9	31.5		clayey -24.9 to -25.4			-24.9
-25.4	32.0					
			CLAY, gray (CH)	66	20	" " 10 3 3
						-26.4
				100	21	" " pushed 3 3
						-27.9
				100	22	" " 4 4 6
						-29.4
				100	23	" " pushed
						-30.9
				100	24	" " pushed
						-32.4
-33.4	40.0			66	25	" " pushed 8
						-33.9
			SAND, fine to coarse, quartz and shell, light gray, clean, tight, very shelly (SP)	26	26	" " 4 8 19
						-35.4

DRILLING LOG (Cont Sheet) | ELEVATION TOP OF HOLE +6.6 | Hole No. CB-CHE-4

PROJECT: Canaveral Harbor Extension | INSTALLATION: Jacksonville District | SHEET 3 OF 3 SHEETS

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
						BIT OR BARREL
						-35.4 Blo/0.5 ft.
				33	27	SPLIT SPOON 10 19 29
						-36.9
				26	28	" " 20 35 40
						-38.4
				20	29	" " 20 43 40
-39.9	46.5					-39.9
						140# hammer with 30" drop used on 2.0" split spoon. (1-3/8" I.D. X 2" O.D.)

ENG FORM JAN 67 1836-A

PROJECT: Canaveral Harbor Extension | HOLE NO. CB-CHE-4

(60)

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS

1. PROJECT: Canaveral Harbor Extension
2. LOCATION (Coordinates or Station): Sta. 281+60 Rge. 250 CHANNEL
3. DRILLING AGENCY: Corps of Engineers
4. HOLE NO. (As shown on drawing title and file number): CB-CHE-5
5. NAME OF DRILLER: J. King
6. DIRECTION OF HOLE: ☒ VERTICAL ☐ INCLINED _____ DEG. FROM VERT.
7. THICKNESS OF OVERBURDEN:
8. DEPTH DRILLED INTO ROCK:
9. TOTAL DEPTH OF HOLE: 27.0'
10. SIZE AND TYPE OF BIT: See remarks
11. DATUM FOR ELEVATION SHOWN (TBM or MSL): MLW
12. MANUFACTURER'S DESIGNATION OF DRILL: Sprague & Henwood 40-C
13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED: ; UNDISTURBED:
14. TOTAL NUMBER CORE BOXES: 1
15. ELEVATION GROUND WATER: Tidal
16. DATE HOLE: STARTED 11-17-71; COMPLETED 11-17-71
17. ELEVATION TOP OF HOLE: -13.2
18. TOTAL CORE RECOVERY FOR BORING: 42 %
19. GEOLOGIST: J. Gentile

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-13.2	0.0					BIT OR BARREL -13.2 Bls/0.5 ft.
-17.7	4.5		SAND, fine, quartz, silty, dark gray (SM)	0		SPLIT SPOON pushed -14.7
				0		" " pushed -16.2
				26	1	" " pushed -17.7
-23.7	10.5		CLAY, [illegible] gray, slightly shelly, soft (CH)	86	2	" " pushed -19.2
				80	3	" " pushed -20.7
				93	4	" " pushed -22.2
				93	5	" " pushed -23.7
-29.7	16.5		SAND, fine, quartz, silty, gray (SM)	0		" " pushed -25.2
				40	6	" " pushed -26.7 1 2
				53	7	" " 1 3 3 -28.2
				47	8	" " 5 7 12 -29.7
-32.7	19.5		SHELL, slightly sandy, tan	33	9	" " 3 16 33 -31.2
				25	10	" " 13 23 31 -32.7

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

PROJECT: Canaveral Harbor Extension | HOLE NO. CB-CHE-5

DRILLING LOG (Cont Sheet) | ELEVATION TOP OF HOLE -13.2 | Hole No. CB-CHE-5

PROJECT Canaveral Harbor Extensi | INSTALLATION Jacksonville Dis ct | SHEET 2 OF 2 SHEETS

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-32.7	19.5					BIT OR BARREL -32.7 Bls/0.5 ft.
-40.2	27.0		SAND, fine, quartz, slightly silty, very shelly, gray (SP)	33	11	SPLIT SPOON -34.2 15 26 30
				25	12	" " -35.7 16 30 35
				40	13	" " -37.2 15 34 30
				30	14	" " -38.7 11 24 30
				46	15	" " -40.2 10 22 31
						140# hammer with 30" drop used on 2.0' split spoon. (1-3/8" I.D. X 2" O.D.)

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS
1. PROJECT Canaveral Harbor Extension		10. SIZE AND TYPE OF BIT See remarks	
2. LOCATION (Coordinates or Station) STA 2+11.0	RCE - 6.50	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW	
3. DRILLING AGENCY Corps of Engineers		12. MANUFACTURER'S DESIGNATION OF DRILL Sprague & Henwood 40-C	
4. HOLE NO. (As shown on drawing title and file number)	CB-CHE-7	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED / UNDISTURBED
5. NAME OF DRILLER J. King		14. TOTAL NUMBER CORE BOXES 1	
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.		15. ELEVATION GROUND WATER Tidal	
		16. DATE HOLE	STARTED 11-23-71 / COMPLETED 11-23-71
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE -18.5	
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING 37 %	
9. TOTAL DEPTH OF HOLE 22.5'		19. GEOLOGIST: J. Gentile	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
						BIT OR BARREL
-18.5	0.0					-18.5 Bls/0.5 ft.
			SILT, soft, dark gray, slightly clayey (ML)	0		SPLIT SPOON -20.0 pushed
				0		" " -21.5 pushed
				0		" " -23.0 pushed
				0		" " -24.5 pushed
				20	1	" " -26.0 pushed
				33	2	" " -27.5
				53	3	" " -29.0 pushed
				60	4	" " -30.5 pushed
				66	5	" " -32.0
-32.0	13.5					
			SAND, fine, quartz, slightly silty to silty, slightly shelly, gray (SM)	40	6	" " -33.5 1 1 2
				33	7	" " -35.0 7 12 11

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

PROJECT Canaveral Harbor Extension | HOLE NO. CB-CHE-7

DRILLING LOG (Cont Sheet) -18.5 Hole No. CB-CHE-7

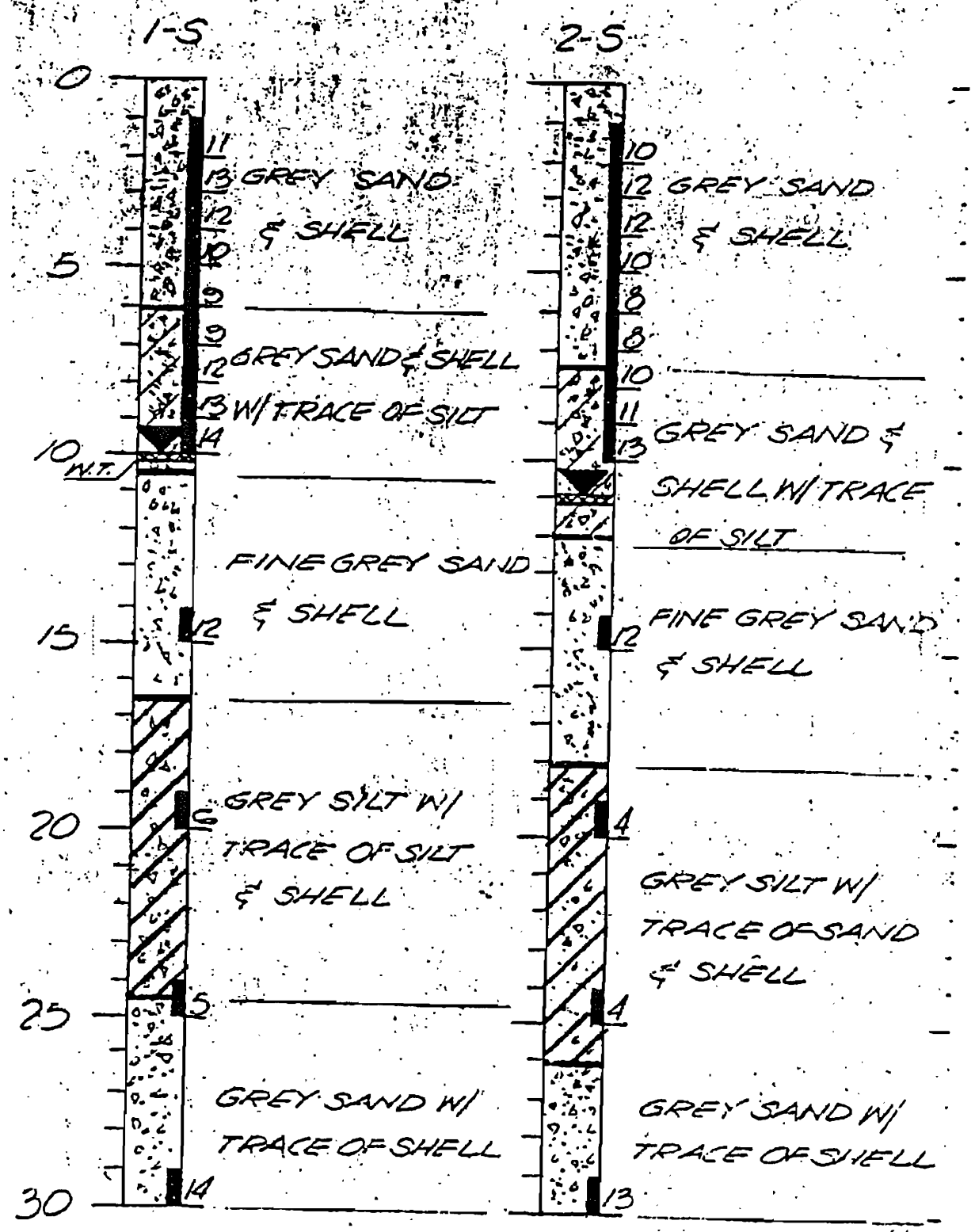
PROJECT Canaveral Harbor Extension | INSTALLATION Jacksonville District | SHEET 2 OF 2 SHEETS

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
						BIT OR BARREL
						-35.0 Bls/0.5 ft.
-36.5	18.0		bed of slightly silty, fine to medium, quartz, sand, shelly, from -36.5 to -38.0	40	8	SPLIT SPOON -36.5 8 9 12
-38.0	19.5			40	9	" " -38.0 7 8 9
-41.0	22.5		CLAY, silty, slightly sandy, green (CL)	86	10	" " -39.5 6 8 3
				80	11	" " -41.0 3 3 4
						140# hammer with 30" drop used on 2.0' split spoon. (1-3/8" I.D. X 2" O.D.)

ENG FORM 1836-A JUN 67

PROJECT Canaveral Harbor Extension | HOLE NO. CB-CHE-7

(67)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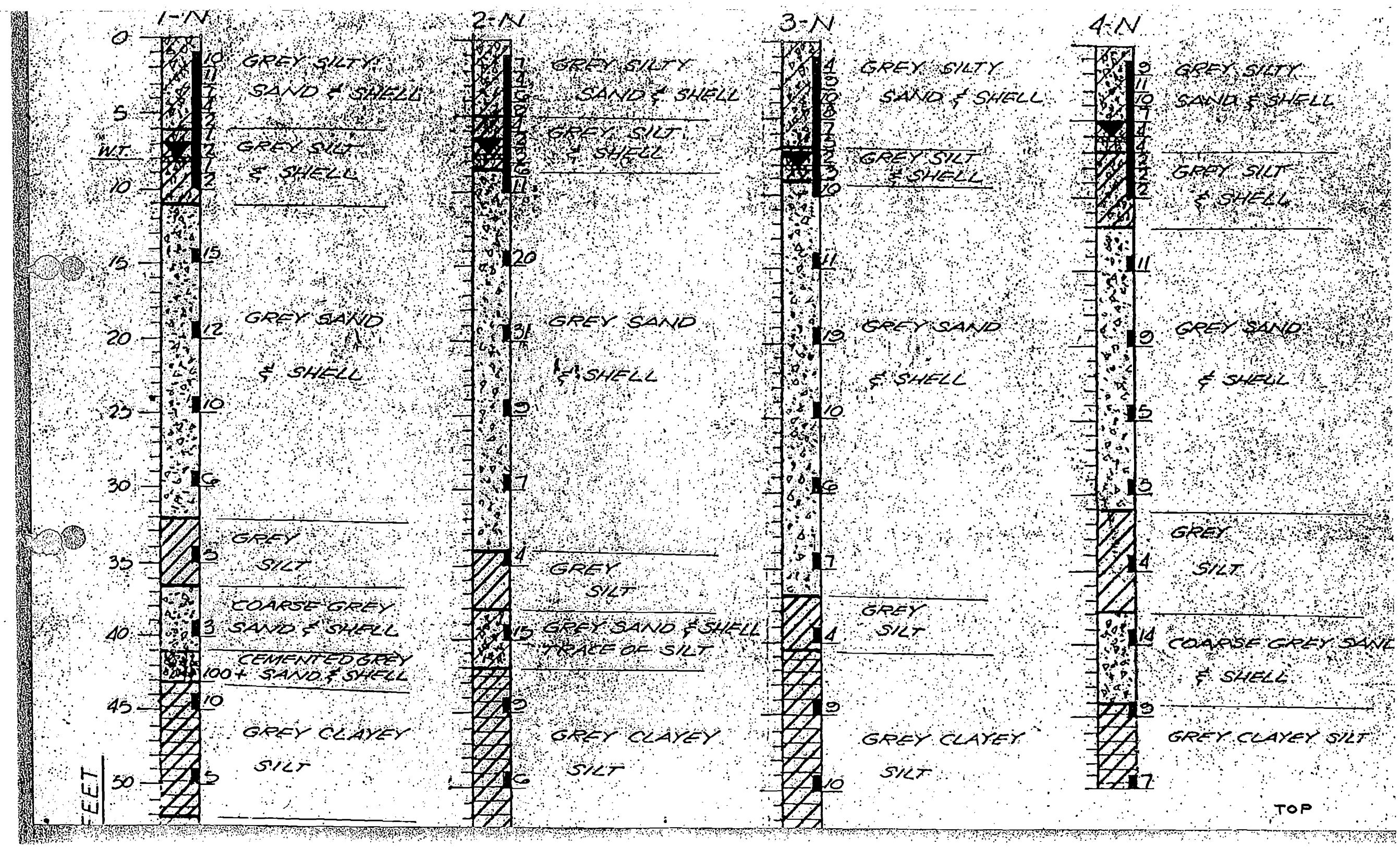
13
GREY SAND & SHELL
GREY SAND & SHELL W/ TRACE OF SILT
FINE GREY SAND & SHELL
GREY SILT W/ TRACE OF SILT & SHELL
GREY SAND W/ TRACE OF SHELL
GREY SAND & SHELL
GREY SAND & SHELL W/ TRACE OF SILT
FINE GREY SAND & SHELL
GREY SILT W/ TRACE OF SAND & SHELL
GREY SAND W/ TRACE OF SHELL


1-N
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FEET
GREY SILTY SAND & SHELL
GREY SILT & SHELL
GREY SAND & SHELL
GREY SILT
COARSE GREY SAND & SHELL
CEMENTED GREY SAND & SHELL
GREY CLAYEY SILT
GREY SILTY SAND & SHELL
GREY SILT & SHELL
GREY SAND & SHELL
GREY SILT
GREY SAND & SHELL
TRACE OF SILT
GREY CLAYEY SILT
GREY SILTY SAND & SHELL
GREY SILT & SHELL
GREY SAND & SHELL
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GREY CLAYEY SILT
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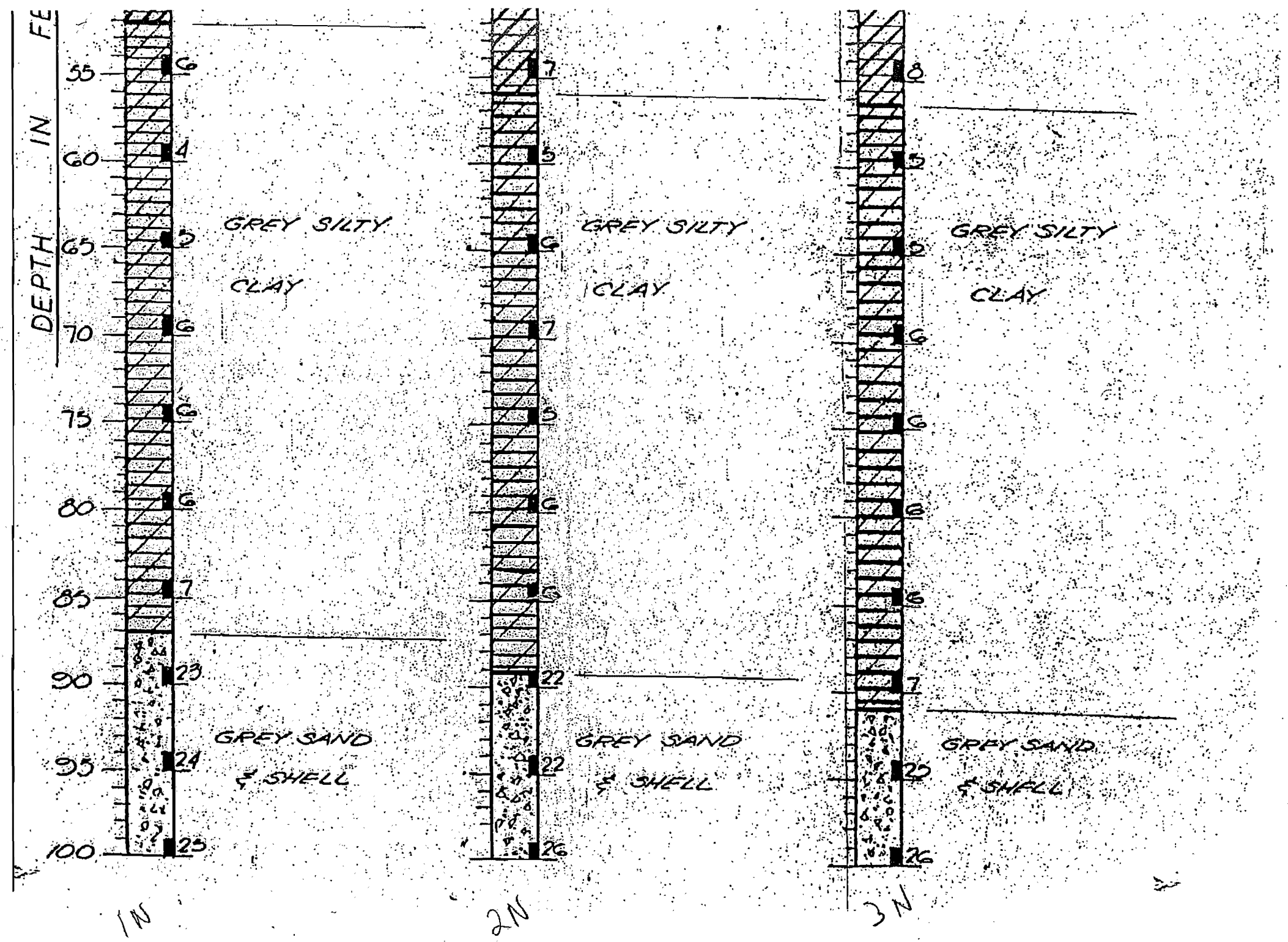
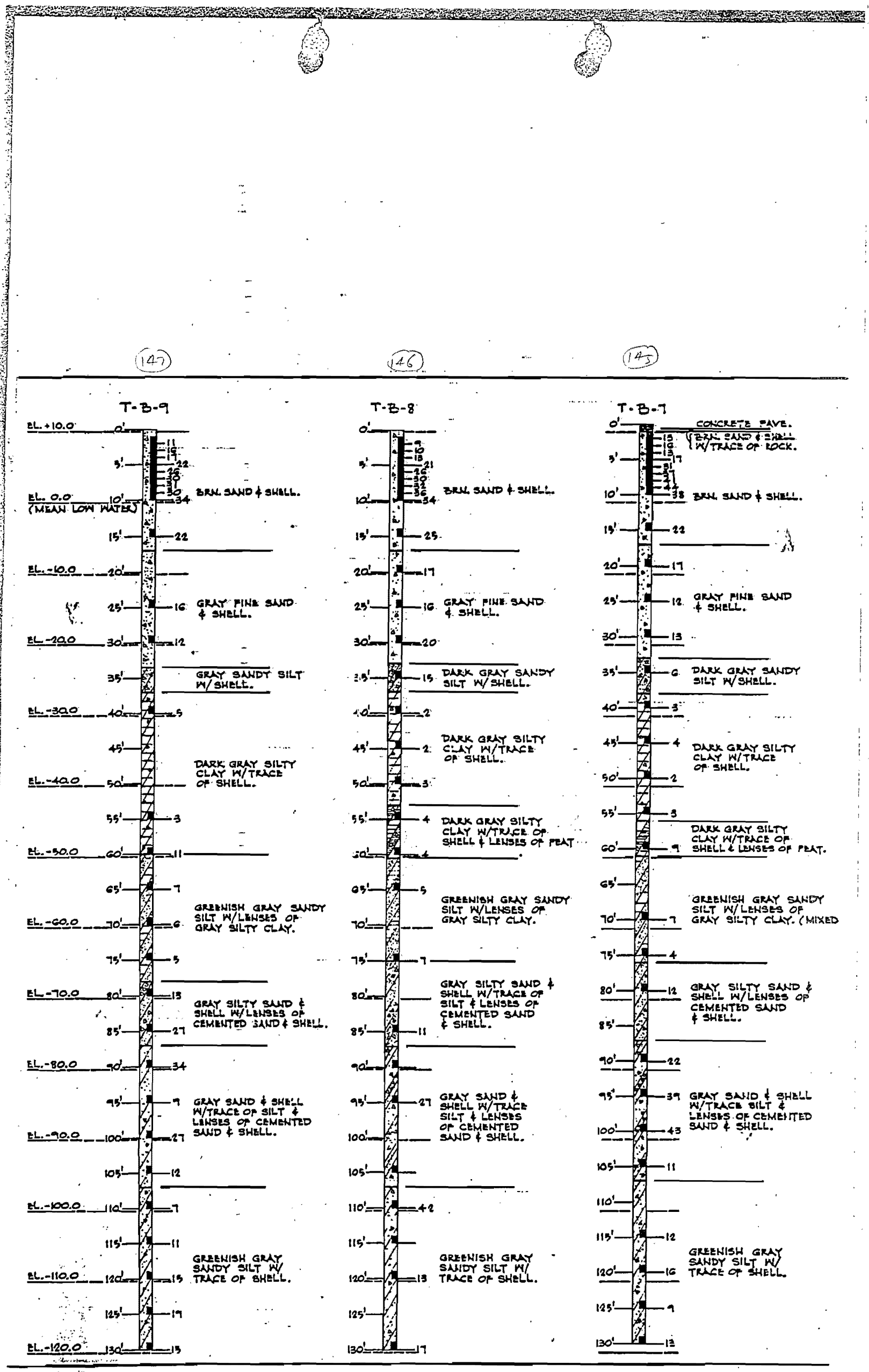
GREY CLAYEY SILT
TOP


DEPTH IN FEET
55
60
65
70
75
80
85
90
95
100
GREY SILTY CLAY
GREY SAND & SHELL
1N
2N
3N


147
146
145
T-B-9
T-B-8
T-B-7
EL. +10.0
EL. 0.0 (MEAN LOW WATER)
EL. -10.0
EL. -20.0
EL. -30.0
EL. -40.0
EL. -50.0
EL. -60.0
EL. -70.0
EL. -80.0
EL. -90.0
EL. -100.0
EL. -110.0
EL. -120.0
BRN. SAND & SHELL.
GRAY FINE SAND & SHELL.
GRAY SANDY SILT W/SHELL.
DARK GRAY SILTY CLAY W/TRACE OF SHELL.
GREENISH GRAY SANDY SILT W/LENSES OF GRAY SILTY CLAY.
GRAY SILTY SAND & SHELL W/LENSES OF CEMENTED SAND & SHELL.
GRAY SAND & SHELL W/TRACE OF SILT & LENSES OF CEMENTED SAND & SHELL.
GREENISH GRAY SANDY SILT W/ TRACE OF SHELL.
DARK GRAY SANDY SILT W/SHELL.
DARK GRAY SILTY CLAY W/TRACE OF SHELL & LENSES OF PEAT
GRAY SILTY SAND & SHELL W/TRACE OF SILT & LENSES OF CEMENTED SAND & SHELL.
CONCRETE PAVE.
BRN. SAND & SHELL W/TRACE OF ROCK.
DARK GRAY SILTY CLAY W/TRACE OF SHELL & LENSES OF PEAT.
GREENISH GRAY SANDY SILT W/LENSES OF GRAY SILTY CLAY. (MIXED

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JOB LOCATION:
Port Canaveral
Florida

WARREN GEORGE INC.
7641 HOOPER ROAD
WEST PALM BEACH, FL. 33411.

FOR: Gee & Jenson, Consulting Engineers

SHEET 1 OF 1
LOCATION
HOLE NO. C-B-W-5
LINE & STA.
OFFSET

DEPTH ____ FT. ____ FT. CASING OUT DATE: ____
DEPTH ____ FT. ALL CASING OUT DATE: ____
DATE, START: 3/21/82
DATE, FINISH: 3/21/82
GROUND ELEVATION
GROUND WATER ELEVATION

CASING O.D. 3" I.D.
SAMPLER O.D. 2" I.D.
DIAMOND BIT SIZE
WEIGHT OF HAMMER 300-140 LBS.
INSIDE LENGTH OF SAMPLER ____ IN.
HAMMER FALL
CASING 24" SAMPLER 30"

DEPTH BELOW SURFACE	CASING BLOWS PER FOOT	SAMPLE NUMBER	SAMPLE DEPTHS ELEV. / FEET	SAMPLE RECOVERY	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	DENSITY OR CONSIST. MOISTURE	PROFILE CHANGE DEPTH	FIELD IDENTIFICATION OF SOILS REMARKS
0			20 ft of water							
		1	0'-2'	Weight of Rods						
										Grey soft organic Silt
		2	5'-7'	Weight of Rods					0'-8'	
10		3	10'-12'	1	1	0	1	1		
		4	15'-17'	1	2	1	1	2		Grey fine silty Sand, and Silt, trace Shells
20		5	20'-22'	1	2	2	3	5	8'-22'	
		6	25'-27'	6	12	14	15	29		Grey compact fine to medium Sand, Shells, trace Shells
30		7	30'-32'	8	17	17	19	36	22'-33'	
		8	35'-37'	2	3	3	6	1	33'-38'	Grey Silt and trace Shells
40		9	38'-40'	9	12	15	19	34	38'-40'	Grey Compact Silt & Shells

Hole Complete @ 40 ft

Soil's Engineer:
Drilling Inspector:
Driller: V.J. Peretti
Helper:

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JOB LOCATION:	WARREN GEORGE INC.	SHEET 1 OF 3
Port Canaveral	7641 HOOPER ROAD	LOCATION
Florida	WEST PALM BEACH, FL. 33411.	HOLE NO. C-B-E-10
	FOR: Gee & Jenson, Consulting Engineers	LINE & STA.
		OFFSET

DEPTH _____ FT. ____ FT. CASING OUT DATE: _____
DEPTH _____ FT. ALL CASING OUT DATE: _____

DATE, START: 3/24/82
DATE, FINISH: 3/25/82

GROUND ELEVATION _____
GROUND WATER ELEVATION 8'6"

CASING O.D. 3" I.D. _____
SAMPLER O.D. 2" I.D. _____
DIAMOND BIT SIZE _____

WEIGHT OF HAMMER 300-140 LBS.
INSIDE LENGTH OF SAMPLER _____ IN.

HAMMER FALL
CASING 24" SAMPLER 30"

DEPTH BELOW SURFACE	CASING BLOWS PER FOOT	SAMPLE NUMBER	SAMPLE DEPTHS ELEV. / FEET	SAMPLE RECOVERY	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	DENSITY OR CONSIST. MOISTURE	PROFILE CHANGE DEPTH	FIELD IDENTIFICATION OF SOILS REMARKS
0										Light Brown fine to medium coarse Sand (Fill)
		1	5'-7'	13	12	12	13		0'-8'6"	
10										Grey fine to medium coarse Sand, trace Shells & Gravel
		2	10'-12'	4	8	12	10		8'6"-15'	
		3	15'-17'	2	1	2	1			Grey Silt, some fine Sand, & Shells
20									15'-21'6"	
		4	20'-22'	1	2	2	12			
		5	25'-27'	5	5	7	9			Grey fine to medium Sand, & Silt
30										
		6	30'-32'	6	8	7	7			
		7	35'-37'	4	4	4	5		21'6"-38'6"	
40										

Soils Engineer: _____ Driller: V.J. Peretti
Drilling Inspector: _____ Helper: _____

JOB LOCATION:
Port Canaveral
Florida

WARREN GEORGE INC.
7641 HOOPER ROAD
WEST PALM BEACH, FL. 33411.

FOR: Gee & Jenson, Consulting Engineers

SHEET 2 OF 3
LOCATION
HOLE NO. C-B-E-10
LINE & STA.
OFFSET

DEPTH FT. FT. CASING OUT DATE:
DEPTH FT. ALL CASING OUT DATE:
DATE, START: 3/24/82
DATE, FINISH: 3/25/82
GROUND ELEVATION
GROUND WATER ELEVATION 8'6"

CASING O.D. 3" I.D.
SAMPLER O.D. 2" I.D.
DIAMOND BIT SIZE
WEIGHT OF HAMMER 300-140 LBS.
INSIDE LENGTH OF SAMPLER IN.
HAMMER FALL
CASING 24" SAMPLER 30"

DEPTH BELOW SURFACE	CASING BLOWS PER FOOT	SAMPLE NUMBER	SAMPLE DEPTHS ELEV. / FEET	SAMPLE RECOVERY	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	DENSITY OR CONSIST. MOISTURE	PROFILE CHANGE DEPTH	FIELD IDENTIFICATION OF SOILS REMARKS
0										
		8	40'-42'	1	1	1	1			Grey organic Silt
									38'6"-46'6"	
		9	45'-47'	1	2	1	12			Grey firm Sand, some Silt
									46'6"-49'	
10										
		10	50'-52'	20	24	20	32			Grey compact Sand, Shells, trace Silt
		11	55'-57'	8	12	12	12			
									49'-60'	
20										
		12	60'-62'	3	3	2	3			
		13	65'-67'	3	3	2	4			
30										
		14	70'-72'	5	6	6	7			
		15	75'-77'	5	5	6	5			
40										

Soils Engineer:
Drilling Inspector:
Driller: V.J. Peretti
Helper:

JOB LOCATION:
Port Canaveral
Florida

WARREN GEORGE INC.
7641 HOOPER ROAD
WEST PALM BEACH, FL. 33411.

FOR: Gee & Jenson, Consulting Engineers

SHEET 3 OF 3
LOCATION
HOLE NO. C-B-E-10
LINE & STA.
OFFSET

DEPTH ____ FT. ____ FT. CASING OUT DATE: ____
DEPTH ____ FT. ALL CASING OUT DATE: ____
DATE, START: 3/24/82
DATE, FINISH: 3/25/82
GROUND ELEVATION
GROUND WATER ELEVATION 8'6"

CASING O.D. 3" I.D. ____
SAMPLER O.D. 2" I.D. ____
DIAMOND BIT SIZE
WEIGHT OF HAMMER 300-140 LBS.
INSIDE LENGTH OF SAMPLER ____ IN.
HAMMER FALL
CASING 24" SAMPLER 30"

DEPTH BELOW SURFACE	CASING BLOWS PER FOOT	SAMPLE NUMBER	SAMPLE DEPTHS ELEV. / FEET	SAMPLE RECOVERY	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	DENSITY OR CONSIST. MOISTURE	PROFILE CHANGE DEPTH	FIELD IDENTIFICATION OF SOILS REMARKS
0										Grey Silt, some Shells,
		16	80'-82'	4	6	6	7		60'-82'	layers fine Sand
										Hole Complete @ 82 ft
10										
20										
30										
40										

Soils Engineer:
Drilling Inspector:
Driller: V.J. Peretti
Helper:

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DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS

1. PROJECT: Canaveral Harbor Extension F. B.
2. LOCATION (Coordinates or Station): Sta. 286+60 Rge. -1150
3. DRILLING AGENCY: Corps of Engineers
4. HOLE NO. (As shown on drawing title and file number): CB-CHE-9
5. NAME OF DRILLER: J. King
6. DIRECTION OF HOLE: ☐ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.
7. THICKNESS OF OVERBURDEN:
8. DEPTH DRILLED INTO ROCK:
9. TOTAL DEPTH OF HOLE: 24.0'
10. SIZE AND TYPE OF BIT: See remarks
11. DATUM FOR ELEVATION SHOWN (TBM or MSL): MLW
12. MANUFACTURER'S DESIGNATION OF DRILL: Sprague & Henwood 40-C
13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED: ; UNDISTURBED:
14. TOTAL NUMBER CORE BOXES: 1
15. ELEVATION GROUND WATER: Tidal
16. DATE HOLE: STARTED 12-2-71 COMPLETED 12-2-71
17. ELEVATION TOP OF HOLE: -16.0
18. TOTAL CORE RECOVERY FOR BORING: 30 %
19. ~~SIGNATURE OF OFFICER~~ GEOLOGIST: J. Gentile

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-16.0	0.0					BIT OR BARREL -16.0 Bls/0.5 ft.
-29.0	13.0		SILT, dark gray, soft (ML)	0		SPLIT SPOON -17.5 pushed
				0		" " -19.0 pushed
				0		" " -20.5 pushed
				0		" " -22.0 pushed
				33	1	" " -23.5 pushed
				33	2	" " -25.0 pushed
				52	3	" " -26.5 pushed
				46	4	" " -28.0 pushed
				26	5	" " -29.5 1 1 13 14
-34.0	18.0		SAND, fine to medium, quartz slightly silty, slightly shelly, gray (SP)	53	6	" " -31.0 1 12 14
				66	7	" " -32.5 2 15 16
				40	8	" " -34.0 4 8 12
			SAND, fine, quartz, silty, shelly, gray (SM)	33	9	" " -35.5

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT Canaveral Harbor Extension HOLE NO. CB-CHE-9

DRILLING LOG (Cont Sheet) | ELEVATION TOP OF HOLE -16.0 | Hole No. CB-CHE-9

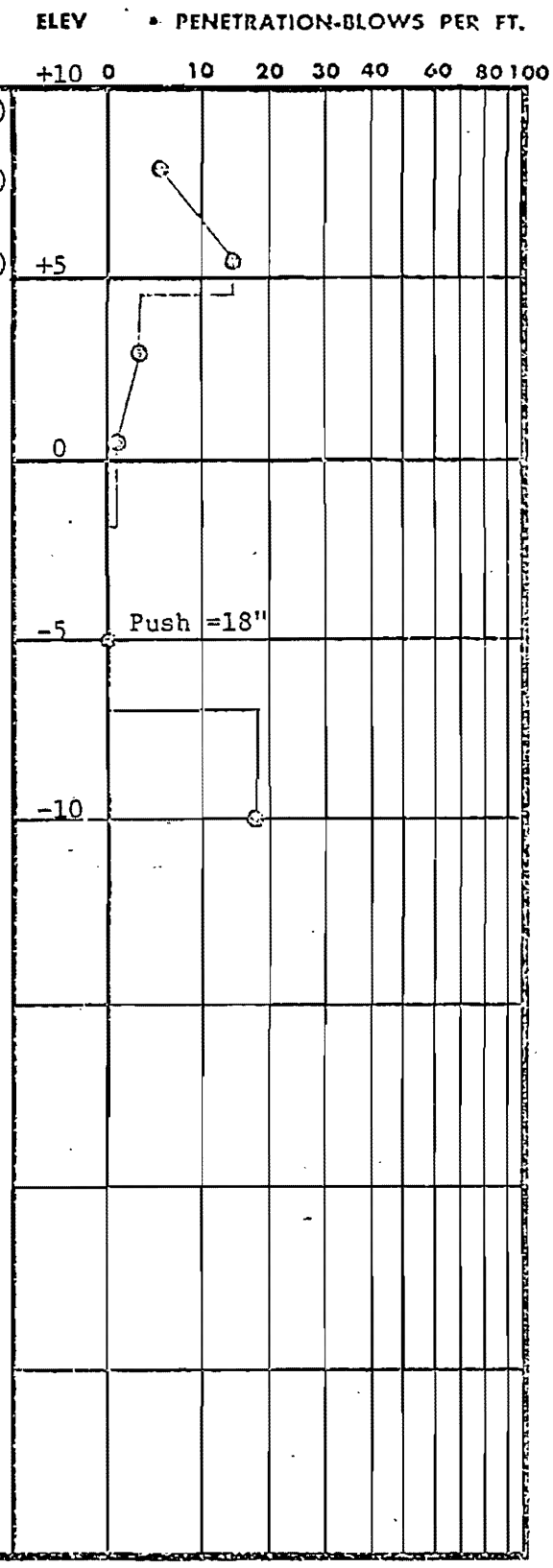
PROJECT Canaveral Harbor Extension | INSTALLATION Jacksonville District | SHEET 2 OF 2 SHEETS

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
						BIT OR BARREL
						-35.5 Bls/0.5 ft.
				33	10	SPLIT SPOON 9 9 11
						-37.0
				26	11	" " 8 9 14
						-38.5
-39.0	23.0					
			SAND, clayey, gray (SC)	46	12	" " 1 4 5
-40.0	24.0					-40.0
						140# hammer with 30" drop used on 2.0' split spoon. (1-3/8" I.D. X 2" O.D.)

ENG FORM 1836-A JAN 67 | PROJECT Canaveral Harbor Extension | HOLE NO CB-CHE-9

DEPTH FT.	DESCRIPTION		ELEV
0	Gray fine to medium SAND with shell	(1)	+10
1.0	LOOSE gray fine to medium SAND with clayey fine sand lenses and shell	(1)	
3.0	FIRM gray fine to medium SAND with clayey fine sand lenses and shell	(1)	+5
5.5	VERY LOOSE gray slightly silty fine to medium SAND with shell and asphalt concrete fragments		
8.0	VERY LOOSE gray slightly silty fine SAND with some shell fragments		0
12.0	VERY LOOSE gray silty clayey fine SAND with trace of shell fragments		-5
17.0	FIRM gray fine SAND with trace of shell fragments		-10
20.5	BORING TERMINATED		

(1) fragments



TEST BORING RECORD

BORING AND SAMPLING MEETS ASTM D-1586
CORE DRILLING MEETS ASTM D-2113
PENETRATION IS THE NUMBER OF BLOWS OF 140 LB. HAMMER FALLING 30 IN. REQUIRED TO DRIVE 1.4 IN. I.D. SAMPLER 1 FT.

UNDISTURBED SAMPLE
50 % ROCK CORE RECOVERY
WATER TABLE, 24 HR.
WATER TABLE, 1 HR.
LOSS OF DRILLING WATER

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BORING NO. R -385, Sta 263+46
DATE DRILLED 1-10-75
JOB NO. 0-718B

LAW ENGINEERING TESTING CO.

Hole No. CB-ER-3

DRILLING LOG	DIVISION South-Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor Extension	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station) X=620,880 Y=1,482,950	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Acker AMC
4. HOLE NO. (As shown on drawing title and file number) CB-ER-3	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES --
6. DIRECTION OF HOLE [X] VERTICAL [ ] INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE — STARTED 4/20/82 — COMPLETED 4/20/82
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -25.5
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 50 %
9. TOTAL DEPTH OF HOLE 12.0	19. SIGNATURE OF INSPECTOR GEOLOGIST D. Rosen

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
-25.5	0.0					-25.5
			SILT, dark gray, very sandy, shelly, soft (ML)	50	1	2" Sampler
-37.5	12.0					
			NOTE: 1. No sample storage in core boxes. Entire sample used for laboratory analysis. 2. Classification conforms to Laboratory analysis.			

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Hole No. CB-ER-4

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor Extension	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station) X=620,880 Y=1,482,350	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Acker AMC;
4. HOLE NO. (As shown on drawing title and file number) CB-ER-4	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES --
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE — STARTED 4/20/82 — COMPLETED 4/20/82
7. THICKNESS OF OVERBURDEN —	17. ELEVATION TOP OF HOLE -18.0
8. DEPTH DRILLED INTO ROCK —	18. TOTAL CORE RECOVERY FOR BORING 83 %
9. TOTAL DEPTH OF HOLE 6.0	19. SIGNATURE OF INSPECTOR GEOLOGIST: D. Rosen

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
-18.0	0.0					-18.0
-24.0	6.0		SAND, dark gray, very silty, very clayey, slightly shelly, soft (SC)	83	1	2" Sampler -24.0
			NOTE: 1. No sample storage in core boxes. Entire sample used for laboratory analysis. 2. Classification conforms to Laboratory analysis.			

Hole No. CB-ER-5

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor Extension	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station) X=622,000 Y=1,481,560	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Acker AMC
4. HOLE NO. (As shown on drawing title and file number) CB-ER-5	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES --
6. DIRECTION OF HOLE [X] VERTICAL [ ] INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 4/20/82 COMPLETED 4/20/82
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -15.0
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 100 %
9. TOTAL DEPTH OF HOLE 5.0	19. SIGNATURE OF INSPECTOR GEOLOGIST: D. Rosen

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
-15.0	0.0					-15.0
-20.0	5.0		SAND, gray, fine to medium quartz, fine to coarse shell, slightly silty (SP)	100	1	2" Sampler -20.00
			NOTE: 1. No sample storage in core boxes. Entire sample used for laboratory analysis. 2. Classification conforms to Laboratory analysis.			

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Hole No. CB-ER-6

DRILLING LOG	DIVISION	INSTALLATION	SHEET
	South Atlantic	Jacksonville District	1 OF 1 SHEETS

1. PROJECT	Canaveral Harbor Extension
2. LOCATION (Coordinates or Station)	X=623,120 Y=1,481,800
3. DRILLING AGENCY	Corps of Engineers
4. HOLE NO. (As shown on drawing title and file number)	CB-ER-6
5. NAME OF DRILLER	R. Gordon
6. DIRECTION OF HOLE	[X] VERTICAL [ ] INCLINED ____ DEG. FROM VERT.
7. THICKNESS OF OVERBURDEN	
8. DEPTH DRILLED INTO ROCK	
9. TOTAL DEPTH OF HOLE	6.0
10. SIZE AND TYPE OF BIT	
11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	MLW
12. MANUFACTURER'S DESIGNATION OF DRILL	Acker AMC
13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN	DISTURBED: ; UNDISTURBED:
14. TOTAL NUMBER CORE BOXES	--
15. ELEVATION GROUND WATER	Tidal
16. DATE HOLE	STARTED 4/20/82 ; COMPLETED 4/20/82
17. ELEVATION TOP OF HOLE	-35.5
18. TOTAL CORE RECOVERY FOR BORING	100 %
19. SIGNATURE OF INSPECTOR	GEOLOGIST D. Rosen

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
-35.5	0.0					-35.5
-41.5	6.0		SAND, dark gray, fine quartz, slightly shelly, silty (SM)	100	1	2" Sampler -41.5
			NOTE: 1. No sample storage in core boxes. Entire sample used for laboratory analysis. 2. Classification conforms to Laboratory analysis.			

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Hole No. CB-CHM84-8

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor Extension	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) X-620,925 Y=1,483,170	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CHM84-8	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED ; UNDISTURBED
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 25 Apr 84; COMPLETED 25 Apr 84
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -22.6
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 75 %
9. TOTAL DEPTH OF HOLE 20'	19. SIGNATURE OF INSPECTOR GEOLOGIST J. Hand

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
						Bit or Barrel
-22.6	0.0					-22.6 BLS/FT
			SILT, gray (ML)	50	1	Settled 2" Sampler
						-32.6
-34.6	12.0				2	Settled "
			SAND, coarse to fine, shelly, quartz, silty, green (SM)	100	3	-37.6
						"
-42.0	20.0					-42.0
						300# hammer with 18" drop used on 2" Sampler

1 9 6 5 3 2 2 2 2

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

PROJECT CANAVERAL HARBOR EXTENSION | HOLE NO. CB-CHM84-8

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Hole No. CB-CHM84-11

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor Extension	10. SIZE AND TYPE OF BIT See remarks
2. LOCATION (Coordinates or Station) X=620,413 Y=1,482,789	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CHM84-11	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 24 Apr 84; COMPLETED 24 Apr 84
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -21.9
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 50 %
9. TOTAL DEPTH OF HOLE 20.0'	19. SIGNATURE OF INSPECTOR X GEOLOGIST J. HAND

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-21.9	0.0					Bit or Barrel -21.9 BLS/FT
-24.0	3.0		SILT, slightly sandy, gray (ML)	50	1	2" Sampler Settled
-31.9	10.0		SAND, medium to fine, quartz, shelly, silty (SM)		2	2 -31.9 2
-41.9	20.0		SILT, slightly sandy, trace of shell, green (ML)	50	3	" Settled 1 1 -41.9 1
						300# hammer with 18" drop used on 2" Sampler

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

PROJECT CANAVERAL HARBOR EXTENSION | HOLE NO. CB-CHM84-11

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Hole No. CB-CHM84-12

DRILLING LOG	DIVISION: South Atlantic	INSTALLATION: Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT: Canaveral Harbor Extension	10. SIZE AND TYPE OF BIT: see remarks
2. LOCATION (Coordinates or Station): X=620,943 Y=1,482,747	11. DATUM FOR ELEVATION SHOWN (TBM or MSL): MLW
3. DRILLING AGENCY: Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL: Failing 1500
4. HOLE NO. (As shown on drawing title and file number): CB-CHM84-12	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED: ; UNDISTURBED:
5. NAME OF DRILLER: R. Gordon	14. TOTAL NUMBER CORE BOXES: 1
6. DIRECTION OF HOLE: [X] VERTICAL [ ] INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER: Tidal
	16. DATE HOLE: STARTED 25 Apr 84; COMPLETED 25 Apr 84
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE: -23.0
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING: 50 %
9. TOTAL DEPTH OF HOLE: 20.0'	19. SIGNATURE OF INSPECTOR: GEOLOGIST J. Hand

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-23.0	0.0					Bit or Barrel -23.0 BLS/FT
-35.0	12.0		SILT, gray (ML)	33	1 2	2" Sampler Settled 5 3 7
-43.0	20.0		SAND, coarse to fine, shelly, quartz, silty, green (SM)	100	3	-38.0 " 1 1 1 1 2 -43.0
						300# hammer with 18" drop used on 2" Sampler

(208) Hole No. CB-CHM84-13

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor Extension	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) X=620.579 Y=1.482.426	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CHM84-13	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED ; UNDISTURBED
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 24 Apr 84; COMPLETED 24 Apr 84
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -23.5
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 85 %
9. TOTAL DEPTH OF HOLE 20.0'	19. SIGNATURE OF INSPECTOR X GEOLOGIST J. Hand

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-23.5	0.0					Bit or Barrel -23.5 BLS/FT
-25.0	1.5		SAND, fine, quartz, shelly, silty (SP-SM)		1	Settled 2" Sampler
-28.5	5.0		CLAY, silty, sandy, green (CH)	60	2	-28.5
			SAND, fine, quartz, slightly silty to silty, gray (SP-SM)	80	3	" 1 12 15 21 25 -33.5
				100	4	" 3 2 3 1 1 -38.5
-43.5	20.0			100	5	" Settled 1 -43.5
						300# hammer with 18" drop used on 2" Sampler

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

PROJECT CANAVERAL HARBOR EXTENSION HOLE NO. CB-CHM84-13

Hole No. CB-CHM84-14

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor Extension	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) X=621,084 Y=1,482,429	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CHM84-14	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☑ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 4-26-84 COMPLETED 4-26-84
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -22.4
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 52 %
9. TOTAL DEPTH OF HOLE 20.0'	19. SIGNATURE OF INSPECTOR GEOLOGIST J. Hand

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-22.4	0.0					Bit or Barrel -22.4 BLS/FT
-32.7	10.3		SAND, fine to medium, quartz, shelly, gray (SP)	50	1 2	2" Sampler Settled 26 37 33 -32.4
-42.4	20.0		SAND, coarse to fine quartz, shelly, silty, green (SM)	40 70	3 4	" 7 6 3 5 5 -37.4 " 1 1 2 3 4 -42.4
						300# hammer with 18" drop used on 2" Sampler

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

PROJECT CANAVERAL HARBOR EXTENSION | HOLE NO. CB-CHM84-14

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Hole No. CB-CHM84-15

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) X=620,944 Y=1,482,110	11. DATUM FOR ELEVATION SHOWN (TBM or MSL)
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CHM84-15	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 26 Apr 84 / COMPLETED 26 Apr 84
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -13.1
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 84 %
9. TOTAL DEPTH OF HOLE 30.0'	19. SIGNATURE OF INSPECTOR GEOLOGIST J. Hand

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	~~BOX NO.~~ SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-13.1	0.0					Bit or Barrel -13.1 BLS/FT
-19.1	6.0		SAND, fine, quartz, shelly, slightly silty, gray (SP-SM)	100	1	2" Sampler 1 1 1 1 1 -18.1
-25.1	12.0		CLAY, slightly silty, slightly sandy, green (CH)	100	2	" 1 2 1 1 2 -23.1
				30	3	" 1 1 12 12 12 -28.1
			SAND, medium to fine, quartz, brown (SP)	100	4	" 3 2 10 19 30 -33.1
-38.1	25.0		very shelly from -32.0 to -38.1	100	5	" 3 4 4 4 7 -38.1
-43.1	30.0		SILT, sandy, some shell (ML)	70	6	" 1 1 1 2 2 -43.1
						300# hammer with 18" drop used on 2" Sampler

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

PROJECT CANAVERAL HARBOR | HOLE NO. CB-CHM84-15

(211)

Hole No. CB-CHM84-16

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor Extension	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) X=621,282 Y=1,481,938	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CHM84-16	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 26 Apr 84; COMPLETED 26 Apr 84
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -16.0
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 55 %
9. TOTAL DEPTH OF HOLE 24.2'	19. SIGNATURE OF INSPECTOR GEOLOGIST J. Hand

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
						Bit or Barrel
-16.0	0.0					-16.0 BLS/FT
			SAND, medium, fine, quartz, shelly, slightly silty, green to brown (SP)	40	1	2" Sampler Settled 1 1 1
						-28.7
				80	2	" 1 1 2 2 2
						-33.7
				60	3	" Settled 1 7 7 14
						-38.7
-39.7	23.7				4	" 48
-40.2	24.2		SANDSTONE, medium, hard	100	5	-40.2 100
						300# hammer with 18" drop used on 2" Sampler

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

PROJECT: CANAVERAL HARBOR EXTENSION | HOLE NO. CB-CHM84-16

212

Hole No. CB-CHM84-17

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT: Canaveral Harbor
2. LOCATION (Coordinates or Station): X=621,825 Y=1,481,580
3. DRILLING AGENCY: Corps of Engineers
4. HOLE NO. (As shown on drawing title and file number): CB-CHM84-17
5. NAME OF DRILLER: R. Gordon
6. DIRECTION OF HOLE: [X] VERTICAL [ ] INCLINED ____ DEG. FROM VERT.
7. THICKNESS OF OVERBURDEN
8. DEPTH DRILLED INTO ROCK
9. TOTAL DEPTH OF HOLE: 24.0'
10. SIZE AND TYPE OF BIT: see remarks
11. DATUM FOR ELEVATION SHOWN (TBM or MSL): MLW
12. MANUFACTURER'S DESIGNATION OF DRILL: Failing 1500
13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED ; UNDISTURBED
14. TOTAL NUMBER CORE BOXES: 1
15. ELEVATION GROUND WATER: Tidal
16. DATE HOLE: STARTED 19 Apr 84; COMPLETED 19 Apr 84
17. ELEVATION TOP OF HOLE: -18.3
18. TOTAL CORE RECOVERY FOR BORING: 62 %
19. SIGNATURE OF INSPECTOR: GEOLOGIST J. Hand

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-18.3	0.0					Bit or Barrel -18.3 BLS/ FT
-23.3	5.0		SAND, fine to medium, shelly quartz, gray and white (SP)	100	1	2" Sampler 1 2 2 2 3 -23.3
-27.3	9.0		SAND, fine, silty, quartz, green (SM)	40	2	Settled " 1 1 1 1 -28.3
-36.3	18.0		CLAY, slightly silty, slightly sandy, slightly shelly, slightly organic, green (CH)	30	3	" 1 1 1 1 1 -33.3
				100	4	" 1 2 2
-42.3	24.0		SAND, medium to fine, quartz, gray (SM)		5 6	17 22 -38.3
				50	7	" 7 17 45 40 -42.3
						300# hammer with 18" drop used on 2" Sampler

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

PROJECT: CANAVERAL HARBOR | HOLE NO. CB-CHM84-17

(23)

Hole No. CB-CHM84-18

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) X=622,410 Y=1,481,580	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CM-CHM84-18	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 19 Apr 84; COMPLETED 19 Apr 84
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -20.7
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 90 %
9. TOTAL DEPTH OF HOLE 22.0'	19. SIGNATURE OF INSPECTOR GEOLOGIST J. Hand

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-20.7	0.0					Bit or Barrel -20.7 BLS/ FT
-27.0	6.3		SAND, fine, quartz, silty, trace of shell, green (SM)	100	1	2" Sampler 1 1 1 1 1 -25.7
-38.7	18.0		CLAY, silty, slightly sandy, slightly shelly, slightly organic, green (CH)	100	2 3	" 1 1 1 1 1 -30.7
				70	4	" 1 1 1 1 1 -35.7
				80	5	" 3 4 5 17 30 -40.7
-42.7	22.0		SAND, fine, calcareous, shelly, white (SP	0	6 -	" 12 10 -42.7
						300# hammer with 18" drop used on 2" Sampler

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

PROJECT CANAVERAL HARBOR | HOLE NO. CB-CHM84-18

(214)

Hole No. CB-CHM84-19

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) X=622,775 Y-1,481,790	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CHM84-19	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED: ; UNDISTURBED:
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 19 Apr 84; COMPLETED 19 Apr 84
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -23.7
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 100 %
9. TOTAL DEPTH OF HOLE 20.0'	19. SIGNATURE OF INSPECTOR x GEOLOGIST J. Hand

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
						Bit or Barrel
-23.7	0.0					-23.7 BLS/ FT
			SAND, fine, quartz, calcareous, slightly silty to silty, gray (SP-SM)	100	1	2" Sampler Settled 1 1 1 -28.7
				100	2	" 1 1 1 1
-33.7	10.0		medium fine, shell fragments -32.7 to -33.7			-33.7 2
			CLAY, silty, traces of sand, shell and organic plant remains (CH)	100	3	" 1 1 1 1 -38.7 3
-41.7	18.0		SAND, medium quartz, silty, black (SM)	90	4	" 1
-43.0	19.3				5	1 1
-43.7	20.0		SANDSTONE		6	3 -43.7 17
						300# hammer with 18" drop used on 2" Sampler

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

PROJECT CANAVERAL HARBOR | HOLE NO. CB-CHM84-19

Hole No. CB-CHM84-20

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT: Canaveral Harbor
2. LOCATION (Coordinates or Station): X=623,100 Y=1,481,580
3. DRILLING AGENCY: Corps of Engineers
4. HOLE NO. (As shown on drawing title and file number): CB-CHM84-20
5. NAME OF DRILLER: R. GORDON
6. DIRECTION OF HOLE: [X] VERTICAL [ ] INCLINED ____ DEG. FROM VERT.
7. THICKNESS OF OVERBURDEN
8. DEPTH DRILLED INTO ROCK
9. TOTAL DEPTH OF HOLE 25.0'
10. SIZE AND TYPE OF BIT: see remarks
11. DATUM FOR ELEVATION SHOWN (TBM or MSL): MLW
12. MANUFACTURER'S DESIGNATION OF DRILL: Failing 1500
13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED ; UNDISTURBED
14. TOTAL NUMBER CORE BOXES: 1
15. ELEVATION GROUND WATER: Tidal
16. DATE HOLE: STARTED 19 Apr 84; COMPLETED 19 Apr 84
17. ELEVATION TOP OF HOLE: -17.8
18. TOTAL CORE RECOVERY FOR BORING: 100 %
19. SIGNATURE OF INSPECTOR: GEOLOGIST J. Hand

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
						Bit or Barrel
-17.8	0.0					-17.8 BLS/ FT
-19.3	1.5		SAND, medium to fine, quartz, silty, green (SM)		1	2" Sampler 2 1
			CLAY, silty, trace of sand and shell (CH)	100	2	1 1 2 -22.8
				100	3	" 1 1 1 1 1 -27.8
				100	4	" 1 1 1 1 1 -32.8
				100	5	1 1 1 1 1 -37.8
			layers of shell fragments -40.0 to -42.0	100	6	" 1 1 1 2
-42.0	24.2		SANDSTONE, medium hard, calcareous, shell fragments, brown		7	-42.8 80
-42.8	25.0					300# hammer with 18" drop used on 2" Sampler

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

PROJECT | HOLE NO.

(216)

Hole No. CB-CHM84-21

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) X=623,600 Y=1,481,580	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CHM84-21	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED ; UNDISTURBED
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 18 Apr 84; COMPLETED 18 Apr 84
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -27.1
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 100 %
9. TOTAL DEPTH OF HOLE 15.0'	19. SIGNATURE OF INSPECTOR GEOLOGIST J. Hand

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
						Bit or Barrel
-27.1	0.0					-27.1 BLS/ FT
			CLAY, silty, traces of sand, shell and organic plant remains, green (CH)	100	1	Settled 2" Sampler 1 1 1 1
						-32.1
				100	2	" 1 1 3 2 2
						-37.1
				100	3	" 1 1 2 2 3
-42.1	15.0					-42.1
						300# hammer with 18" drop used on 2" Sampler

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

PROJECT CANAVERAL HARBOR

HOLE NO. CB-CHM84-21

Hole No. CB-CHM84-22

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) X=624,130 Y=1,481,580	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CHM84-22	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 18 Apr 84 / COMPLETED 18 Apr 84
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -21.5
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 100 %
9. TOTAL DEPTH OF HOLE 20.0'	19. SIGNATURE OF INSPECTOR GEOLOGIST J. Hand

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
						Bit or Barrel
-21.5	0.0					-21.5 BLS/ FT
			CLAY, silty, trace of sand, trace of shell, trace of organic plant remains, green (CH)	100	1	2" Sampler 1 1 2 2 3
						-26.5
				100	2	" 1 1 1 1 1
						-31.5
				100	3	" 1 1 1 1 3
						-36.5
				100	4	" 1 1 1 2 4
-41.5	20.0					-41.5
						300# hammer with 18" drop used on 2" Sampler

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT CANAVERAL HARBOR HOLE NO.

(218)

Hole No. CB-CHM84-23

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT CANAVERAL HARBOR	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) Y=624,630 X=1,481,580	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CHM84-23	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 18 Apr 84 / COMPLETED 18 Apr 84
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -22.8
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 75 %
9. TOTAL DEPTH OF HOLE 20.0'	19. SIGNATURE OF INSPECTOR GEOLOGIST J. Hand

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
-22.8	0.0					Bit or Barrel -22.8 BLS/ FT
			SAND, fine, quartz, slightly silty, gray to green (SP)	100	1	2" Sampler Settled 2 -27.8 2
				80	2	" 1 1 2 2 -32.8 3
			medium/fine shelly -32.8 to -39.0	20	3	" 1 2 3 3 -37.8 5
-39.0	16.2					
			CLAY, silty, gray, trace of sand, and shell, slightly organic (CH)	100	4	" 1 2 3 3 -42.8 5
-42.8	20.0					
						300# hammer with 18" drop used on 2" Sampler

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE.

PROJECT CANAVERAL HARBOR | HOLE NO.

(219)

Hole No. CB-CHM84-24

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS

1. PROJECT Canaveral Harbor Extension	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) X=622,510 Y=1,481,785	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL S&H
4. HOLE NO. (As shown on drawing title and file number) CB-CHM84-24	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER D. Howser	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 3/27/85 COMPLETED 3/27/85
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -16.5
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 76 %
9. TOTAL DEPTH OF HOLE 25.5'	19. SIGNATURE OF INSPECTOR GEOLOGIST J. Gentile

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-16.5	0.0					Bit or Barrel -16.5 BLS/0.5 FT
-20.5	4.0		SAND, fine to medium, quartz, slightly shelly, gray, isolated thin seams of clay, slightly silty from -16.5 to -17.0 (SP)	80	1	Split Spoon Settled 12 -18.0 7
				73	2	" 5 6 -19.5 7
-22.0	5.5		CLAY, silty, sandy, gray (CH)	66	3	12 " 21 -21.0 8
				66	4	1 " 2 -22.5 5
-24.0	7.5		SAND, fine, quartz, clayey, slightly silty, gray, isolated clay seams (SC)	80	5	2 " 2 -24.0 3
-36.0	19.5		CLAY, slightly silty, gray, soft (CH)	100	6	1 " 1 -25.5 1
				88	7	1 " 1 -27.0 1
				100	8	1 " 1 -28.5 1
				66	9	1 " 1 -30.0 1
				100	10	1 " 1 -31.5 1
				73	11	3 " 3 -33.0 3
				100	12	1 " 1 -34.5 1
				73	13	2 " 2 -36.0 2

DRILLING LOG (Cont Sheet) ELEVATION TOP OF HOLE -16.5 Hole No. CB-CHM84-24

PROJECT: CANAVERAL HARBOR EXTENSION | INSTALLATION: Jacksonville District | SHEET 2 OF 2 SHEETS

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
						Bit or Barrel
-36.0	19.5					-36.0 BLS/0.5 FT
-36.2	19.7		Medium hard Limestone, poorly cemented from -36.0 to -36.2			
			SAND, fine to medium, quartz, silty, tan, organic stain, slightly shelly (SM)	80	14	Split Spoon 10 10
-37.5	21.0					-37.5 10
			SAND, fine, quartz, shelly, slightly clayey, light gray (SP)	60	15	" 12 18
						-39.0 21
-39.5	23.0					12
			SAND, fine, quartz, light gray, clayey (SC)	66	16	" 7
						-40.5 7
				26	17	4 " 6
-42.0	25.5					-42.0 11
						140# hammer with 30" drop used on 2' split spoon (1-3/8" ID x 2" OD)

(220)

Hole No. CB-CHM84-25

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS

1. PROJECT Canaveral Harbor Extension	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) X=622,365 Y=1,481,790	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL S&H Skid Rig
4. HOLE NO. (As shown on drawing title and file number) CB-CHM84-25	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED: — UNDISTURBED:
5. NAME OF DRILLER D. Howser	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE [X] VERTICAL [ ] INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE — STARTED 3/28/85 — COMPLETED 3/28/85
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -16.0
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 75 %
9. TOTAL DEPTH OF HOLE 26.0'	19. SIGNATURE OF INSPECTOR GEOLOGIST J. Gentile

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-16.0	0.0					Bit or Barrel -16.0 BLS/0.5 FT
			SAND, fine to medium, quartz, slightly silty, loose, gray, slightly shelly (SP)	60	1	Settled Split Spoon -17.5
				33	2	" -19.0 2 2 3
-20.5	4.5			73	3	" -20.5 2 2 3
			SAND, fine, quartz, clayey, gray, soft (SC)	60	4	" -22.0 2 3 3
				73	5	" -23.5 1 3 2
-25.0	9.0			60	6	" -25.0 1 1 2
			CLAY, soft, slightly sandy, slightly shelly, gray (CH)	93	7	" -26.5 1 1 1
				80	8	" -28.0 1 1 2
				100	9	" -29.5 1 1 1
				73	10	" -31.0 1 1 2
				93	11	" -32.5 1 1 1
				88	12	" -34.0 1 1 1
			slightly compact from -35.0 to -38.0	88	13	" -35.5 1 1 2

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT CANAVERAL HARBOR EXTENSION HOLE NO.

DRILLING LOG (Cont Sheet) | ELEVATION TOP OF HOLE -16.0 | **Hole No.** CB-CHM84-25

PROJECT: CANAVERAL HARBOR EXTENSION | INSTALLATION: Jacksonville District | SHEET 2 OF 2 SHEETS

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
						Bit or Barrel
						-35.5 BLS/0.5 FT
				80	14	Split Spoon 2
						2
						-37.0 3
			SHELL, fragments, silty with organic stain, brown from -38.0 to -38.5	80	15	1
-38.0	22.0					" 2
-38.5	22.5					-38.5 13
-39.0	23.0			66	16	16
			SAND, fine to medium, quartz, shelly (45% shell) clayey (SC)			" 30
-40.0	24.0					-40.0 24
			SAND, fine quartz, clayey, trace silt, trace shell, gray (SC)	80	17	6
						" 8
						10
-42.0	26.0					-42.0 12
						140# hammer with 30" drop used on 2' split spoon (1-3/8" ID x 2" OD)

Hole No. CB-CHM84-26

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 3 SHEETS

1. PROJECT Canaveral Harbor Extension	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) X=622,135 Y=1,481,910	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CHM84-26	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED ; UNDISTURBED
5. NAME OF DRILLER D. Howser	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER +2.5
	16. DATE HOLE: STARTED 3/12/85; COMPLETED 3/14/85
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE +9.7
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 76 %
9. TOTAL DEPTH OF HOLE 48.0'	19. SIGNATURE OF INSPECTOR GEOLOGIST J. Gentile

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
+9.7	0.0					Bit or Barrel +9.7 BLS/0.5 FT
			SAND, fine to coarse, quartz, and shell fragments, clean, tan, shelly (SP)	80	1	Split Spoon +8.2 6 6 12
				73	2	" +6.7 13 15 17
				88	3	" +5.2 12 13 14
				80	4	" +3.7 9 10 12
				88	5	" +2.2 10 15 16
				80	6	" +0.7 3 3 4
-0.3	10.0			66	7	" -0.8 4 4 4
-0.8	10.5		GRAY (CH) CLAY from -0.3 to -0.8			
			SAND, fine to medium, quartz, silty, slightly clayey, shelly, gray (SM)	73	8	" -2.3 1 Pushed
-2.8	12.5					
			SAND, fine to medium, quartz, slightly clayey, shelly, gray (SP)	66	9	" -3.8 1 4 8
-4.8	14.5			66	10	" -5.3 3 8 3
			SAND, fine to medium, quartz, clayey, silty, shelly, gray, seams of (CH) clay (SC)	73	11	" -6.8 2 2 4
-8.3	18.0			73	12	" -8.3 1 1 2
			SAND, fine to medium, quartz, slightly shelly, gray (SP)	80	13	" -9.8 3 3 6

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE.

PROJECT CANAVERAL HARBOR EXTENSION | HOLE NO.

DRILLING LOG (Cont Sheet) ELEVATION TOP OF HOLE +9.7 **Hole No.** CB-CHM84-26

PROJECT Canaveral Harbor Extension | INSTALLATION Jacksonville District | SHEET 2 OF 3 SHEETS

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
						Bit or Barrel
						-9.8 BLS/0.5 FT
				88	14	Split Spoon 4 8 8
						-11.3
				73	15	" 10 15 18
						-12.8
				66	16	" 2 2 4
						-14.3
				73	17	" 4 6 8
-15.8	25.5					-15.8
			SAND, fine, quartz, silty, gray, (SM), thin seams of (CH) clay	80	18	" 1 1 1
						-17.3
				73	19	" 1 2 2
						-18.8
				66	20	" 1 1 1
						-20.3
				46	21	" 1 3 5
						-21.8
				93	22	" 3 7 11
						-23.3
				66	23	" 4 6 9
-24.8	34.5		Shelly from -24.8 to -25.3			-24.8
-25.3	35.0			100	24	" 2 1
			CLAY, soft, gray (CH)			-26.3 Pushed
				80	25	" 1 3 4
						-27.8
				100	26	" 1 2 1
						-29.3
				80	27	" 2 2 2
						-30.8
				100	28	" 1 1 2
						-32.3
-33.3	43.0			66	29	" 2 2 2
			SAND, fine to medium quartz,			-33.8

DRILLING LOG (Cont Sheet)	ELEVATION TOP OF HOLE +9.7	Hole No. CB-CHM84-26
PROJECT Canaveral Harbor Extension	INSTALLATION Jacksonville District	SHEET 3 OF 3 SHEETS

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
						Bit or Barrel
						-33.8 BLS/0.5 FT
-34.8	44.5		SAND, fine to medium quartz, dark brown, silty organic stain, trace of shell (SM)	46	30	Split Spoon Washed 3
			SAND, fine to coarse, quartz, shelly, tan (SP) isolated limestone lenses, slightly limy, 80% sand size shell fragments from -36.8 to -38.3			-35.3 16
-36.8	46.5			73	31	12 " 23 -36.8 25
-38.3	48.0			66	32	18 " 22 -38.3 30
		NOTE:	Core Hole backfilled.			140# hammer with 30" drop used on 2' split spoon (1-3/8" ID x 2" OD)

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Hole No. CB-CHM84-27

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS

1. PROJECT Canaveral Harbor Extension	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) X=621,755 Y=1,487-826	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CHM84-27	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER L. C. Gregory	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER +2.0
	16. DATE HOLE: STARTED 4/11/85; COMPLETED 4/12/85
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE +5.0
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 67 %
9. TOTAL DEPTH OF HOLE 46.5'	19. SIGNATURE OF INSPECTOR GEOLOGIST J. Gentile

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
+5.0	0.0					Bit or Barrel +5.0 BLS/0.5 FT
			SAND, fine to medium, quartz, clean, slightly shelly, tan (SP)	73	1	Split Spoon Pushed 2 +3.5 3
				66	2	" 4 6 +2.0 6
+1.5	3.5		Bed of clayey sand (SC) from +1.5 to +0.5	73	3	" 5 2 +0.5 4
+0.5	4.5		Slightly shelly, slightly clayey from +0.5 to -0.5	66	4	5 " 6 -1.0 3
-0.5	5.5		Bed of clayey sand (SC) from -0.5 to -2.0	80	5	" 1 2 -2.5 8
-2.0	7.0		Sand (SP), clean, slightly shelly, gray, from -2.0 to -4.5	53	6	5 " 11 -4.0 9
-4.5	9.5		Bed of (SC) sand from -4.5 to -5.0	93	7	9 " 3 -5.5 1
-5.0	10.0		CLAY, sandy, gray, soft (CH)	60	8	Pushed 1 " -7.0 7
-6.5	11.5		SAND, fine, quartz, slightly clayey, slightly silty, gray (SP)	66	9	7 9 " -8.5 5
				73	10	2 5 " -10.0 7
				66	11	8 " 10 -11.5 17
				60	12	" 2 5 -13.0 6
-13.0	18.0		Bed of sandy (CL) clay from -13.0 to -13.5	66	13	3 " 5 -14.5 9
-13.5	18.5					
-14.5	19.5					
						140# hammer with 30" drop used on 2" split spoon (1-3/8" ID x 2" OD)

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

PROJECT CANAVERAL HARBOR EXTENSION | HOLE NO. CB-CHM84-27

DRILLING LOG (Cont Sheet) ELEVATION TOP OF HOLE +5.0 Hole No. CB-CHM84-27

PROJECT Canaveral Harbor Extension INSTALLATION Jacksonville District SHEET 2 OF 2 SHEETS

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-14.5	19.5					Bit or Barrel -14.5 BLS/0.5 FT
-16.5	21.5		CLAY, slightly sandy, slightly shelly, soft, gray (CL)	88	14	Split Spoon 1 1 1 -16.0
-17.9	22.9		SAND, fine, quartz, clayey, gray, soft (SC)	60	15	" 1 2 3 -17.5
-18.5	23.5		Bed of (CL) clay, sandy, from -17.9 to -18.5	80	16	" 1 1 1 -19.0
-20.5	25.5		Bed of (CL) clay, very soft from -20.5 to -21.5	53	17	" 1 2 8 -20.5
-21.5	26.5			53	18	" 1 1 1 -22.0
-23.5	28.5			NO REC		" 2 4 6 -23.5
-27.5	32.5		CLAY, fat, slightly shelly, seams of clayey sand, gray, slightly compact (CH)	80	19	" 1 2 7 -25.0
				80	20	" 2 2 3 -26.5
-28.0	33.0		Bed of (SC) sand from -27.5 to -28.0	93	21	" 3 4 5 -28.0
				88	22	" 3 3 5 -29.5
				80	23	" 1 1 2 -31.0
-32.0	37.0			80	24	" 2 2 3 -32.5
-33.0	38.0		SAND, medium, quartz, silty (SM), dark brown, organic stain from -32.0 to -33.0	80	25	" 2 1 5 -34.0
-33.8	38.8					
-38.5	43.5		SAND, fine to medium, quartz, shelly, slightly silty, gray (SP) slightly shelly, from -38.5 to -41.5	66	26	" 10 25 32 -35.5
				66	27	" 20 23 23 -37.0
				60	28	" 23 30 38 -38.5
				80	29	" 12 23 23 -40.0
-41.5	46.5			60	30	" 22 27 35 -41.5
						140# hammer with 30" drop used on 2" split spoon (1-3/8" ID x 2" OD)

ENG FORM 1836-A JUN 67 (ER 1110-1-1801) GPO 1969 OF-626-603

PROJECT CANAVERAL HARBOR EXTENSION HOLE NO. CB-CHM84-27

Hole No. CB-CHM84-28

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS

1. PROJECT Canaveral Harbor Extension	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) X=621,495 Y=1,481,745	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL S&H
4. HOLE NO. (As shown on drawing title and file number) CB-CHM84-28	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED ; UNDISTURBED
5. NAME OF DRILLER D. Howser	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 4/10/85; COMPLETED 4/10/85
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -4.5
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 67 %
9. TOTAL DEPTH OF HOLE 37.5'	19. SIGNATURE OF INSPECTOR GEOLOGIST J. Gentile

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-4.5	0.0					Bit or Barrel -4.5 BLS/0.5 FT
			SAND, fine, quartz, clayey, slightly silty, gray, isolated thin beds of sandy (CL) clay (SC)	80	1	Split Spoon 1 1 2 -6.0
				66	2	" 1 2 2 -7.5
				73	3	" 2 4 7 -9.0
				73	4	" 3 4 5 -10.5
				88	5	" 1 2 2 -12.0
				80	6	" 2 3 4 -13.5
-15.0	10.5			88	7	" 1 1 1 -15.0
				60	8	" 2 4 5 -16.5
				46	9	" 5 7 4 -18.0
				33	10	" 4 5 5 -19.5
-20.5	16.0			60	11	" 2 5 1 -21.0
				12	12	" 1 5 2 -22.5
				60	13	1 1 1 -24.0"

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

PROJECT CANAVERAL HARBOR EXTENSION HOLE NO. CB-CHM84-28

DRILLING LOG (Cont Sheet) | ELEVATION TOP OF HOLE -4.5 | Hole No. CB-CHM84-28

PROJECT: Canaveral Harbor Extension | INSTALLATION: Jacksonville District | SHEET 2 OF 2 SHEETS

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
						Bit or Barrel
						-24.0 BLS/0.5 FT
-25.5	21.0			53	14	Split Spoon 1 1 2
			CLAY, slightly compact, dark gray, fat (CH)	100	15	" 1 1 1 -27.0
				100	16	" 2 1 2 -28.5
-30.5	26.0			100	17	" 1 1 1 -30.0
-32.0	27.5		SAND, medium, quartz, silty, brown, organic stain (SM)	60	18	" 1 2 2 -31.5
-32.5	28.0		SAND, fine to medium, quartz and shell fragments, clean (SP); thin lenses of medium hard Limestone (cemented shell) from -32.0 to -32.5	66	19	" 1 4 8 -33.0
-34.5	30.0			66	20	" 14 24 27 -34.5
			SHELL, sand to gravel size shell fragments, some quartz grains, trace of silt, gray	66	21	" 20 26 20 -36.0
-37.5	33.0			60	22	" 18 18 19 -37.5
-38.5	34.0		SAND, fine, quartz, clayey, slightly shelly (SC)	88	23	" 6 8 2 -39.0
-39.3	34.8		Bed of sandy (CL) clay from -38.5 to -39.3			
-40.5	36.0		Bed of shelly sand (SP), from -39.3 to -40.5	12	24	" 4 20 30 -40.5
-42.0	37.5		very clayey sand (SC), shelly soft, from -40.5 to -42.0	88	25	" 1 1 2 -42.0
						140# hammer with 30" drop used on 2" split spoon (1-3/8" ID x 2" OD)

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Hole No. CB-CHM84-29

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS

1. PROJECT: Canaveral Harbor Extension
2. LOCATION (Coordinates or Station): X=620,760 Y=1,481,845
3. DRILLING AGENCY: Corps of Engineers
4. HOLE NO. (As shown on drawing title and file number): CB-CHM84-29
5. NAME OF DRILLER: D. Howser
6. DIRECTION OF HOLE: [X] VERTICAL [ ] INCLINED ____ DEG. FROM VERT.
7. THICKNESS OF OVERBURDEN:
8. DEPTH DRILLED INTO ROCK:
9. TOTAL DEPTH OF HOLE: 28.5'
10. SIZE AND TYPE OF BIT: see remarks
11. DATUM FOR ELEVATION SHOWN (TBM or MSL): MLW
12. MANUFACTURER'S DESIGNATION OF DRILL: S&H
13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED: ; UNDISTURBED:
14. TOTAL NUMBER CORE BOXES: 1
15. ELEVATION GROUND WATER: Tidal
16. DATE HOLE: STARTED 3/29/85; COMPLETED 3/29/85
17. ELEVATION TOP OF HOLE: -14.1
18. TOTAL CORE RECOVERY FOR BORING: 56 %
19. SIGNATURE OF INSPECTOR: GEOLOGIST J. Gentile

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-14.1	0.0					Bit or Barrel -14.1 BLS/0.5 FT
-17.1	3.0		SAND, fine to medium, quartz slightly silty, gray, slightly shelly (SP)	66	1	Split Spoon Settled -15.6
				60	2	" 2 2 3 -17.1
-21.6	7.5		CLAY, soft, gray, slightly shelly, slightly sandy (CH)	80	3	" Pushed -18.6
				80	4	" Pushed -20.1
				73	5	" Pushed -21.6
-26.1	12.0		SAND, fine to medium, quartz, tan, slightly clayey (SP)	26	6	" 5 6 8 -23.1
				73.	7	" 1 3 5 -24.6
				66	8	" 7 10 9 -26.1
-27.6	13.5		SHELL, sand to gravel size fragments, trace of silt, sandy,	53	9	" 4 20 37 -27.6
-33.6	19.5		SAND, fine to medium, quartz, slightly shelly, gray, slightly silty (SP)	NO REC		" 7 27 42 -29.1
				66	10	" 8 19 43 -30.6
				46	11	" 9 15 35 -32.1
				60	12	" 8 15 16 -33.6

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE.

PROJECT: CANAVERAL HARBOR EXTENSION | HOLE NO. CB-CHM84-29

DRILLING LOG (Cont Sheet) ELEVATION TOP OF HOLE -14.1 **Hole No.** CB-CHM84-29

PROJECT CANAVERAL HARBOR EXTENSION | INSTALLATION Jacksonville District | SHEET 2 OF 2 SHEETS

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
						Bit or Barrel
-33.6	19.5					-33.6 BLS/0.5 FT
			SAND, fine, quartz, slightly silty, slightly shelly, gray, slightly clayey (SM)	73	13	Split Spoon 4 6
						-35.1 4
				60	14	" 5 8
-36.6	22.5		Sandy, silty clay (CH), from -36.6 to -37.6			-36.6 14
-37.6	23.5			66	15	" 2 5
			SAND, fine to medium, quartz, clayey, shelly, gray (SC)			-38.1 8
				46	16	" 8 10
-39.6	25.5					-39.6 14
			CLAY, soft, sandy, slightly silty, seams of shelly sand (CH)	66	17	" 1 4
						-41.1 2
				66	18	" 2 2
-42.6	28.5					-42.6 3
						140# hammer with 30" drop used on 2' split spoon (1-3/8" ID x 2" OD)

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Hole No. CB-CHM84-30

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS

1. PROJECT Canaveral Harbor Extension	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) X=620,460 Y=1,481,720	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL S&H
4. HOLE NO. (As shown on drawing title and file number) CB-CHM84-30	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED ; UNDISTURBED
5. NAME OF DRILLER D. Howser	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 4/1/85; COMPLETED 4/2/85
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -12.8
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 60 %
9. TOTAL DEPTH OF HOLE 30.0'	19. SIGNATURE OF INSPECTOR GEOLOGIST J. Gentile

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-12.8	0.0					Bit or Barrel -12.8 BLS/0.5 FT
			SAND, fine to medium, quartz, slightly silty, gray, slightly shelly, (SP)	73	1	Split Spoon -14.3 1 1 2
-15.8	3.0		clayey from -15.8 to -16.8	60	2	" -15.8 1 2 2
-16.8	4.0			73	3	" -17.3 Pushed
-19.3	6.5		CLAY, soft, slightly sandy, silty, gray (CH)	66	4	" -18.8 Pushed
			SAND, medium, quartz, slightly silty, tan (SP)	60	5	" -20.3 1 4 4
				33	6	" -21.8 4 4 3
				33	7	" -23.3 3 4 4
				33	8	" -24.8 4 5 6
-25.3	12.5		slightly clayey, shelly, light gray, from -25.3 to -30.8	60	9	" -26.3 1 2 3
				46	10	" -27.8 3 5 6
				73	11	" -29.3 3 12 19
-30.8	18.0		slightly shelly, slightly silty, from -30.8 to -34.8	60	12	" -30.8 9 16 25
				80	13	" -32.3 Washed 8 12

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE.

PROJECT CANAVERAL HARBOR EXTENSION | HOLE NO. CB-CHM84-30

DRILLING LOG (Cont Sheet) | ELEVATION TOP OF HOLE -12.8 | Hole No. CB-CHM84-30

PROJECT: Canaveral Harbor Extension | INSTALLATION: Jacksonville District | SHEET 2 OF 2 SHEETS

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
						Bit or Barrel -32.3 BLS/0.5 FT
				73	14	Split Spoon 7, 15, 23 -33.8
-34.8	22.0			66	15	" 3, 4, 1 -35.3
-36.3	23.5		SAND, fine, quartz, clayey, seams of (CH) clay, gray (SC)	60	16	" 2, 5, 7 -36.8
			SAND, fine to medium, quartz, shelly, dark gray, clean (SP)	60	17	" 1, 3, 12 -38.3
-39.8	27.0			60	18	" 20, 10, 10 -39.8
			SILT, sandy, clayey, slightly shelly, gray, riddled with seams of silty shelly sand (ML)	66	19	" 2, 3, 4 -41.3
-42.8	30.0			60	20	" 3, 4, 7 -42.8
						140# hammer with 30" drop used on 2' split spoon (1-3/8" ID x 2" OD)

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Hole No. CB-CHM84-31

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 2 SHEETS

1. PROJECT Canaveral Harbor Extension	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) X=620,430 Y=1,482,000	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) M.L.W.
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Sprague & Henwood
4. HOLE NO. (As shown on drawing title and file number) CB-CHM84-31	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER D. Howser	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☑ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 4/3/85 COMPLETED 4/4/85
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -5.0
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 60 %
9. TOTAL DEPTH OF HOLE 37.5'	19. SIGNATURE OF INSPECTOR GEOLOGIST J. Gentile

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-5.0	0.0					Bit or Barrel -5.0 BLS/0.5 FT
-9.5	4.5		SAND, fine quartz, clayey, shelly, gray (SC) Bed of clay (CH) shelly, gray from -9.5 to -10.5	66	1	Split Spoon Settled 3 -6.5 4
				46	2	" 1 4 -8.0 3
				80	3	" 2 2 -9.5 3
-10.5	5.5			73	4	" 1 1 -11.0 2
-12.5	7.5			93	5	" 1 2 -12.5 2
-17.0	12.0		CLAY, sandy, gray, soft, silty (CL)	46	6	" 1 1 -14.0 1
				73	7	" 1 1 -15.5 1
				60	8	1 1 -17.0 1
-19.5	14.5		CLAY, soft, sandy, dark gray, slightly compact (CH)	93	9	" 1 1 -18.5 1
-20.0	15.0		SAND, medium, quartz, slightly silty, organic stain, brown (SP)	60	10	" 1 1 -20.0 2
				80	11	" 2 2 -21.5 3
-23.0	18.0		Silty (SM) from -19.5 to -20.0	66	12	" 3 4 -23.0 4
			SHELL, sand to gravel size fragments, clean, slightly sandy	66	13	" 4 5 -24.5 6

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE.

PROJECT CANAVERAL HARBOR EXTENSION | HOLE NO. CB-CHM84-31

DRILLING LOG (Cont Sheet) ELEVATION TOP OF HOLE -5.0 **Hole No.** CB-CHM84-37

PROJECT Canaveral Harbor Extension | INSTALLATION Jacksonville District | SHEET 2 OF 2 SHEETS

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
						Bit or Barrel
						-24.5 BLS/0.5 FT
-25.5	20.5		SHELL, sand to gravel (cont'd)	46	14	Split Spoon 8, 10, 12
			SAND, fine to medium, quartz, clean, shelly, gray (SP)	NO REC		-26.0 " 4, 18, 24
						-27.5
				53	15	" 5, 8, 18
						-29.0
-30.5	25.5		slightly silty from -30.5 to -32.0	60	16	" 10, 14, 24
						-30.5
-32.0	27.0			66	17	" 4, 12, 14
						-32.0
-33.5	28.5		SAND, fine, quartz, silty, gray (SM)	46	18	" 8, 16, 20
						-33.5
			Clayey, with seams of (CH) clay from -33.5 to -35.0	60	19	" 4, 3, 3
						-35.0
-35.5	30.5		SAND, fine, quartz, clayey, many seams and thin beds of (CL) clay, slightly silty, gray (SC)	33	20	" 3, 8, 12
						-36.5
				53	21	" 2, 3, 2
						-38.0
				33	22	" 2, 3, 9
						-39.5
-40.0	35.0		CLAY, silty, gray, slightly compact, sandy, slightly shelly (CL)	88	23	" 4, 2, 1
						-41.0
				66	24	" 1, 2, 4
-42.5	37.5					-42.5
						140# hammer with 30" drop used on 2" split spoon (1-3/8" ID x 2" OD)

Hole No. CB-CHM84-35

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor Maintenance	10. SIZE AND TYPE OF BIT 2" Sampler
2. LOCATION (Coordinates or Station) X=630,770 Y=1,481,590	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL ACKER PORTABLE
4. HOLE NO. (As shown on drawing title and file number) CB-CHM84-35	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED 9; UNDISTURBED
5. NAME OF DRILLER C. Mason	14. TOTAL NUMBER CORE BOXES PARTIAL
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER TIDAL
	16. DATE HOLE: STARTED 7/16/85; COMPLETED 7/16/85
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -31.0
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 100 %
9. TOTAL DEPTH OF HOLE 10.0'	19. SIGNATURE OF INSPECTOR X GEOLOGIST: R. ROSS

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
-31.0	0.0					-31.0
-31.5	0.5		SAND, gray, fine quartz, silty (SM)			2" SAMPLER
-35.0	4.0		CLAY, gray, medium plasticity, with fine quartz sand (CL)	100	1, 2, 3, 4	-36.0
-37.5	6.5		SAND, gray, fine quartz, silty (SM)			2" SAMPLER
-40.0	9.0		SILT, gray, with fine quartz sand (ML)	100	5, 6, 7, 8	
-41.0	10.0		SAND, gray, fine quartz, silty (SM)			-41.0

NOTE

Sample #9 is a surface grab sample

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

PROJECT Canaveral Harbor Maint | HOLE NO. CB-CHM84-35

(231)

Hole No. CB-CHM84-36

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT: Canaveral Harbor Maintenance
2. LOCATION (Coordinates or Station): X-630,110 Y=1,481,580
3. DRILLING AGENCY: Corps of Engineers
4. HOLE NO. (As shown on drawing title and file number): CB-CHM84-36
5. NAME OF DRILLER: C. Mason
6. DIRECTION OF HOLE: [X] VERTICAL [ ] INCLINED _____ DEG. FROM VERT.
7. THICKNESS OF OVERBURDEN
8. DEPTH DRILLED INTO ROCK
9. TOTAL DEPTH OF HOLE: 10.0
10. SIZE AND TYPE OF BIT: 2" Sampler
11. DATUM FOR ELEVATION SHOWN (TBM or MSL): MLW
12. MANUFACTURER'S DESIGNATION OF DRILL: ACKER PORTABLE
13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED 4 ; UNDISTURBED
14. TOTAL NUMBER CORE BOXES: PARTIAL
15. ELEVATION GROUND WATER: TIDAL
16. DATE HOLE: STARTED 7/17/85 ; COMPLETED 7/17/85
17. ELEVATION TOP OF HOLE: -33.5
18. TOTAL CORE RECOVERY FOR BORING: 50% %
19. SIGNATURE OF INSPECTOR: GEOLOGIST: R. ROSS

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
-33.5	0.0					-33.5
-36.5	3.0		CLAY, dark gray, sandy (CL)	50	1	2" Sampler
-41.5	8.0		SAND, gray, fine quartz, silty (SM)		2	-38.5
				50	3	2" Sampler
-43.5	10.0		CLAY, gray, sandy (CL)		4	-43.5

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

PROJECT: Canaveral Harbor Maint | HOLE NO. CB-CHM84-36

(237)

Hole No. CB-CHM84-37

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor Maintenance	10. SIZE AND TYPE OF BIT 2" Sampler
2. LOCATION (Coordinates or Station) X=629,870 Y=1,481,600	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL ACKER PORTABLE
4. HOLE NO. (As shown on drawing title and file number) CB-CHM84-37	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED 6; UNDISTURBED
5. NAME OF DRILLER C. Mason	14. TOTAL NUMBER CORE BOXES PARTIAL
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER TIDAL
	16. DATE HOLE: STARTED 7/17/85; COMPLETED 7/17/85
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -31.0
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 63 %
9. TOTAL DEPTH OF HOLE 10.0	19. SIGNATURE OF INSPECTOR GEOLOGIST: R. ROSS

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
-31.0	0.0					-31.0
-34.0	3.0		SAND, gray, fine quartz, silty (SM)	75	1 2	2" Sampler
-36.0	5.0		Very silty, slightly clayey to -34.0		3	-36.0
-41.0	10.0		Occasional clay layers below -36.0 Clay below -40.7	50	4 5	2" Sampler -41.0
			NOTE: Sample #6 is a surface grab sample.			

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Hole No. CB-CHM84-38

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor Maintenance	10. SIZE AND TYPE OF BIT 2" Sampler
2. LOCATION (Coordinates or Station) X=629,365 Y=1,481,595	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL ACKER PORTABLE
4. HOLE NO. (As shown on drawing title and file number) CB-CHM84-38	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED 6; UNDISTURBED
5. NAME OF DRILLER C. Mason	14. TOTAL NUMBER CORE BOXES PARTIAL
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER TIDAL
	16. DATE HOLE: STARTED 7/17/85; COMPLETED 7/17/85
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -30.8
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 63% %
9. TOTAL DEPTH OF HOLE 10.0	19. SIGNATURE OF INSPECTOR GEOLOGIST: R. ROSS

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
-30.8	0.0					-30.8
-31.8	1.0		SAND, gray, fine quartz, silty, slightly clayey (SM)			2" Sampler
			Shell layer at -31.8'	50	1	
					2	
-35.8	5.0		Thin clayey layers below -35.8'			-35.8
			35.8 to 38.8, with sand sized shell fragments		3	2" Sampler
-38.8	8.0			75	4	
			CLAY, gray (CH)		5	
-40.8	10.0					-40.8
			NOTE: Sample #6 is a surface grab sample.			

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

PROJECT Canaveral Harbor Maint. HOLE NO. CB-CHM84-38

Hole No. CB-CHM84-39

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor Maintenance	10. SIZE AND TYPE OF BIT 2" Sampler
2. LOCATION (Coordinates or Station) X=633,895 Y=1,481,860	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL ACKER PORTABLE
4. HOLE NO. (As shown on drawing title and file number) CB-CHM84-39	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED 6; UNDISTURBED
5. NAME OF DRILLER C. Mason	14. TOTAL NUMBER CORE BOXES PARTIAL
6. DIRECTION OF HOLE [X] VERTICAL [ ] INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER TIDAL
	16. DATE HOLE: STARTED 7/16/85; COMPLETED 7/16/85
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -38.5
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 75 %
9. TOTAL DEPTH OF HOLE 10.0	19. SIGNATURE OF INSPECTOR GEOLOGIST: R. ROSS

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
-38.5	0.0					-38.5
			SAND, gray, fine quartz, silty (SM)	50	1, 2	2" Sampler; -43.5
-45.0	6.5			100	3	2" Sampler
-46.0	7.5				4	
-46.5	8.0				5	
-47.5	9.0		CLAY, gray, sandy (CL)		6	
-48.5	10.0		SAND, gray, fine quartz, silty (SP)			-48.5

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

PROJECT Canaveral Harbor Maint. HOLE NO. CB-CHM84-39

(235)

Hole No. CB-CHM84-40

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor Maintenance	10. SIZE AND TYPE OF BIT 2" Sampler
2. LOCATION (Coordinates or Station) X=632,870 Y-1,481,560	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL ACKER PORTABLE
4. HOLE NO. (As shown on drawing title and file number) CB-CHM84-40	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED 6; UNDISTURBED
5. NAME OF DRILLER C. Mason	14. TOTAL NUMBER CORE BOXES PARTIAL
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED _____ DEG. FROM VERT.	15. ELEVATION GROUND WATER TIDAL
	16. DATE HOLE: STARTED 7/16/85; COMPLETED 7/16/85
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -40.0
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 75% %
9. TOTAL DEPTH OF HOLE 10.0	19. SIGNATURE OF INSPECTOR GEOLOGIST: R. ROSS

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
-40.0	0.0					-40.0
			SAND, dark gray, fine quartz, silty (SM)	50	1	2" Sampler
-43.5	3.5		-43.5 to -47.5 gray		2	-45.0
				100	3	2" Sampler
-47.5	7.5				4	
					5	
					6	
-50.0	10.0					-50.0

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

PROJECT Canaveral Harbor Maint. HOLE NO. CB-CHM84-40

(234)

Hole No. CB-CH87-1

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor Investigation	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) X=621,320 Y=1,481,829	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CH87-1	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED ; UNDISTURBED
5. NAME OF DRILLER D. Howser	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 2/10/87; COMPLETED 2/10/87
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -22.5
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 35 %
9. TOTAL DEPTH OF HOLE 15.6'	19. SIGNATURE OF INSPECTOR JOE GENTILE

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
					OR MIN/FT	
-22.5	0.0					-22.5
			Washed no sample	NO REC		Washed ↓
-29.9	7.4					-29.9
-30.7	8.2		SANDSTONE, hard, fossiliferous, riddled with solution holes filled with loose silty sand, calcareous, dark gray. Soft poorly consolidated, sandstone from -30.7 to -31.7	80	7	Start 1453 4x5½ Diamond -30.9 End 1500
-31.7	9.2			NO REC	19 / 1	Start 1548 4x5½ Diamond PSI=100, 0 -33.1 End 1608
-34.6	12.1		SAND, fine to medium quartz, shelly, trace silt, light gray (SP) fine quartz, gray, little shell, from -34.6 to -36.1	60	1	1-3/8x2" Spl Spoon Washed with water -34.6 4 5 6
-36.1	13.6			33	2	7 9 8 -36.1
-38.1	15.6		SAND, fine quartz, silty gray (SM)	0		Settled " 2 1 1 -38.1 140# hammer with 30" drop used on 2.0' split spoon (1-3/8" ID x 2"OD)

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT HOLE NO.

Hole No. CB-CH87-2

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor Investigation	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station) X=621,216 Y-1,481,813	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CH87-2	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER D. Howser	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 2/11/87 COMPLETED 2/11/87
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -25.5
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 61 %
9. TOTAL DEPTH OF HOLE 13.1'	19. SIGNATURE OF INSPECTOR GEOLOGIST J. GENTILE

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
					OR MIN/FT	
-25.5	0.0					-25.5
-27.1	1.6		Washed, no sample			Washed -27.1
-28.0	2.5		SANDSTONE, soft, friable, (broken with fingers with some difficulty) dark brown-gray, seams loose sand, very hard sandstone with large voids filled with loose(SP) sand, from -28.0 to -29.7. medium hard sandstone from -29.7 to -30.1	95	11	4x5½ Diamond Start 0919 PSI=weight of rods
					15	PSI=weight of rods -29.1 End 0945
-29.7	4.2			50	8	4x5½ Diamond Start 1010 PSI=Weight of Rods
-30.1	-4.6				1	-31.1 End 1019
			SAND, fine to medium quartz, shelly, light gray (SP)	66	1	1-3/8"x2 Spl Sp. 1 8 11 -32.6
				33	2	" 8 16 20 -34.1
-35.6	10.1			66	3	" 8 9 10 -35.6
			SAND, fine quartz, little to some silt, shelly, gray(SM)	40	4	" 3 5 8 -37.1
-38.6	13.1			80	5	" 1 3 5 -38.6
						140# hammer with 30" drop used on 2' split spoon (1-3/8" ID x 2" OD)

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT | HOLE NO.

(298)

Hole No. CB-CH87-3

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor Investigation	10. SIZE AND TYPE OF BIT
2. LOCATION (Coordinates or Station) X=621,167 Y=1,481,758	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CH87-3	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED — UNDISTURBED
5. NAME OF DRILLER D. Howser	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE — STARTED 2/11/87 — COMPLETED 2/11/87
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -25.4
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 66 %
9. TOTAL DEPTH OF HOLE 13.0'	19. SIGNATURE OF INSPECTOR GEOLOGIST J. Gentile

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
					OR MIN/FT	
-25.4	0.0					-25.4
-27.4	2.0		Washed, no sample	NO REC		Washed ↓ -27.4
-29.4	4.0		SANDSTONE, soft, poorly consolidated, seams loose sand, brown, friable (broken by fingers with difficulty), bed of very hard sandstone with voids of loose sand from -29.4 to -29.8	40	2	4x5' Diamond Start 1250
					3	PSI= Weight of Rods
-29.8	4.4				15	
					1	-30.9 End 1311
			SAND, fine to medium quartz, trace silt, shelly, gray(SP)	88	1	1-3/8x2" Sp. Sp. 4 Washed with water 3 -32.4 5
				33	2	" 4 9 -33.9 11
-35.4	10.0			66	3	Settled 6 -35.4 8
-36.9	11.5		SAND, fine, quartz, little silt, gray, little shell(SM)	46	4	" 6 8 -36.9 8
-38.4	13.0		SILT, sandy, little shell, gray, trace clay (ML)	93	5	" 1 1 -38.4 1
						140# hammer with 30" drop used on 2' split spoon (1-3/8" ID x 2" OD)

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT CANAVERAL HARBOR INVESTIGATION HOLE NO.

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Hole No. CB-CH87-4

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor Investigation	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) X=621,231 Y=1,481,734	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CH87-4	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER Howser, Doug	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE STARTED 2/11/87 COMPLETED 2/11/87
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -26.5
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 30 %
9. TOTAL DEPTH OF HOLE 12.0'	19. SIGNATURE OF INSPECTOR GEOLOGIST J. Gentile

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
-26.5	0.0				OR MIN/ FT	-26.5
-27.9	1.4		Washed, no sample	NO REC		Washed ↓ -27.9
-28.5	2.0		SANDSTONE, soft, poorly consolidated, seams loose sand, friable (broken between fingers) green, loose sand with thin hard sandstone lenses from -28.5 to -30.0.	44	2	Start 1514 PSI=Weight of Rods 4x5½ Diamond
-30.0	3.5				2	
-31.8	5.3		soft sandstone as above from -30.0 to -31.8		2	
					2	
					0.5	-32.5 End 1522.5
			SAND, fine to medium quartz, shelly, trace silt, gray(SP)	60	1	1-3/8" x 2" Sp. Sp Settled Washed w/water 5 -34.0 7
-35.5	9.0			40	2	" 5 7 -35.5 8
-38.5	12.0		SAND, fine quartz, little shell, gray, little silt(SM)	12	3	" Settled 4 -37.0 5
				NO REC	4	" 2 2 -38.5 4
						140# hammer with 30' drop used on 2' split spoon (1-3/8" ID x 2" OD)

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE. PROJECT

Hole No. CB-CH88-1

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) x=630,562 y=1,481,885	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CH88-1	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 30 Aug 88 / COMPLETED 30 Aug 88
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -22.3'
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 60% %
9. TOTAL DEPTH OF HOLE 25.0'	19. Geologist J. Hand

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
						Bit or Barrel
-22.3	0.0					-22.3 Blows/ft
			Sand, very fine quartz, a trace of silt, gray (SP)	40	1	2" Sampler settled ↓ 9
-27.3	5.0					-27.3 9
			Clay, slightly sandy, a trace of shell, gray (CH)	40	2	settled " 4 9
-29.9	7.6					
			Sand, very fine to fine quartz, a little shell and a trace of silt, gray (SP)		3	11
-32.3	10.0					-32.3 13
			Clay, gray, a few brown traces of leaves and stems (CH)	20	4	" 3 2 3 3
						-37.3 5
				100	5	" settled ↓ 1
						-42.3 5
				100	6	" 2 1 2 3
-47.3	25.0					-47.3 4
			Soils are field visually classified in accordance with the Unified Soils Classification System. BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X 2½" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.				300# hammer with 18" drop used on 2" Sampler. BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN CORRELATED WITH STANDARD SPLIT SPOON TESTS AS DESIGNATED IN ASTM D-1586. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER.

Hole No. CB-CH88-2

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) x=630,042 y=1,481,526	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CH88-2	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED: UNDISTURBED:
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 30 Aug 88 COMPLETED 30 Aug 88
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -41.7
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 70% %
9. TOTAL DEPTH OF HOLE 7.0'	19. ~~SIGNATURE OF INSPECTOR~~ GEOLOGIST - J. Hand

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-41.7	0.0					Bit or Barrel -41.7 Blows/ft
-45.4	3.7		Silt with a little very fine quartz sand, gray (ML)	70	1	2" Sampler settled
					2	2 settled
-48.7	7.0		Clay, with a little very fine quartz sand, gray (CH)			-48.7
			Soils are field visually classified in accordance with the Unified Soils Classification System. LABORATORY CLASSIFICATION (based on grain size and visual) Elev. Class -41.7 to -45.7 SM BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X 2½" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.			300 # Hammer used with 18" drop on 2" Sampler BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN CORRELATED WITH STANDARD SPLIT SPOON TESTS AS DESIGNATED IN ASTM D-1586. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER.

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Hole No. CB-CH88-3

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) x=628,548 y=1,481,865'	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CH88-3	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 31 Aug 88 / COMPLETED 31 Aug 88
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -35.5'
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 88% %
9. TOTAL DEPTH OF HOLE 10.8'	19. ~~SIGNATURE OF CHIEF DRILLER~~ GEOLOGIST - J. Hand

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-35.5	0.0					Bit or Barrel -35.5 Blows/ft
-36.5	1.0		Sand, fine quartz, silty, a piece of visquene, gray (SM)	90	1	2" Sampler 2 settled
-38.5	3.0		Silt, a trace of very fine sand, gray (MH)		2	
-41.3			Clay, a trace of very fine quartz sand, gray (CH) From -41.0 to -46.3, clay gray with a few brown traces of leaves and stems, a very few shells (CH)		3	settled
				100	4	"
-46.3	10.8					-46.3 1

Soils are field visually classified in accordance with the Unified Soils Classification System.

BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X 2½" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.

300 # hammer used with 18" drop on 2" Sampler

BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN CORRELATED WITH STANDARD SPLIT SPOON TESTS AS DESIGNATED IN ASTM D-1586. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER.

Hole No. CB-CH88-4

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) x=627,554 y=1,481,604	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CH88-4	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED ; UNDISTURBED
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE [X] VERTICAL [ ] INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 31 Aug 88; COMPLETED 31 Aug 88
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -40.9
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 80% %
9. TOTAL DEPTH OF HOLE 5.0'	19. GEOLOGIST - J. Hand

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-40.9	0.0					Bit or Barrel -40.9 Blows/ft
-41.9	1.0		Silt, a little very fine sand, gray (ML)		1	Settled 2" Sampler
-45.9	5.0		Clay, gray, a few brown traces of leaves and stems (CH)	80	2	-45.9 3

Soils are field visually classified in accordance with the Unified Soils Classification System.

BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X 2½" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.

300# hammer used with 18" drop on 2" Sampler.

BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN CORRELATED WITH STANDARD SPLIT SPOON TESTS AS DESIGNATED IN ASTM D-1586. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER.

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Hole No. CB-CH88-5

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) x=626,707 y=1,481,516	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failings 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CH88-5	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 31 Aug 88 / COMPLETED 31 Aug 88
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -38.1
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 98% %
9. TOTAL DEPTH OF HOLE 10.0'	19. ~~SIGNATURE OF INSPECTOR~~ GEOLOGIST - J. Hand

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	~~BOX~~ SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-38.1	0.0					Bit or Barrel -38.1 Blows/ft
-39.4	1.3		Silt, a trace of very fine sand, gray (ML)	95	1	2" Sampler settled
			Clay, gray, a few brown traces of leaves and stems (CH)		2	-43.1 4
				100	3	" settled
-48.1	10.0					-48.1 7
			Soils are field visually classified in accordance with the Unified Soils Classification System. BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X 2½" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.			300 # hammer used with 18" drop on 2" sampler. BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN CORRELATED WITH STANDARD SPLIT SPOON TESTS AS DESIGNATED IN ASTM D-1586. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER.

Hole No. CB-CH88-6

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) x=625,725 y=1,481,670	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failings 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CH88-6	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 2 Sept 88; COMPLETED 2 Sept 88
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -40.6
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 85% %
9. TOTAL DEPTH OF HOLE 6.0 feet	19. GEOLOGIST - J. Hand

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-40.6	0.0					Bit or Barrel
-43.1	2.5		Silt, gray-green (MH)	85	1	-41.6 Blows/ft settled 2" Sampler
-46.6	6.0		Clay, a trace of very fine quartz sand, gray, a few brown traces of leaves and stems (CH)		2	-47.6

Soils are field visually classified in accordance with the Unified Soils Classification System.

BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X 2½" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.

300# hammer used with 18" drop on 2" Sampler.

BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN CORRELATED WITH STANDARD SPLIT SPOON TESTS AS DESIGNATED IN ASTM D-1586. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER.

(28)

Hole No. CB-CH88-7

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) x=625,235 y=1,482,228	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CH88-7	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED ; UNDISTURBED
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 1 Sept 88; COMPLETED 1 Sept 88
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -38.4
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 90% %
9. TOTAL DEPTH OF HOLE 10.0'	19. ~~TOTAL CORE RECOVERY~~ GEOLOGIST J. Hand

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
						Bit or Barrel
-38.4	0.0					-38.4 Blows/ft
-39.4	1.0		Silt, gray (ML)		1	settled
-39.9	1.5		Sand, very fine quartz, slightly silty (SM)	80	2	2" Sampler
			Clay, gray (CH)		3	-43.4
						settled
				100	4	"
-48.4	10.0					-48.4 1/5

Soils are field visually classified in accordance with the Unified Soils Classification System.

LABORATORY CLASSIFICATION

(based on grain size and visual)

Elev.	Class
-39.9 to -43.4	CH

BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X 2½" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.

300# hammer used with 18" drop on 2" Sampler.

BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN CORRELATED WITH STANDARD SPLIT SPOON TESTS AS DESIGNATED IN ASTM D-1586. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER.

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Hole No. CB-CH88-9

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) x=625,242 Y=1,482,210	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CH88-9	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE [X] VERTICAL [ ] INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 1 Sept 88 / COMPLETED 1 Sept 88
	17. ELEVATION TOP OF HOLE -37.1
7. THICKNESS OF OVERBURDEN	18. TOTAL CORE RECOVERY FOR BORING 70% %
8. DEPTH DRILLED INTO ROCK	19. SIGNATURE OF INSPECTOR GEOLOGIST - J. Hand
9. TOTAL DEPTH OF HOLE 11.0'	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-37.1	0.0					Bit or Barrel -37.1 Blows/ft
-39.6	2.5		Silt, gray-green (MH)	85	1	settled
-45.1	8.0		Clay, gray (CH)		2	2" Sampler -43.1
-46.1	9.0		Sand, very fine quartz, clayey, gray-brown (SC)	50	3	settled "
-48.1	11.0		Sand, very fine quartz, some shell, very silty, calcareous nodules and layers of moderately hard quartz, sandstone, light green with white (SM)		4	6 9 4 -48.1

Soils are field visually classified in accordance with the Unified Soils Classification System.

BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X 2½" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.

300 # hammer used with 18" drop on 2" Sampler.

BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN CORRELATED WITH STANDARD SPLIT SPOON TESTS AS DESIGNATED IN ASTM D-1586. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER.

(250)

Hole No. CB-CH88-11

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) x=623,408 y=1,481,615	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CH88-11	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED: — UNDISTURBED:
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE [X] VERTICAL [ ] INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE — STARTED 7 Sept 88 — COMPLETED 7 Sept 88
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -35.4
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 77% %
9. TOTAL DEPTH OF HOLE 11.0'	19. ~~XHOLXXXXXXXXXXXXXXXX~~ GEOLOGIST J. Hand

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-35.4	0.0					Bit or Barrel -35.4 Blows/ft
-38.4	3.0		Silt, Malodorous, gray-green (MH)	80	1 2	2" Sampler settled
-39.8	4.4		Clay with a little very fine quartz sand, gray (CH)			4
			Shell, medium sand size, silty, a trace of very fine quartz sand, white with gray		3	-41.4 5
				60	4	" settled 6 2 7
-46.4	11.0					-46.4 15

Soils are field visually classified in accordance with the Unified Soils Classification System.

LABORATORY CLASSIFICATION

(based on grain size and visual)

ELEVATION	CLASS
-41.4 to -46.4	SP-SM

BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X 2½" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.

300 # hammer used with 18" drop on 2" sampler.

BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN CORRELATED WITH STANDARD SPLIT SPOON TESTS AS DESIGNATED IN ASTM D-1586. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER.

Hole No. CB-CH88-12

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) x=622,415 y=1,481,953	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CH88-12	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED: — UNDISTURBED:
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE [X] VERTICAL [ ] INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE — STARTED 2 Aug 88 — COMPLETED 2 Aug 88
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -23.4
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 61% %
9. TOTAL DEPTH OF HOLE 22.0'	19. GEOLOGIST - J. Hand

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-23.4	0.0					Bit or Barrel -23.4 Blows/ft
-26.4	3.0		Silt, a trace of very fine quartz sand and shell, gray (MH)		1	settled 2" Sampler
-27.4	4.0		Sand, very fine quartz, a trace of silt and shell, gray (SP)	70	2	
			Clay, gray (CH)		3	-30.4 settled
				100	4	"
-36.4	13.0					-35.4 2 3
			Shell, medium sand size, a little very fine quartz sand, a trace of silt, light gray	80	5	" 10 14 16 -40.4 26
-44.4	21.0			10	6	" 1 3 14 10
-45.4	22.0		Sand, very fine quartz, slightly silty, light gray (SM)		7	-45.4 6

Soils are field visually classified in accordance with Unified Soils Classification System.

LABORATORY CLASSIFICATION

(based on grain size and visual)

ELEVATION	CLASS
-26.4 to -27.4	SM

300 # hammer used with 18" drop on 2" Sampler.
Blow counts for the 2" sampler have not been correlated with standard split spoon tests as designated in ASTM D-1586. Judgement is needed in the use of the blow count data for the 2" sampler.
Bls/ft refers to the # of hammer blows required to advance a 2" Sampler (2" I.D. X 2½" O.D.) one foot. The sampler is 5 ft. long and driven continuously 5 ft where possible.

(25-2)

Hole No. CB-CH-88-13

DRILLING LOG	DIVISION South Atlantic	INSTALLATION Jacksonville District	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor	10. SIZE AND TYPE OF BIT see remarks
2. LOCATION (Coordinates or Station) x=621,495 y=1,481,703	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY Corps of Engineers	12. MANUFACTURER'S DESIGNATION OF DRILL Failing 1500
4. HOLE NO. (As shown on drawing title and file number) CB-CH88-13	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER R. Gordon	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE [X] VERTICAL [ ] INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER Tidal
	16. DATE HOLE: STARTED 2 Sept 88; COMPLETED 2 Sept 88
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -39.4
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 70% %
9. TOTAL DEPTH OF HOLE 6.0'	19. GEOLOGIST - J. Hand

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
						Bit or Barrel
-39.4	0.0					-39.4 Blows/ft
			Sand, fine to medium shell, very fine quartz, a little silt to silty layers of silt, gray (SM)		1	settled
-42.4	3.0					2" Sampler 7
				70	2	5
			Silt, very sandy, some shell, green (ML)			6
-45.4	6.0				3	-45.4 4

Soils are field visually classified in accordance with the Unified Soils Classification System.

LABORATORY CLASSIFICATION

(based on grain size and visual)

ELEVATION	CLASS
-39.4 to -41.0	SC

BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X 2½" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.

300 # hammer used with 18" drop on 2" sampler

BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN CORRELATED WITH STANDARD SPLIT SPOON TESTS AS DESIGNATED IN ASTM D-1586. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER.

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Hole No. CB-CH89-1

DRILLING LOG	DIVISION SOUTH ATLANTIC	INSTALLATION JACKSONVILLE DISTRICT	SHEET 1 OF 1 SHEETS

1. PROJECT: CANAVERAL HARBOR	10. SIZE AND TYPE OF BIT: SEE REMARKS
2. LOCATION (Coordinates or Station): X=555796 Y=1465943	11. DATUM FOR ELEVATION SHOWN (TBM or MSL): MLW
3. DRILLING AGENCY: CORPS OF ENGINEERS	12. MANUFACTURER'S DESIGNATION OF DRILL: S&H SKID RIG
4. HOLE NO. (As shown on drawing title and file number): CB-CH89-1	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED: ; UNDISTURBED:
5. NAME OF DRILLER: R. GORDON	14. TOTAL NUMBER CORE BOXES: 1
6. DIRECTION OF HOLE: [X] VERTICAL [ ] INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER: TIDAL
	16. DATE HOLE: STARTED 2-8-89; COMPLETED 2-8-89
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE: -45.1
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING: 71 %
9. TOTAL DEPTH OF HOLE: 7.0'	19. SIGNATURE OF INSPECTOR: J. GENTILE GEOLOGIST

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
						BIT OR BARREL
-45.1	0.0					-45.1 BLS/FT
			SAND, very fine, quartz, very silty, little clay, gray, little shell, wet, soupy (SM)	71	1 2	SETTLED 2" SAMPLER
-51.1	6.0		CLAY, plastic, fat, damp, trace to little shell, gray (CH)			
-52.1	7.0					-52.1

SOILS ARE FIELD VISUALLY CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOILS CLASSIFICATION SYSTEM

SAMPLE ELEVATION	LABORATORY CLASSIFICATION *
-45.1 to -55.1	(SW-SM)

NOTE:
*VISUAL CLASSIFICATION BASED ON GRADATION CURVE

No Atterberg Limits.

300# hammer with 18" drop used on 2" Sampler.

BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN CORRELATED WITH STANDARD SPLIT-SPOON TESTS AS DESIGNATED IN ASTM D-1586. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER.

BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X 2 1/8" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.

ENG FORM 1836

Hole No. CB-CH89-2

DRILLING LOG	DIVISION SOUTH ATLANTIC	INSTALLATION JACKSONVILLE DISTRICT	SHEET 1 OF 1 SHEETS

1. PROJECT CANAVERAL HARBOR	10. SIZE AND TYPE OF BIT SEE REMARKS
2. LOCATION (Coordinates or Station) X=655541 Y=1467078	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY CORPS OF ENGINEERS	12. MANUFACTURER'S DESIGNATION OF DRILL S&H SKID RIG
4. HOLE NO. (As shown on drawing title and file number) CB-CH89-2	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER R. GORDON	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE XX VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER TIDAL
	16. DATE HOLE: STARTED 2-22-89 / COMPLETED 2-22-89
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -44.3
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 100 %
9. TOTAL DEPTH OF HOLE 10.0'	19. SIGNATURE OF INSPECTOR XXXXXXX J. GENTILE GEOLOGIST

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-44.3	0.0					BIT OR BARREL -44.3 BLS/FT
-46.8	2.5		SAND, fine, quartz, silty, wet, soupy, gray, little shell (SM)	100	1	SETTLED 3
-49.3	5.0		SAND, fine to medium, quartz, clayey, little shell, gray, damp (SC)		2	2" SAMPLER 9 -49.3 13
-51.3	2.0		SHELL, clayey, wet, trace sand, gray	100	3	" SETTLED 3
-54.3	10.0		CLAY, plastic, fat, little shell, gray (CH)		4	SETTLED -54.3

SOILS ARE FIELD VISUALLY CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOILS CLASSIFICATION SYSTEM

300# hammer with 18" drop used on 2" Sampler.

BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN CORRELATED WITH STANDARD SPLIT-SPOON TESTS AS DESIGNATED IN ASTM D-1586. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER.

BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X 2½" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.

ENG FORM 1836 PROJECT

(25)

Hole No. CB-CH89-3

DRILLING LOG	DIVISION SOUTH ATLANTIC	INSTALLATION JACKSONVILLE DISTRICT	SHEET 1 OF 1 SHEETS

1. PROJECT CANAVERAL HARBOR	10. SIZE AND TYPE OF BIT SEE REMARKS
2. LOCATION (Coordinates or Station) x=654,510 y=1,466,739	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY CORPS OF ENGINEERS	12. MANUFACTURER'S DESIGNATION OF DRILL S&H SKID RIG
4. HOLE NO. (As shown on drawing title and file number) CB-CH89-3	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED ; UNDISTURBED
5. NAME OF DRILLER R. GORDON	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER TIDAL
	16. DATE HOLE: STARTED 2-2-89; COMPLETED 2-2-89
	17. ELEVATION TOP OF HOLE -45.6
7. THICKNESS OF OVERBURDEN	18. TOTAL CORE RECOVERY FOR BORING 100 %
8. DEPTH DRILLED INTO ROCK	19. SIGNATURE OF INSPECTOR J. GENTILE GEOLOGIST
9. TOTAL DEPTH OF HOLE 10.0'	

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-45.6	0.0					BIT OR BARREL -45.6 BLS/FT
-48.1	2.5		CLAY, plastic, gray wet, (CH)	100	1	2" SAMPLER SETTLED 5
-50.7	5.1		SAND, fine to medium, quartz, some silt, trace clay, some shell, (SM)		2	-50.6 SETTLED 2
-55.6	10.0		CLAY, plastic, little to some shell, gray (CH)	100	3	" 1 SETTLED -55.6
			SOILS ARE FIELD VISUALLY CLASSIFICATION IN ACCORDANCE WITH THE UNIFIED SOILS CLASSIFICATION SYSTEM			300# hammer with 18" DROP USED ON 2" Sampler. BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN COORELATED WITH STANDARD SPLIT-SPOON TESTS AS DESIGNATED IN ASTM D-1586. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER. BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X 2 ½" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.

(25)

Hole No. CB-CH89-4

DRILLING LOG	DIVISION SOUTH ATLANTIC	INSTALLATION JACKSONVILLE DISTRICT	SHEET 1 OF 1 SHEETS

1. PROJECT CANAVERAL HARBOR	10. SIZE AND TYPE OF BIT SEE REMARKS
2. LOCATION (Coordinates or Station) X=653547 Y=1467210	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY CORPS OF ENGINEERS	12. MANUFACTURER'S DESIGNATION OF DRILL S&H SKID RIG
4. HOLE NO. (As shown on drawing title and file number) CB-CH89-4	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER R. GORDON	14. TOTAL NUMBER CORE BOXES
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER TIDAL
	16. DATE HOLE: STARTED 3-1-89 / COMPLETED 3-1-89
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -43.9
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 67 %
9. TOTAL DEPTH OF HOLE 7.5'	19. SIGNATURE OF INSPECTOR J. GENTILE GEOLOGIST

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-43.9	0.0					BIT OR BARREL -43.9 BLS/FT
-44.8	0.9		CLAY, dark gray, wet, soupy, trace shell, (CL)		1	2" SAMPLER 1 5 7 SETTLED
-47.4	3.5		SAND, fine to medium, quartz, clayey, wet, little shell, gray, (SC)	67	2 3	
-51.4	7.5		CLAY, plastic, dark gray, trace sand, trace shell, damp (CH)			-51.4

SOILS ARE FIELD VISUALLY CLASSIFIED IN ACCORDANCE WITH THE UNIFIED CLASSIFICATION SYSTEM

SAMPLE ELEVATION	LABORATORY CLASSIFICATION
-44.8 to -47.4	(SM-SC)*

NOTE:
*VISUAL CLASSIFICATION BASED ON GRADATION CURVE ANALYSIS. NO ATTERBERG LIMITS.

300# hammer with 18" drop used on 2" Sampler.

BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN COORELATED WITH STANDARD SPLIT-SPOON TESTS AS DESIGNATED IN ASTM D-1586. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER.

BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X 2 ½" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.

(25)

Hole No. CB-CH 89-5

DRILLING LOG	DIVISION SOUTH ATLANTIC	INSTALLATION JACKSONVILLE DISTRICT	SHEET 1 OF 1 SHEETS

1. PROJECT Canaveral Harbor	10. SIZE AND TYPE OF BIT SEE REMARKS
2. LOCATION (Coordinates or Station) X=654020 Y=1467805	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY CORPS OF ENGINEERS	12. MANUFACTURER'S DESIGNATION OF DRILL S&H SKID RIG
4. HOLE NO. (As shown on drawing title and file number) CB-CH89-5	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER R. GORDON	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER TIDAL
	16. DATE HOLE: STARTED 3-1-89 / COMPLETED 3-1-89
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -43.4
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 100 %
9. TOTAL DEPTH OF HOLE 10.0'	19. SIGNATURE OF INSPECTOR J. GENTILE GEOLOGIST

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-43.4	0.0					BIT OR BARREL -43.4 BLS/FT.
-45.1	1.7		CLAY, slightly plastic, sandy, silty, wet, soupy, dark gray, trace shell (CL)	100	1 2	SETTLED 2" SAMPLER 2 6 6 2
-47.9	4.5		SAND, fine to medium, quartz, clayey, trace shell, wet, gray (SC) Bed of clayey shell, from -47.9 to -48.9			
-48.9	5.5					-48.4
-53.4	10.0		CLAY, plastic, little shell, trace sand, gray, damp, (CH)	100	3 4	SETTLED "
						-53.4

SOILS ARE FIELD VISUALLY CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM

SAMPLE ELEVATION	LABORATORY CLASSIFICATION
-43.4 to -45.1	(SM-H)*
-45.1 to -47.9	(SP-SM)*
-47.9 to -48.9	(SP-SM)*
-48.9 to -53.4	(CH)*

NOTE:
*VISUAL CLASSIFICATION BASED ON GRADATION CURVE. NO ATTERBERG LIMITS.

300# hammer with 18" drop used on 2" Sampler.

BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN COORELATED WITH STANDARD SPLIT-SPOON TESTS AS DESIGNATED IN ASTM D-1586. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER.

BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X 2 ½" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.

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Hole No. CB-CH89-6

DRILLING LOG	DIVISION SOUTH ATLANTIC	INSTALLATION JACKSONVILLE DISTRICT	SHEET 1 OF 1 SHEETS

1. PROJECT CANAVERAL HARBOR	10. SIZE AND TYPE OF BIT SEE REMARKS
2. LOCATION (Coordinates or Station) X=653027 Y=1468140	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY CORPS OF ENGINEERS	12. MANUFACTURER'S DESIGNATION OF DRILL S&H SKID RIG
4. HOLE NO. (As shown on drawing title and file number) CB-CH89-6	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED ; UNDISTURBED
5. NAME OF DRILLER R. GORDON	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER TIDAL
7. THICKNESS OF OVERBURDEN	16. DATE HOLE: STARTED 2-3-89; COMPLETED 2-3-89
8. DEPTH DRILLED INTO ROCK	17. ELEVATION TOP OF HOLE -45.4
9. TOTAL DEPTH OF HOLE 10.0'	18. TOTAL CORE RECOVERY FOR BORING 80 %
	19. SIGNATURE OF INSPECTOR J GENTILE GEOLOGIST

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-45.4	0.0					BIT OR BARREL -45.4 BLS/FT.
-46.9	1.5		SILT, soft, soupy, sandy, dark gray, (ML)		1	SETTLED 2" SAMPLER 2 5 3
-50.4	5.0		SAND, fine to medium, quartz, shelly, silty, gray, wet (SM)	60	2	-50.4
-55.4	10.0		CLAY, plastic, fat, little shell, gray (CH)	100	3	SETTLED " -55.4 1
			SOILS ARE FIELD VISUALLY CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM			300# hammer with 18" drop used on 2" Sampler. BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN CORRELATED WITH STANDARD SPLIT-SPOON TESTS AS DESIGNATED IN ASTM D-1586. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER. BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X 2½" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.

Hole No. CB-CH89-7

DRILLING LOG	DIVISION SOUTH ATLANTIC	INSTALLATION JACKSONVILLE DISTRICT	SHEET 1 OF 1 SHEETS

1. PROJECT CANAVERAL HARBOR	10. SIZE AND TYPE OF BIT SEE REMARKS
2. LOCATION (Coordinates or Station) X=651989 Y=1468503	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY CORPS OF ENGINEERS	12. MANUFACTURER'S DESIGNATION OF DRILL S&H SKID RIG
4. HOLE NO. (As shown on drawing title and file number) CB-CH89-7	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER R GORDON	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER TIDAL
	16. DATE HOLE: STARTED 2-3-89 / COMPLETED 2-3-89
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -43.6
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 61 %
9. TOTAL DEPTH OF HOLE 10.0'	19. SIGNATURE OF INSPECTOR GEOLOGIST J. GENTILE

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	BOX NO. / SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-43.6	0.0					BIT OR BARREL -43.6 BLS/FT.
-45.1	1.5		CLAY, plastic, dark gray trace sand, wet (CH)			2" SAMPLER SETTLED
			SAND, fine to medium, quartz little to some silt, gray little shell, (SM)	82	1 2	4 9 9 -48.6 13
-51.6	8.0		CLAY, plastic, little sand trace shell, gray (CH)	40	3 4	" 5 8 10 5
-53.6	10.0					-53.6 4

SOILS ARE FIELD VISUALLY CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM

SAMPLE ELEVATION	LABORATORY CLASSIFICATION
-43.6 to -45.1	(MH)*
-45.1 to -51.6	(SP-SM)*

NOTE:
*VISUAL CLASSIFICATION BASED ON GRADATION CURVE. NO ATTERBERG LIMITS.

300# hammer with 18" drop used on 2" Sampler

BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN CORRELATED WITH STANDARD SPLIT-SPOON TESTS AS DESIGNATED IN ASTM D-1586. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER.

BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X 2½" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.

(260)

Hole No. CB-CH89-8

DRILLING LOG	DIVISION SOUTH ATLANTIC	INSTALLATION JACKSONVILLE DISTRICT	SHEET 1 OF 1 SHEETS

1. PROJECT CANAVERAL HARBOR	10. SIZE AND TYPE OF BIT SEE REMARKS
2. LOCATION (Coordinates or Station) X=652505 Y=1469083	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY CORPS OF ENGINEERS	12. MANUFACTURER'S DESIGNATION OF DRILL S&H SKID RIG
4. HOLE NO. (As shown on drawing title and file number) CB-CH89-8	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED ; UNDISTURBED
5. NAME OF DRILLER R. GORDON	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER TIDAL
	16. DATE HOLE: STARTED 2-6-89; COMPLETED 2-6-89
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -42.5
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 70 %
9. TOTAL DEPTH OF HOLE 10.0'	19. SIGNATURE OF ~~INSPECTOR~~ GEOLOGIST J. GENTILE

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
-42.5	0.0					BIT OR BARREL -42.5 BLS/FT.
-44.0	1.5		SAND, fine to medium, quartz, clayey, little shell, gray (SC)	80	1	2" SAMPLER settled 2
			SAND, fine to medium, quartz, little shell, little to some silt, little clay, (SM)		2	9 10 -47.5 9
-50.5	8.0			60	3 4	" 7 15 16
-52.5	10.0		CLAY, slightly plastic, sandy, silty, gray, little shell, (CL)			8 -52.5 8
			SOILS ARE FIELD VISUALLY CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOILS CLASSIFICATION SYSTEM			300# hammer with 18" drop used on 2" Sampler. BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN CORRELATED WITH STANDARD SPLIT-SPOON TESTS AS DESIGNATED IN ASTM. D-1586. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER. BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X 2½" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.

(261)

Hole No. CB-CH89-9

DRILLING LOG	DIVISION SOUTH ATLANTIC	INSTALLATION JACKSONVILLE DISTRICT	SHEET 1 OF 1 SHEETS

1. PROJECT CANAVERAL HARBOR	10. SIZE AND TYPE OF BIT SEE REMARKS
2. LOCATION (Coordinates or Station) X=651,438 Y=1,469,439	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY CORPS OF ENGINEERS	12. MANUFACTURER'S DESIGNATION OF DRILL S&H SKID RIG
4. HOLE NO. (As shown on drawing title and file number) CB-CH89-9	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN — DISTURBED: — UNDISTURBED:
5. NAME OF DRILLER R. GORDON	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER TIDAL
	16. DATE HOLE — STARTED 2-3-89 — COMPLETED 2-3-89
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -45.3
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 61 %
9. TOTAL DEPTH OF HOLE 8.0'	19. SIGNATURE OF INSPECTOR J. GENTILE — GEOLOGIST

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
						BIT OR BARREL
-45.3	0.0					-45.3 BLS/FT.
-49.3	4.0		CLAY, wet, soupy, sandy, dark gray, slightly plastic seams clayey sand, (CL)	80	1	2" SAMPLER SETTLED
						-50.3 10
-51.3	6.0		SAND, fine to medium, quartz, little clay, some shell, gray (SC)		2	" 12 5
-53.3	8.0		CLAY, plastic, fat, little shell, gray, (CH)	43	3	-53.3 3

SOILS ARE FIELD VISUALLY CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOILS CLASSIFICATION SYSTEM

SAMPLE ELEVATION	LABORATORY CLASSIFICATION
-43.5 to -49.3	(SM-H)

NOTE:
*VISUAL CLASSIFICATION BASED ON GRADATION CURVE. NO ATTERBERG LIMITS.

300# hammer with 18" drop used on 2" Sampler.

BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN COORELATED WITH STANDARD SPLIT-SPOON TESTS AS DESIGNATED IN ASTM D-1586. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER.

BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X 2 ½" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.

Hole No. CB-CH89-10

DRILLING LOG	DIVISION SOUTH ATLANTIC	INSTALLATION JACKSONVILLE DISTRICT	SHEET 1 OF 1 SHEETS

1. PROJECT CANAVERAL HARBOR	10. SIZE AND TYPE OF BIT SEE REMARKS
2. LOCATION (Coordinates or Station) X=650436 Y=1469769	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY CORPS OF ENGINEERS	12. MANUFACTURER'S DESIGNATION OF DRILL S&H SKID RIG
4. HOLE NO. (As shown on drawing title and file number) CB-CH89-10	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER R. GORDON	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER TIDAL
	16. DATE HOLE: STARTED 2-6-89 / COMPLETED 2-6-89
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -42.3
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 80 %
9. TOTAL DEPTH OF HOLE 10.0'	19. SIGNATURE OF INSPECTOR J. GENTILE GEOLOGIST

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-42.3	0.0					BIT OR BARREL -42.3 BLS/FT.
-44.5	2.2		CLAY, plastic, wet, dark gray, trace shell (CH) gray, trace to little sand from -42.3 to -42.8; sandy, silty, from -44.0 to -44.5 (CH)	80	1 2	2" SAMPLER SETTLED 9 11 13 -47.3
-52.3	10.0		SAND, fine to medium, quartz, little silt, trace clay, little shell, gray (SM)	80	3	" 2 7 9 21 23 -52.3

SOILS ARE FIELD VISUALLY CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOILS CLASSIFICATION SYSTEM

SAMPLE ELEVATION	LABORATORY CLASSIFICATION
-42.3 to -44.5	(SM-H)*
-44.5 to -52.3	(SP-SM)*

NOTE:
*VISUAL CLASSIFICATION BASED ON GRADATION CURVE. NO ATTERBERG LIMITS.

300# hammer with 18" drop used on 2" Sampler.

BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN CORRELATED WITH STANDARD SPLIT-SPOON TESTS AS DESIGNATED IN ASTM D-1586. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER.

BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X 2½" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.

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Hole No. CB-CH89-11

DRILLING LOG	DIVISION SOUTH ATLANTIC	INSTALLATION JACKSONVILLE DISTRICT	SHEET 1 OF 1 SHEETS

1. PROJECT CANAVERAL HARBOR	10. SIZE AND TYPE OF BIT SEE REMARKS
2. LOCATION (Coordinates or Station) X=650913 Y=1470390	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY CORPS OF ENGINEERS	12. MANUFACTURER'S DESIGNATION OF DRILL S&H SKID RIG
4. HOLE NO. (As shown on drawing title and file number)	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER R. GORDON	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER TIDAL
	16. DATE HOLE: STARTED 2-7-89 / COMPLETED 2-7-89
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -41.8
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 65 %
9. TOTAL DEPTH OF HOLE 10.0'	19. SIGNATURE OF INSPECTOR J. GENTILE GEOLOGIST

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-41.8	0.0					BIT OR BARREL -41.8 BLS/FT.
-44.8	3.0		SAND, very fine, quartz, very clayey little silt, gray (SC)	80	1 2	SETTLED 2" Sampler 1 3 10 11
-51.8	10.0		SAND, fine to medium, quartz some silt, little clay, gray, little shell, (SM)	50	3	-46.8 " 6 11 10 15 25 -51.8
			SOILS ARE FIELD VISUALLY CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOILS CLASSIFICATION SYSTEM			300# hammer with 18" drop used on 2" Sampler. BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN CORRELATED WITH STANDARD SPLIT-SPOON TESTS AS DESIGNATED IN ASTM D-1585. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER. BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2' I.D. X 2½" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.

(20)

Hole No. CB-CH89-12

DRILLING LOG	DIVISION SOUTH ATLANTIC	INSTALLATION JACKSONVILLE DISTRICT	SHEET 1 OF 1 SHEETS

1. PROJECT CANAVERAL HARBOR	10. SIZE AND TYPE OF BIT SEE REMARKS
2. LOCATION (Coordinates or Station) X-649927 Y=1470727	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY CORPS OF ENGINEERS	12. MANUFACTURER'S DESIGNATION OF DRILL S&H SKID RIG
4. HOLE NO. (As shown on drawing title and file number) CB-CH89-12	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER R. GORDON	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER TIDAL
	16. DATE HOLE: STARTED 2-7-89 / COMPLETED 2-7-89
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 12 %
9. TOTAL DEPTH OF HOLE 8.5'	19. SIGNATURE OF INSPECTOR J. GENTILE GEOLOGIST

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-45.7	0.0					BIT OR BARREL -45.7 BLS/FT.
-53.7	8.5		CLAY, plastic, trace to little sand, gray, wet, soupy (CH)	12	1	2" SAMPLER SETTLED -53.7
			SOILS ARE FIELD VISUALLY CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOILS CLASSIFICATION SYSTEM			300# hammer with 18" drop used on 2" Sampler. BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN CORRELATED WITH STANDARD SPLIT-SPOON TESTS AS DESIGNATED IN ASTM D-1586. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER. BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X2½" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.

Hole No. CB-CH89-13

DRILLING LOG	DIVISION SOUTH ATLANTIC	INSTALLATION JACKSONVILLE DISTRICT	SHEET 1 OF 1 SHEETS

1. PROJECT CANAVERAL HARBOR	10. SIZE AND TYPE OF BIT SEE REMARKS
2. LOCATION (Coordinates or Station) X=648925 Y=1471044	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY CORPS OF ENGINEERS	12. MANUFACTURER'S DESIGNATION OF DRILL S&H SKID RIG
4. HOLE NO. (As shown on drawing title and file number) CB-CH89-13	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER R. GORDON	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE [X] VERTICAL [ ] INCLINED ____ DEG. FROM VERT.	15. ELEVATION GROUND WATER TIDAL
	16. DATE HOLE: STARTED 2-7-89 / COMPLETED 2-7-89
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -42.2
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 67 %
9. TOTAL DEPTH OF HOLE 10.0	19. SIGNATURE OF INSPECTOR XXXXXXXXXX GEOLOGIST J. GENTILE

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
						BIT OR BARREL
-42.2	0.0					-42.2 BLS/FT.
-43.0	0.8		CLAY, plastic dark gray (CH)	84	1	2" SAMPLER SETTLED
-45.9	3.7		SAND, very fine, quartz, clayey, gray, little shell (SC)		2	4
					3	16
						-47.2
			SAND, fine to medium, quartz, trace silt, gray, trace shell (SP)	50	4	9
						10
						16
						21
-52.2	10.0					-52.2 16

SOILS ARE FIELD VISUALLY CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOILS CLASSIFICATION SYSTEM

SAMPLE ELEVATION	LABORATORY CLASSSIFICATION
-42.2 to -43.0	(CH)*
-43.0 to -45.9	(SM-H)*
-45.9 to -52.2	(SP)*

Note:
* Visual Classification based on gradation curve. No Atterberg Limits.

300# hammer with 18" drop used on 2" Sampler.

BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN CORRELATED WITH STANDARD SPLIT-SPOON TESTS AS DESIGNATED IN ASTM D-1586. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER.

BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X2½" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.

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Hole No. CB-CH89-14

DRILLING LOG	DIVISION SOUTH ATLANTIC	INSTALLATION JACKSONVILLE DISTRICT	SHEET 1 OF 1 SHEETS

1. PROJECT CANAVERAL HARBOR	10. SIZE AND TYPE OF BIT SEE REMARKS
2. LOCATION (Coordinates or Station) X=649418 Y=1471644	11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLW
3. DRILLING AGENCY CORPS OF ENGINEERS	12. MANUFACTURER'S DESIGNATION OF DRILL S&H SKID RIG
4. HOLE NO. (As shown on drawing title and file number) CB-CH89-14	13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN: DISTURBED / UNDISTURBED
5. NAME OF DRILLER R. GORDON	14. TOTAL NUMBER CORE BOXES 1
6. DIRECTION OF HOLE ☒ VERTICAL ☐ INCLINED _____ DEG. FROM VERT.	15. ELEVATION GROUND WATER TIDAL
	16. DATE HOLE: STARTED 2-7-89 / COMPLETED 2-7-89
7. THICKNESS OF OVERBURDEN	17. ELEVATION TOP OF HOLE -42.6
8. DEPTH DRILLED INTO ROCK	18. TOTAL CORE RECOVERY FOR BORING 75 %
9. TOTAL DEPTH OF HOLE 10.0'	19. SIGNATURE OF INSPECTOR GEOLOGIST J. GENTILE

ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOVERY e	SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
-42.6	0.0					BIT OR BARREL -42.6 BLS/FT.
-47.6	5.0		SAND, very fine, quartz, very clayey, soft, wet, many thin beds sandy (CH) clay, gray, little shell (SC)	100	1	2" SAMPLER SETTLED -47.6 3
-50.6	8.0		SAND, fine to medium, quartz trace silt, trace shell, gray (SP)	50	2	" 15 29 27
-52.6	10.0		SAND, fine to medium, quartz little to some silt, gray, wet, trace shell, (SM)		3	23 -52.6 20

SOILS ARE FIELD VISUALLY CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOILS CLASSIFICATION SYSTEM

SAMPLE ELEVATION	LABORATORY CLASSIFICATION
-42.6 to -47.6	(SC-H)*

NOTE:
*VISUAL CLASSIFICATION BASED ON GRADATION CURVE. NO ATTERBERG LIMITS.

300# hammer with 18" drop used on 2" Sampler.

BLOW COUNTS FOR THE 2" SAMPLER HAVE NOT BEEN CORRELATED WITH STANDARD SPLIT-SPOON TESTS AS DESIGNATED IN ASTM D-1586. JUDGEMENT IS NEEDED IN THE USE OF THE BLOW COUNT DATA FOR THE 2" SAMPLER.

BLS/FT. REFERS TO THE NUMBER OF HAMMER BLOWS REQUIRED TO ADVANCE A 2" SAMPLER (2" I.D. X 2½" O.D.) ONE FOOT. THE SAMPLER IS 5 FT. LONG AND DRIVEN CONTINUOUSLY 5 FT. WHERE POSSIBLE.