PB7 PG 67

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E D C B A

Hole No. CB-41

DRILLING LOG — Division: South Atlantic — Installation: Jacksonville District — Sheet 1 of 1 sheets

1. PROJECT: St. Lucie Inlet
2. LOCATION (Coordinates or Station): X= 776,412 Y= 1,031,045
3. DRILLING AGENCY: Corps of Engineers
4. HOLE NO. (As shown on drawing title and file number): CB-41
5. NAME OF DRILLER: J. Detloff
6. DIRECTION OF HOLE: (X) VERTICAL ( ) INCLINED ____ DEG. FROM VERT.
7. THICKNESS OF OVERBURDEN
8. DEPTH DRILLED INTO ROCK
9. TOTAL DEPTH OF HOLE: 8.0'
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 22 Jun 78 COMPLETED 22 Jun 78
17. ELEVATION TOP OF HOLE: -10.5
18. TOTAL CORE RECOVERY FOR BORING: 83 %
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
						BIT OR BARREL
-10.5	0.0					-10.5 Blows/0.5 Ft.
-11.0	0.5		SAND, fine to medium quartz and shell, tan, clean, tight, (SP)	40	1	SPLIT SPOON 32 / 15 / 14
			LIMESTONE, coquina, medium hard, porous, poorly consolidated, tan, fine grained.			-12.0
				6		DIAMOND 4 X 5-1/2 DT 15 MIN HP 60 PSI
						-15.0
				60		DIAMOND 4 X 5-1/2 DT 54 MIN HP 100 PSI
-18.0	7.5		Hard, well consolidated, coquina from -18.0 to -18.5.			
-18.5	0.5					-18.5
						140# hammer with 30" drop used on 2.0' split spoon. (1-3/8" I.D. X 2" O.D.)

Hole No. CB-42

DRILLING LOG — Division: South Atlantic — Installation: Jacksonville District — Sheet 1 of 1 sheets

1. PROJECT: St. Lucie Inlet
2. LOCATION (Coordinates or Station): X= 776,557 Y= 1,030,926
3. DRILLING AGENCY: Corps of Engineers
4. HOLE NO. (As shown on drawing title and file number): CB-42
5. NAME OF DRILLER: J. Detloff
6. DIRECTION OF HOLE: (X) 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: 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 22 Jun 78 COMPLETED 22 Jun 78
17. ELEVATION TOP OF HOLE: +3.8
18. TOTAL CORE RECOVERY FOR BORING: 89 %
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
						BIT OR BARREL
-14.8	0.0		SAND, fine to medium quartz and shell fragments, clean, tight, tan. (SP)	89	1	-14.8 Blows/0.5 Ft. SPLIT SPOON
-16.8	2.0		LIMESTONE, medium hard, sandy in composition, very shelly, tan, riddled with solution holes filled with loose silty sand, seams silty sand.	76	2	-16.3 " " -17.3
-18.3	4.5			60	3	-18.3 140# hammer with 30" drop used on 2.0' split spoon. (1-3/8" I.D. X 2" O.D.)

CB-43 SAFETY ON THIS JOB DEPENDS ON YOU

DRILLING LOG — Division: South Atlantic — Installation: Jacksonville District — Sheet 1 of 1 sheets

1. PROJECT: St. Lucie Inlet
2. LOCATION (Coordinates or Station): X= 776,574 Y= 1,030,385
3. DRILLING AGENCY: Corps of Engineers
4. HOLE NO. (As shown on drawing title and file number): CB-43
5. NAME OF DRILLER: J. Detloff
6. DIRECTION OF HOLE: (X) VERTICAL ( ) INCLINED ____ DEG. FROM VERT.
7. THICKNESS OF OVERBURDEN
8. DEPTH DRILLED INTO ROCK
9. TOTAL DEPTH OF HOLE: 13.5'
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: 2
15. ELEVATION GROUND WATER: Tidal
16. DATE HOLE: STARTED 20 Jun 78 COMPLETED 20 Jun 78
17. ELEVATION TOP OF HOLE: +6.5
18. TOTAL CORE RECOVERY FOR BORING: 93 %
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
						BIT OR BARREL
-6.5	0.0					-6.5 Blows/0.5 Ft.
			SAND, medium to coarse quartz and shell fragments, tan, clean. (SP)	66	1	SPLIT SPOON 1 / 5 / 22
-7.9	1.4		LIMESTONE, coquina, hard, massive bedded, porous, tan.			-8.0
				60		DIAMOND 4 X 5-1/2 DT 17 MIN HP 100 PSI
						-12.3
				100		DIAMOND 4 X 5-1/2 DT 31 MIN HP 100 PSI
-20.0	12.1					-20.0
						140# hammer with 30" drop used on 2.0' split spoon. (1-3/8" I.D. X 2" O.D.)

Hole No. CB-46

DRILLING LOG — Division: South Atlantic — Installation: Jacksonville District — Sheet 1 of 1 sheets

1. PROJECT: St. Lucie Inlet
2. LOCATION (Coordinates or Station): X= 774,618 Y= 1,031,220
3. DRILLING AGENCY: Corps of Engineers
4. HOLE NO. (As shown on drawing title and file number): CB-46
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: 21.8'
10. SIZE AND TYPE OF BIT: See remarks
11. DATUM FOR ELEVATION SHOWN (TBM or MSL): MLW
12. MANUFACTURER'S DESIGNATION OF DRILL: Failing 314
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 July 78 COMPLETED 11 July 78
17. ELEVATION TOP OF HOLE: +1.3
18. TOTAL CORE RECOVERY FOR BORING: 91 %
19. SIGNATURE OF INSPECTOR: Geologist: D. Cross

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
+1.3	0.0					+1.3 Blows/0.5 Ft.
			SAND, light tan, medium, shelly. (SP)	80	1	SPLIT SPOON 1 / 1 / 2
				40	2	" " 4 / 11 / 22
-2.7	4.0			40	3	" " 7 / 13 / 20
			Slightly shelly below -2.7.	33	4	" " 7 / 7 / 18
				40	5	" " 8 / 23 / 28
				40	6	" " 14 / 32 / 28
				33	7	" " 16 / 21 / 22
				33	8	" " 18 / 25 / 28
-10.7	12.8					
-11.7	13.8		SAND, silty, gray, fine quartz (SM), shelly below -11.7.	33	9	" " 16 / 25 / 28
				67	10	" " 23 / 28 / 28
-14.2	16.3			100	11	" " 53 / 28 / 28
-15.8	17.9		LIMESTONE, medium hard, shelly, gray, porous, massive, coquina.	53		DIAMOND NX DT 0 MIN HP 0 PSI
-17.7	19.8		GRAVEL, shelly, 1" to 2" (GW)			-17.7
			LIMESTONE, medium hard with hard layers, shelly, white, massive, coquina.	100		DIAMOND NX DT 24 MIN HP 0 PSI
-20.9	21.8					-20.0
						140# hammer with 30" drop used on 2.0' split spoon. (1-3/8" I.D. X 2" O.D.)

Hole No. CB-47

DRILLING LOG — Division: South Atlantic — Installation: Jacksonville District — Sheet 1 of 1 sheets

1. PROJECT: St. Lucie Inlet
2. LOCATION (Coordinates or Station): X= 774,335 Y= 1,031,160
3. DRILLING AGENCY: Corps of Engineers
4. HOLE NO. (As shown on drawing title and file number): CB-47
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: 23.3'
10. SIZE AND TYPE OF BIT: See remarks
11. DATUM FOR ELEVATION SHOWN (TBM or MSL): MLW
12. MANUFACTURER'S DESIGNATION OF DRILL: Failing 314
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 July 78 COMPLETED 12 July 78
17. ELEVATION TOP OF HOLE: +3.3
18. TOTAL CORE RECOVERY FOR BORING: 74 %
19. SIGNATURE OF INSPECTOR: Geologist: D. Cross

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
+3.3	0.0					+3.3 Blows/0.5 Ft.
			SAND, light brown, medium, quartz, shelly (SP)	40	1	SPLIT SPOON 1 / 6 / 8
				40	2	" " 12 / 10 / 16
				47	3	" " 16 / 16 / 16
-5.7	9.0			20	4	" " FINISHED 1 / 8 / 24
			SAND, silty, medium, shelly, gravelly, gray, quartz (SM)	27	5	" " 36 / 23 / 21
-7.2	10.5		SILT, gray, sandy, clayey (ML)	27	6	" " 21 / 23 / 19
-8.2	11.5		LIMESTONE, soft, silty, porous.	100	7	" " FINISHED 17 / 11 / 5
-9.2	12.5		SILT, gray, sandy, clayey, slightly shelly (ML)	100	8	" " 15 / 32 / 23
				100	9	" " 17 / 39 / 17
-11.0	14.3			100	10	" " 26 / 111 / 100
			LIMESTONE, light gray to white, very porous, shelly, massive, coquina, medium hard.	100	11	DIAMOND NX DT 14 MIN HP 0 PSI
-15.7	19.0					-15.7
				100		DIAMOND NX DT 16 MIN HP 0 PSI
-20.0	23.3					-20.0
						140# hammer with 30" drop used on 2.0' split spoon. (1-3/8" I.D. X 2" O.D.)

Hole No. CB-48

DRILLING LOG — Division: South Atlantic — Installation: Jacksonville District — Sheet 1 of 1 sheets

1. PROJECT: St. Lucie Inlet
2. LOCATION (Coordinates or Station): X= 774,138 Y= 1,031,048
3. DRILLING AGENCY: Corps of Engineers
4. HOLE NO. (As shown on drawing title and file number): CB-48
5. NAME OF DRILLER: J. Tindall
6. DIRECTION OF HOLE: (X) VERTICAL ( ) INCLINED ____ DEG. FROM VERT.
7. THICKNESS OF OVERBURDEN
8. DEPTH DRILLED INTO ROCK
9. TOTAL DEPTH OF HOLE: 23.3'
10. SIZE AND TYPE OF BIT: See remarks
11. DATUM FOR ELEVATION SHOWN (TBM or MSL): MLW
12. MANUFACTURER'S DESIGNATION OF DRILL: Failing 314
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 7 July 78 COMPLETED 11 July 78
17. ELEVATION TOP OF HOLE: +3.3
18. TOTAL CORE RECOVERY FOR BORING: 45 %
19. SIGNATURE OF INSPECTOR: Geologist: D. Cross

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
+3.3	0.0					+3.3 Blows/0.5 Ft.
			SAND, light tan, fine to medium, shelly (SP)	40	1	PUSHED SPLIT SPOON 5 / 5 / 6
				47	2	" " 6 / 12 / 14
-1.2	4.5			27	3	" " 12 / 20 / 20
			Slightly shelly from -1.2 to -7.2.	33	4	" " 7 / 12 / 18
				33	5	" " 14 / 34 / 31
				33	6	" " 15 / 45 / 44
-7.2	10.5			40	7	" " 6 / 9 / 11
-8.7	12.0			53	8	" " 13 / 40 / 28
-10.2	13.5		SAND, gray, medium, slightly silty, quartz, with shell and gravel up to 2" across (SP)	27	9	" " 10 / 23 / 37
-11.2	14.5		CLAY, gray, stiff, with fragments of soft Limestone (CL)	100	10	" " 52 / 100
			LIMESTONE, tan, very porous, shelly, medium hard, massive, coquina.	100		DIAMOND NX DT 15 MIN HP 0 PSI
-15.2	18.5					-15.2
				20		DIAMOND NX DT 8 MIN HP 0 PSI
-20.0	23.3					-20.0
						140# hammer with 30" drop used on 2.0' split spoon. (1-3/8" I.D. X 2" O.D.)

NOTE: FOR CORE BORING NOTES, SEE SHEET 18.

REVISIONS					
NO	SYM	ZONE	DESCRIPTION	DATE	APPROVED

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT. CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

ST. LUCIE INLET, FLORIDA

DREDGING AND JETTY CONSTRUCTION

CUTS 1 AND 2
CORE BORING LOGS

DESIGN ENG. | DWN BY | CKD. BY | INV. NO. DAC | DATED: | SIZE F | DWG. NO | SCALE: AS SHOWN | DATED: DEC. 1977 | SHEET 23 OF 31

D. O. FILE NO. 15-32,620