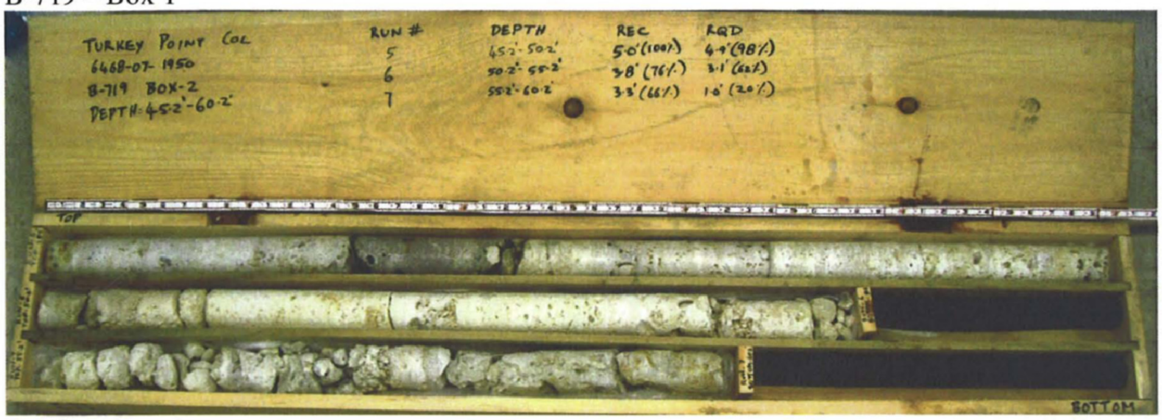
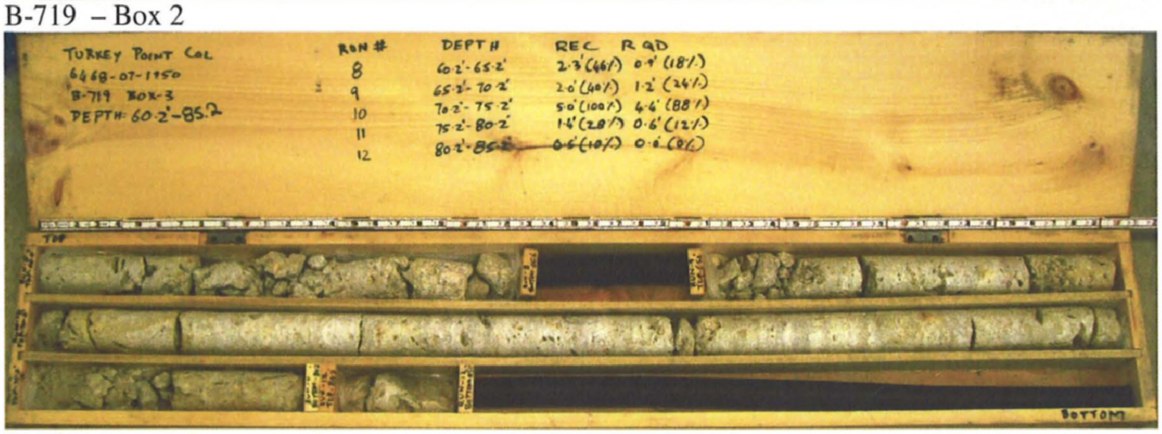
B-719 – Box 1

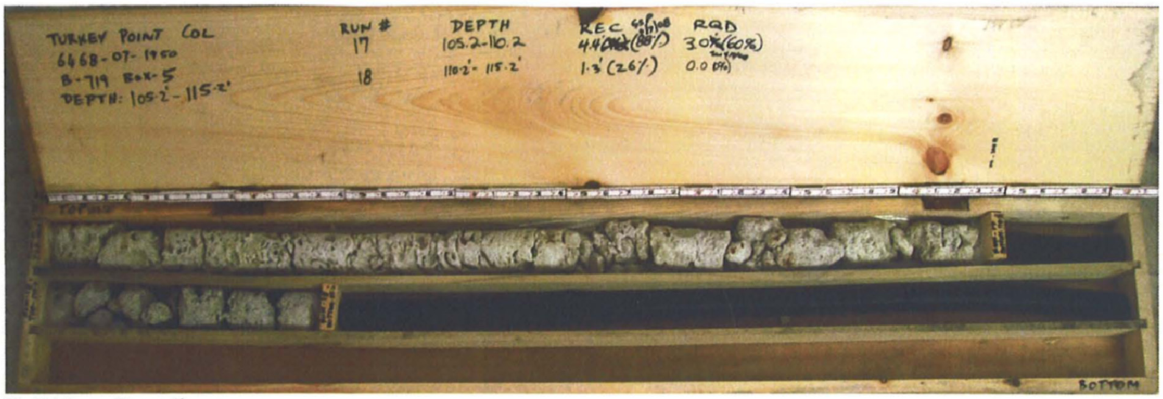


B-719 – Box 2



B-719 – Box 3

B-719 – Box 4


TURKEY POINT COL
6468-07-1950
B-719 BOX-5
DEPTH: 105.2'-115.2'
RUN #
17
18
DEPTH
105.2-110.2
110.2'-115.2'
REC
1.3' (26%)
RQD
0.0
BOTTOM

B-719 – Box 5

MACTEC

GEOTECHNICAL BORING LOG

Prepared By [signature] Date 8-19-08

Checked By [signature] Date 8/19/08

SHEET 1 OF 3

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: B. Taylor
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550X (ATL)	DRILLER: R. Landeros/ N. Rodriguez	GROUND WATER (ft)
BORING NO.: B-720(DH)	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -0.9 ft (NAVD88)	NORTHING: 397,397 US ft (NAD83/90)	EASTING: 875,791 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 204.9 ft	BORING DIAMETER: 4" to 204.9'	CASING DEPTH: 4" to 118.4'	HAMMER (ID):140 lb. Auto (MEC-05)
DATE STARTED: 4/5/08	COMPLETED: 4/8/08	CORE SIZE: HQ3	BITS USED: 3 7/8" Tricone

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT	SAMP. NO.	SOIL AND ROCK DESCRIPTION
-0.9					Ground Surface		-0.9 0.0
-0.9	0.0	WOH	WOH	WOH	0 WOH	720(DH)-1	MUCK, gray (10YR5/1), very soft, moist, organics, trace roots, strong HCl reaction
							-3.9 3.0
-4.4	3.5	12	16	14	30 SEE LEGEND FOR ROCK HARDNESS CRITERIA BASED ON SPT DATA	720(DH)-2	LIMESTONE, boundstone, very pale brown (10YR8/2), soft, moist, strong HCl reaction, oolitic (Miami Formation)
-6.9	6.0	6	7	6	13	720(DH)-3	6.0ft: white (10YR8/1), very soft
-9.4	8.5	3	4	2	6	720(DH)-4	
-11.9	11.0	3	4	4	8	720(DH)-5	
-14.4	13.5	7	8	38	46	720(DH)-6	13.5ft: moderately hard, vugs
-19.4	18.5	5	5	7	12	720(DH)-7	18.5ft: very soft, trace interbedded sand
-24.4	23.5	9	9	22	31	720(DH)-8	23.5ft: medium hard
							-26.9 26.0
							LIMESTONE, boundstone, white (10YR8/1), hard, moist, strong HCl reaction, oolitic (Upper Fort Thompson Formation)
-29.4	28.5	24	48	50/0.3	98/0.8	720(DH)-9	
-30.7	29.8					RUN-1	29.8ft: Switch sampling method to coring 29.8ft: moderately hard, moderately indurated, fossiliferous, vugs filled with cemented sand and shell fragments
-34.3	33.4					RUN-2	33.4ft: hard, indurated, few vugs, coralline
-39.3	38.4					RUN-3	38.4ft: loss of circulation
-44.3	43.4					RUN-4	43.4ft: white (10YR8/1) to 46.8ft, then gray (10YR6/1) to 48.4ft
-49.3	48.4					RUN-5	-49.3 48.4 LIMESTONE, boundstone, white (10YR8/1), hard, indurated, fossiliferous, strong HCl reaction, few to little shell molds and casts (Lower Fort Thompson Formation)
-54.3	53.4					RUN-6	53.4ft: moderately hard, moderately indurated, little vugs, trace sand
-59.3	58.4					RUN-7	58.4ft: few vugs
							-61.9 61.0
-64.3	63.4					RUN-8	POORLY GRADED SAND (SP), light gray (10YR7/1), soft, moist, fine grained sand, and interbedded LIMESTONE, boundstone, white (10YR8/1), moderately hard, moderately indurated, trace vugs, few to little sand
-69.3	68.4					RUN-9	68.4ft: fine to medium grained sand, some shell fragments, few to little friable LIMESTONE fragments, strong HCl reaction
-71.3	70.4					RUN-10	-71.3 70.4 LIMESTONE, boundstone, white (10YR8/1), moderately hard, moderately indurated, few
-74.3	73.4					RUN-11	

TURKEY POINT COL BORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 8/19/08

MACTEC

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: B. Taylor
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550X (ATL)	DRILLER: R. Landeros/ N. Rodriguez	GROUND WATER (ft)
BORING NO.: B-720(DH)	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -0.9 ft (NAVD88)	NORTHING: 397,397 US ft (NAD83/90)	EASTING: 875,791 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 204.9 ft	BORING DIAMETER: 4" to 204.9'	CASING DEPTH: 4" to 118.4'	HAMMER (ID): 140 lb. Auto (MEC-05)
DATE STARTED: 4/5/08	COMPLETED: 4/8/08	CORE SIZE: HQ3	BITS USED: 3 7/8" Tricone

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	BLOW COUNT 0.5ft	BLOW COUNT 0.5ft	BLOWS PER FOOT (0 20 40 60 80 100)	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-75.7					Continued from previous page				
									vugs, strong HCl reaction, trace sand 73.4ft: fossiliferous LIMESTONE, boundstone, white (10YR8/1), moderately hard, moderately indurated, few vugs, strong HCl reaction, trace sand *(continued)*
-79.3	78.4					RUN-12			78.4ft: moderately hard to hard, moderately indurated to indurated, trace vugs, few shell molds and casts
-84.3	83.4					RUN-13			83.4ft: moderately hard, moderately indurated, few vugs
-89.3	88.4					RUN-14			
									-93.3 — 92.4 POORLY GRADED SAND (SP), light gray (10YR7/1), moist, fine to medium grained sand, soft, some shell fragments, strong HCl reaction
-94.3	93.4					RUN-15			
-99.3	98.4					RUN-16			-100.3 — 99.4 LIMESTONE, boundstone, white (10YR8/1), moderately hard, moderately indurated, little vugs, fossiliferous, strong HCl reaction, few to some shell molds and casts
-104.3	103.4					RUN-17			
-109.3	108.4					RUN-18			108.4ft: soft to moderately hard, friable to moderately indurated
									-113.9 — 113.0 POORLY GRADED SAND with silt (SP-SM), light gray (10YR7/1), medium dense, wet, fine to coarse grained sand, some shell fragments, strong HCl reaction, with soft, friable to moderately indurated cemented sand layers (Tamiami Formation)
-114.3	113.4					RUN-19			
-119.3	118.4	6	8	5	13	720(DH)-10			118.4ft: Switch sampling method to SPT
-129.3	128.4	4	4	4	8	720(DH)-11			128.4ft: greenish gray (5GY5/1), loose, weak HCl reaction
-139.7	138.8	8	9	8	17	720(DH)-12			-139.7 — 138.8 Silty SAND (SM), greenish gray (5GY5/1), medium dense, wet, weak HCl reaction, fine to coarse grained sand, fine gravel
-149.3	148.4	5	7	10	17	720(DH)-13			

TURKEY POINT COL BORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 8/19/08

GEOTECHNICAL BORING LOG

MACTEC

SHEET 3 OF 3

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: B. Taylor
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550X (ATL)	DRILLER: R. Landeros/ N. Rodriguez	GROUND WATER (ft)
BORING NO.: B-720(DH)	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -0.9 ft (NAVD88)	NORTHING: 397,397 US ft (NAD83/90)	EASTING: 875,791 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 204.9 ft	BORING DIAMETER: 4" to 204.9'	CASING DEPTH: 4" to 118.4'	HAMMER (ID):140 lb. Auto (MEC-05)
DATE STARTED: 4/5/08	COMPLETED: 4/8/08	CORE SIZE: HQ3	BITS USED: 3 7/8" Tricone

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT (0 20 40 60 80 100)	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-150.5					Continued from previous page				
									148.4ft: fine grained sand Silty SAND (SM), greenish gray (5GY5/1), medium dense, wet, weak HCl reaction, fine to coarse grained sand, fine gravel *(continued)*
-159.3	158.4	4	6	13	19	720(DH)-14			-159.3 — 158.4 Sandy SILT (ML), greenish gray (5GY5/1), very stiff, wet, weak HCl reaction, fine to coarse grained sand, fine gravel
-169.3	168.4	4	6	13	19	720(DH)-15			
-179.3	178.4	3	4	7	11	720(DH)-16			
-189.3	188.4	3	4	13	17	720(DH)-17			
-199.3	198.4	3	4	7	11	720(DH)-18			
-204.3	203.4	4	5	8	13	720(DH)-19			-205.8 — 204.9 Boring Terminated at Elevation -205.8 ft

TURKEY POINT COL BORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 8/19/08

MACTEC

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: B. Taylor
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550X (ATL)	DRILLER: R. Landeros/ N. Rodriguez	GROUND WATER (ft)
BORING NO.: B-720(DH)	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -0.9 ft (NAVD88)	NORTHING: 397,397 US ft (NAD83/90)	EASTING: 875,791 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 204.9 ft	CASING DEPTH: 4" to 118.4'		HAMMER (ID): 140 lb. Auto (MEC-05)
DATE STARTED: 4/5/08	COMPLETED: 4/8/08	CORE SIZE: HQ3	CORE BARREL TYPE: Triple Tube Wireline (Split inner liners)

ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	RUN REC. (ft) %	RUN RQD (ft) %	SAMP. NO.	STRATA REC. (ft) %	STRATA RQD (ft) %	LOG	DESCRIPTION AND REMARKS
										Begin Coring @ 29.8 ft
-30.7 -34.3	29.8 33.4	3.6	0:39 0:41 0:42 0:28/0.6	(3.4) 94%	(3.0) 83%	RUN-1	(18.0) 97%	(16.7) 90%		LIMESTONE, boundstone, white (10YR8/1), hard, moist, strong HCl reaction, oolitic (Upper Fort Thompson Formation) *(continued)* 29.8ft: moderately hard, moderately indurated, fossiliferous, vugs filled with cemented sand and shell fragments 33.4ft: hard, indurated, few vugs, coralline
-39.3	38.4	5.0	1:14 0:50 0:38 0:29 0:30	(5.0) 100%	(4.4) 88%	RUN-2				
-44.3	43.4	5.0	1:03 1:08 0:52 1:05 1:07	(4.6) 92%	(4.5) 90%	RUN-3				38.4ft: loss of circulation
-49.3	48.4	5.0	0:56 1:05 1:05 1:26 1:36	(5.0) 100%	(4.8) 96%	RUN-4				43.4ft: white (10YR8/1) to 46.8ft, then gray (10YR6/1) to 48.4ft -49.3 ... 48.4
-54.3	53.4	5.0	1:08 1:16 1:02 1:14 0:55	(5.0) 100%	(5.0) 100%	RUN-5	(9.4) 75%	(7.7) 61%		LIMESTONE, boundstone, white (10YR8/1), hard, indurated, fossiliferous, strong HCl reaction, few to little shell molds and casts (Lower Fort Thompson Formation)
-59.3	58.4	5.0	0:40 1:06 0:48 0:19 0:28	(2.6) 52%	(0.4) 8%	RUN-6				53.4ft: moderately hard, moderately indurated, little vugs, trace sand
-64.3	63.4	5.0	0:41 0:26 0:49 0:38 0:21	(1.8) 36%	(1.8) 36%	RUN-7	(3.7) 39%	(0.0) 0%		58.4ft: few vugs -61.9 ... 61.0 POORLY GRADED SAND (SP), light gray (10YR7/1), soft, moist, fine grained sand, and interbedded LIMESTONE, boundstone, white (10YR8/1), moderately hard, moderately indurated, trace vugs, few to little sand
-69.3	68.4	5.0	0:25 1:27 0:41 1:04 3:29	(1.7) 34%	(0.0) 0%	RUN-8				
-71.1	70.2	1.8	0:26 3:35	(1.8) 100%	(0.0) 0%	RUN-9				68.4ft: fine to medium grained sand, some shell fragments, few to little friable LIMESTONE fragments, strong HCl reaction -71.3 ... 70.4
-74.3	73.4	3.2	2:10 1:56 2:32	(3.2) 100%	(2.9) 91%	RUN-10 *RUN-10*	(15.2) 69%	(11.1) 50%		LIMESTONE, boundstone, white (10YR8/1), moderately hard, moderately indurated, few vugs, strong HCl reaction, trace sand
-79.3	78.4	5.0	0:23 0:25 0:37 0:29 0:23	(2.6) 52%	(1.7) 34%	RUN-11				73.4ft: fossiliferous
-84.3	83.4	5.0	0:36 0:19 0:15 0:29 0:41	(3.0) 60%	(1.7) 34%	RUN-12				78.4ft: moderately hard to hard, moderately indurated to indurated, trace vugs, few shell molds and casts
-89.3	88.4	5.0	0:30 0:19 0:27 0:54 0:39	(2.7) 54%	(2.1) 42%	RUN-13				83.4ft: moderately hard, moderately indurated, few vugs
-94.3	93.4	5.0	0:54 0:15 0:17 0:21 0:18	(3.9) 78%	(2.7) 54%	RUN-14	(2.7) 39%	(0.0) 0%		-93.3 ... 92.4 POORLY GRADED SAND (SP), light gray (10YR7/1), moist, fine to medium grained sand, soft, some shell fragments, strong HCl reaction
-99.3	98.4	5.0	0:41 0:35 0:23 0:19 0:19	(2.7) 54%	(0.0) 0%	RUN-15				
-104.3	103.4	5.0	0:48 1:05 0:53 1:08 0:47	(3.6) 72%	(2.1) 42%	RUN-16	(7.6) 56%	(5.6) 41%		-100.3 ... 99.4 LIMESTONE, boundstone, white (10YR8/1), moderately hard, moderately indurated, little vugs, fossiliferous, strong HCl reaction, few to some shell molds and casts
		5.0	0:34	(3.8)	(3.5)	RUN-17				

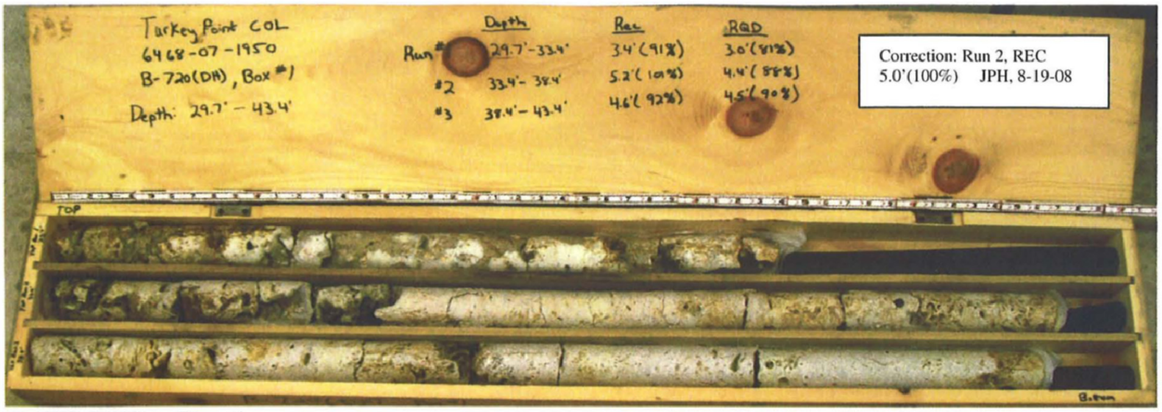
TURKEY POINT COL CORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 8/19/08

MACTEC

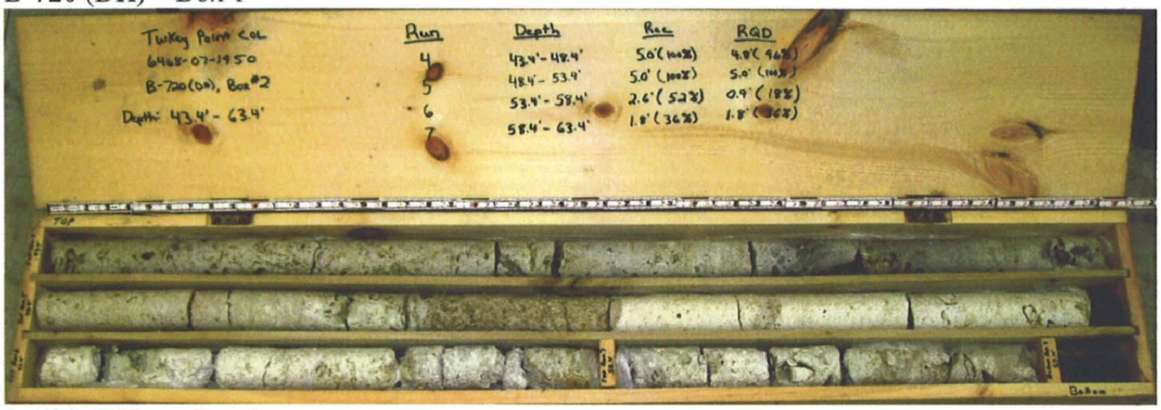
BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: B. Taylor
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550X (ATL)	DRILLER: R. Landeros/ N. Rodriguez	GROUND WATER (ft)
BORING NO.: B-720(DH)	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -0.9 ft (NAVD88)	NORTHING: 397,397 US ft (NAD83/90)	EASTING: 875,791 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 204.9 ft	CASING DEPTH: 4" to 118.4'		HAMMER (ID): 140 lb. Auto (MEC-05)
DATE STARTED: 4/5/08	COMPLETED: 4/8/08	CORE SIZE: HQ3	CORE BARREL TYPE: Triple Tube Wireline (Split inner liners)

ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	RUN REC. (ft) %	RUN RQD (ft) %	SAMP. NO.	STRATA REC. (ft) %	STRATA RQD (ft) %	LOG	DESCRIPTION AND REMARKS
										Continued from previous page
-109.3	108.4		0:39 0:32 0:28 0:19	76%	70%					LIMESTONE, boundstone, white (10YR8/1), moderately hard, moderately indurated, little vugs, fossiliferous, strong HCl reaction, few to some shell molds and casts *(continued)*
-114.3	113.4	5.0	0:26 0:22 0:19 1:37 0:39	(0.2) 4%	(0.0) 0%	RUN-18				108.4ft: soft to moderately hard, friable to moderately indurated -113.9 — 113.0
-119.3	118.4	5.0	0:25 0:21 0:10 0:11 0:11	(0.7) 14%	(0.0) 0%	RUN-19	(0.7) 13%	(NA)		POORLY GRADED SAND with silt (SP-SM), light gray (10YR7/1), medium dense, wet, fine to coarse grained sand, some shell fragments, strong HCl reaction, with soft, friable to moderately indurated cemented sand layers (Tamiami Formation) -119.3 — 118.4
										Coring Terminated at Elevation -119.3

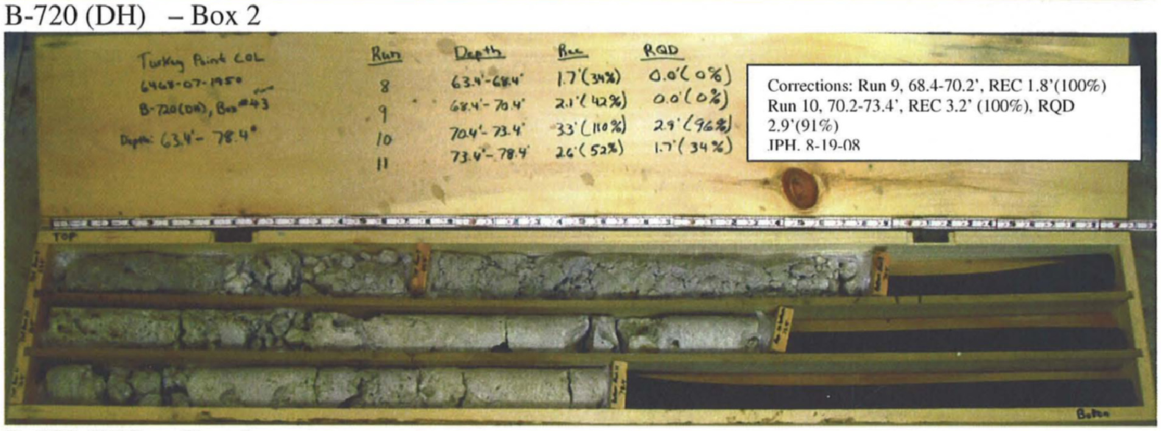
TURKEY POINT COL CORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 8/19/08



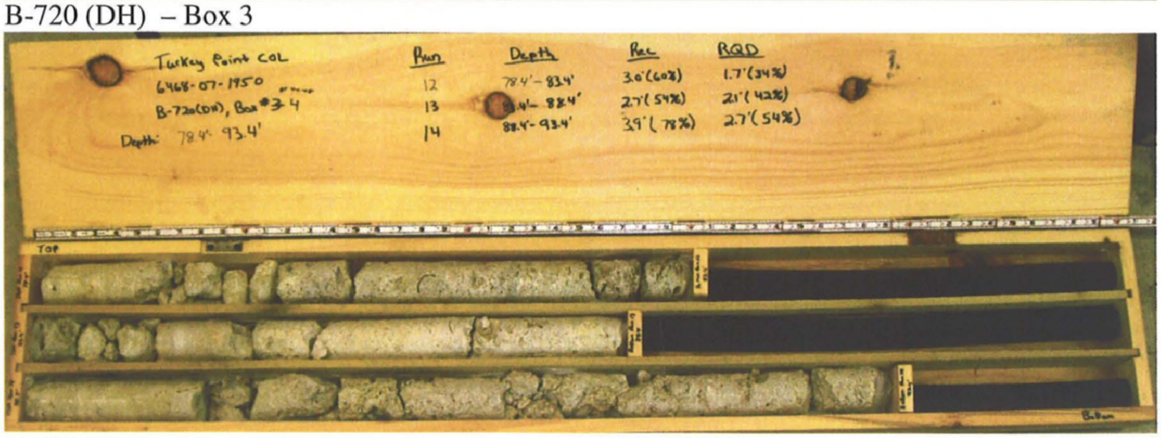
B-720 (DH) – Box 1



B-720 (DH) – Box 2



B-720 (DH) – Box 3



B-720 (DH) – Box 4

B-720 (DH) – Box 5

B-720 (DH) – Box 6

8/19/08

GEOTECHNICAL BORING LOG

Prepared By JPH Date 5-30-08

Checked By [illegible] Date 5-30-08

MACTEC

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: S. Woodham
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-55 Marsh Buggy	DRILLER: P. Pitts/R. Price	GROUND WATER (ft)
BORING NO.: B-720G(DH)	DRILL METHOD: Mud Rotary	SAMPLE METHODS: NA	0 HR. NA
GROUND ELEV.: -1.1 ft (NAVD88)	NORTHING: 397,385 US ft (NAD83/90)	EASTING: 875,794 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 220.8 ft	BORING DIAMETER: 4" to 220.8'	CASING DEPTH: NA	HAMMER (ID): 140 lb. Auto (MEC-425)
DATE STARTED: 3/12/08	COMPLETED: 3/20/08	CORE SIZE: NA	BITS USED: 3 7/8" Mill Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-1.1					Ground Surface				-1.1 0.0
					SEE LEGEND FOR ROCK HARDNESS CRITERIA BASED ON SPT DATA				Boring drilled to perform down-hole geophysical testing. See boring B-720(DH) for complete soil and rock descriptions.
									-3.6 Muck 2.5
									LIMESTONE (Miami Formation)
									-26.1 25.0
									LIMESTONE (Fort Thompson Formation)

TURKEY POINT COL BORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 5/30/08

MACTEC

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: S. Woodham
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-55 Marsh Buggy	DRILLER: P. Pitts/R. Price	GROUND WATER (ft)
BORING NO.: B-720G(DH)	DRILL METHOD: Mud Rotary	SAMPLE METHODS: NA	0 HR. NA
GROUND ELEV.: -1.1 ft (NAVD88)	NORTHING: 397,385 US ft (NAD83/90)	EASTING: 875,794 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 220.8 ft	BORING DIAMETER: 4" to 220.8'	CASING DEPTH: NA	HAMMER (ID):140 lb. Auto (MEC-425)
DATE STARTED: 3/12/08	COMPLETED: 3/20/08	CORE SIZE: NA	BITS USED: 3 7/8" Mill Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-75.9					Continued from previous page				
									LIMESTONE (Fort Thompson Formation) *(continued)*
-116.1	115.0								SAND (Tamiami Formation)

TURKEY POINT COL BORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 5/30/08

MACTEC

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: S. Woodham
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-55 Marsh Buggy	DRILLER: P. Pitts/R. Price	GROUND WATER (ft)
BORING NO.: B-720G(DH)	DRILL METHOD: Mud Rotary	SAMPLE METHODS: NA	0 HR. NA
GROUND ELEV.: -1.1 ft (NAVD88)	NORTHING: 397,385 US ft (NAD83/90)	EASTING: 875,794 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 220.8 ft	BORING DIAMETER: 4" to 220.8'	CASING DEPTH: NA	HAMMER (ID):140 lb. Auto (MEC-425)
DATE STARTED: 3/12/08	COMPLETED: 3/20/08	CORE SIZE: NA	BITS USED: 3 7/8" Mill Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-150.7					Continued from previous page				
									SAND (Tamiami Formation) *(continued)*
-221.9	220.8								Boring Terminated at Elevation -221.9 ft

TURKEY POINT COL BORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 5/30/08