MACTEC

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: B. Taylor/L. Bisson
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 (ATL)	DRILLER: L. Carter/ J. Landeros	GROUND WATER (ft)
BORING NO.: B-605	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.7 ft (NAVD88)	NORTHING: 396,917 US ft (NAD83/90)	EASTING: 876,694 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 201.0 ft	BORING DIAMETER: 4" to 36.0', 3" to 201.0'	CASING DEPTH: 4" to 36.0', 3" to 119.9'	HAMMER (ID):140 lb. Auto (MEC-03)
DATE STARTED: 2/23/08	COMPLETED: 2/27/08	CORE SIZE: HQ3	BITS USED: 3 7/8" and 2 15/16" Tricones

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
-151.3					Continued from previous page				
-151.6	149.9	5	6	11	17	605-19			Silty SAND (SM), greenish gray (10Y5/1), medium dense, fine grained sand, strong HCl reaction *(continued)*
-156.6	154.9	4	5	7	12	605-20			154.9ft: fine grained sand
-161.2	159.5	3	4	6	10	605-21			159.5ft: loose
-166.2	164.5	3	4	5	9	605-22			-166.2 164.5 Sandy SILT (ML), greenish gray (10Y5/1), firm, wet, fine to medium grained sand, strong HCl reaction
-171.2	169.5	2	3	6	9	605-23			169.5ft: no recovery
-176.2	174.5	2	3	5	8	605-24			174.5ft: some fine grained sand
-181.2	179.5	2	2	4	6	605-25			177.5ft: olive gray (5Y5/2)
-186.2	184.5	2	3	5	8	605-26			184.5ft: fine to medium grained sand
-191.2	189.5	3	3	6	9	605-27			187.5ft: olive gray (5Y5/2), fine grained sand,
-196.2	194.5	4	5	13	18	605-28			-196.2 194.5 Sandy, Silty CLAY (CL), olive gray (5Y4/2), very stiff, moist, fine to medium grained sand, weak HCl reaction
-201.2	199.5	4	4	17	21	605-29			-201.2 199.5 -202.7 201.0 Sandy SILT (ML), olive gray (5Y4/2), very stiff, moist, fine to coarse grained sand
									Boring Terminated at Elevation -202.7 ft

TURKEY POINT COL BORE: TURKEY POINT GPJ TURKEY POINT COL.GDT 8/18/08

MACTEC

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: B. Taylor/L. Bisson
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 (ATL)	DRILLER: L. Carter/ J. Landeros	GROUND WATER (ft)
BORING NO.: B-605	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.7 ft (NAVD88)	NORTHING: 396,917 US ft (NAD83/90)	EASTING: 876,694 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 201.0 ft	CASING DEPTH: 4" to 36.0', 3" to 119.9'		HAMMER (ID): 140 lb. Auto (MEC-03)
DATE STARTED: 2/23/08	COMPLETED: 2/27/08	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 @ 36.2 ft
-37.9	36.2	1.9	1:20 1:50/0.9	(1.9) 100%	(1.9) 100%	RUN-1	(11.6) 97%	(11.4) 96%		LIMESTONE, boundstone, white (10YR8/1), moderately hard, moist, trace shell fragments (Upper Fort Thompson Formation) *(continued)*
-39.8	38.1	5.0	1:26 1:17 0:57 0:50 0:48	(4.7) 94%	(4.5) 90%	RUN-2				36.2ft: medium hard, moderately indurated, fossiliferous, few vugs NOTE: Coring began at 35.1 ft though previous SPT. Only material below SPT depth is included in log.
-44.8	43.1	5.0	0:39 0:38 0:45 0:44 0:50	(5.0) 100%	(5.0) 100%	RUN-3				43.1ft: hard, moderately indurated, recrystallized calcite
-49.8	48.1	5.0	1:01 1:04 1:01 1:00 1:24	(5.0) 100%	(5.0) 100%	RUN-4	(52.7) 79%	(36.3) 54%		-49.8 48.1 LIMESTONE, boundstone, white (10YR8/1), hard, indurated, little vugs, some shells, trace recrystallized calcite in vugs (Lower Fort Thompson Formation)
-54.8	53.1	5.0	0:46 0:43 0:32 0:16 0:37	(4.9) 98%	(4.2) 84%	RUN-5				53.1ft: medium hard, moderately indurated
-59.8	58.1	5.0	0:21 0:24 0:20 0:15 0:15	(3.4) 68%	(1.9) 38%	RUN-6				
-64.8	63.1	5.0	0:21 0:19 0:23 0:26 0:13	(3.9) 78%	(2.9) 58%	RUN-7				63.1ft: few vugs
-69.8	68.1	5.0	0:29 0:10 0:16 0:24 0:28	(2.4) 48%	(0.6) 12%	RUN-8				68.1ft: mottled light gray (10YR7/1), some vugs, interbedded sand
-74.8	73.1	0.8	0:24/0.8	(0.5) 63%	(0.0) 0%	RUN-9				
-75.6	73.9	5.0	0:15 0:25 0:25 0:20 0:26	(2.7) 54%	(0.5) 10%	RUN-10				73.9ft: hard, indurated, mostly vugs
-80.6	78.9	5.0	0:29 0:57 0:55 0:51 0:23	(3.8) 76%	(3.7) 74%	RUN-11				
-85.6	83.9	5.0	0:15 0:19 0:23 0:19 0:38	(2.5) 50%	(0.5) 10%	RUN-12				83.9ft: moderately indurated
-90.6	88.9	4.0	0:53 0:53 1:00 1:26	(3.8) 95%	(2.5) 63%	RUN-13				88.9ft: moderately hard, indurated, few vugs
-94.6	92.9	1.0	0:54	(0.6) 60%	(0.5) 50%	RUN-14				92.9ft: trace vugs, trace sand
-95.6	93.9	5.0	0:33 0:41 0:35 0:37 0:38	(4.9) 98%	(3.9) 78%	RUN-15				
-100.6	98.9	5.0	0:39 0:52 0:46 0:51 1:06	(5.0) 100%	(3.0) 60%	RUN-16				
-105.6	103.9	5.0	0:51 0:58 1:03 0:52 1:03	(5.0) 100%	(5.0) 100%	RUN-17				103.9ft: hard, shell molds and casts
-110.6	108.9	5.0	0:42 0:58	(3.6) 72%	(2.1) 42%	RUN-18				108.9ft: moderately hard

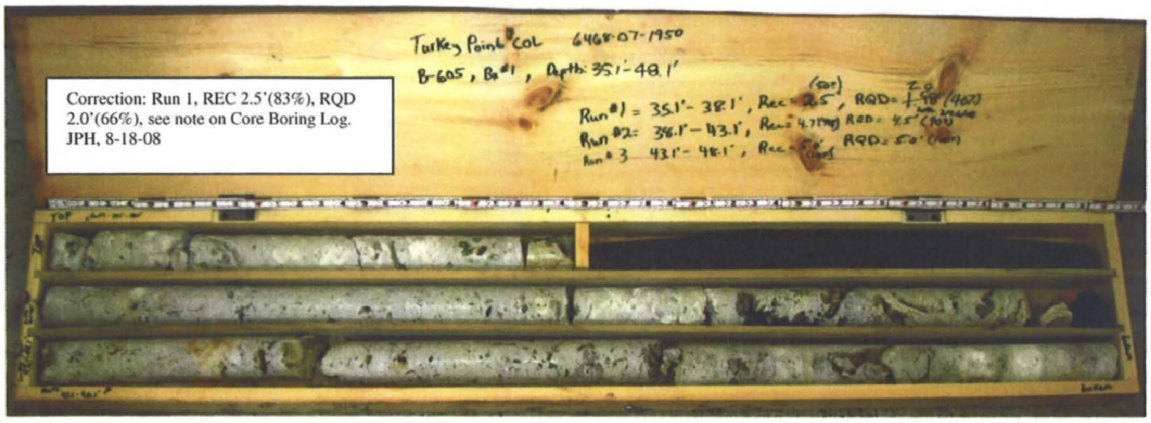
TURKEY POINT COL CORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 8.18.08

MACTEC

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: B. Taylor/L. Bisson
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 (ATL)	DRILLER: L. Carter/ J. Landeros	GROUND WATER (ft)
BORING NO.: B-605	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.7 ft (NAVD88)	NORTHING: 396,917 US ft (NAD83/90)	EASTING: 876,694 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 201.0 ft	CASING DEPTH: 4" to 36.0', 3" to 119.9'		HAMMER (ID): 140 lb. Auto (MEC-03)
DATE STARTED: 2/23/08	COMPLETED: 2/27/08	CORE SIZE: HQ3	CORE BARREL TYPE: Triple Tube Wireline (Split inner liners)

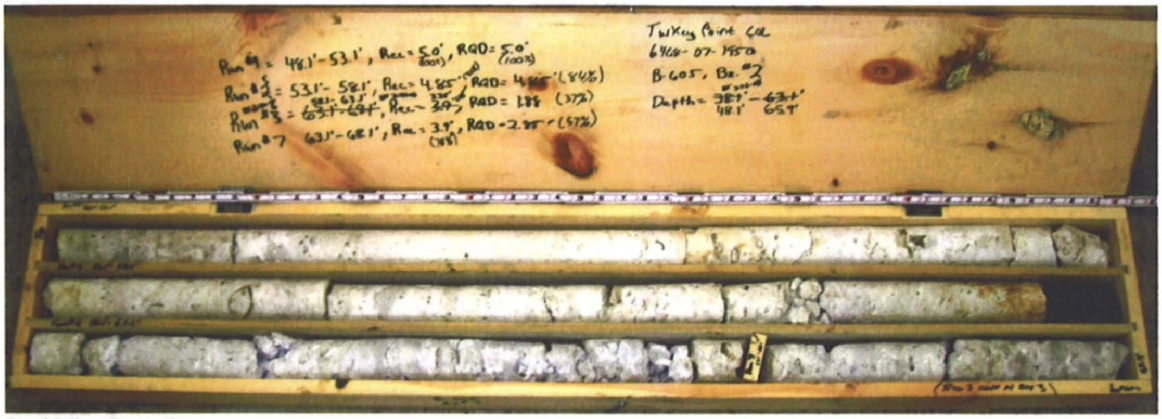
ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	RUN REC (ft) %	RUN RQD (ft) %	SAMP. NO.	STRATA REC (ft) %	STRATA RQD (ft) %	LOG	DESCRIPTION AND REMARKS
										Continued from previous page
-115.6	113.9		0:55 0:21 1:22							LIMESTONE, boundstone, white (10YR8/1), hard, indurated, little vugs, some shells, trace recrystallized calcite in vugs (Lower Fort Thompson Formation) *(continued)*
		5.0	0:30 0:23 0:44 0:14	(0.7) 14%	(0.0) 0%	RUN-19	(0.0) 0%	(NA)		-116.7 113.9ft: light gray (2.5Y7/2), hard 115.0 Sandy SILT (ML), light gray (2.5Y7/1), very stiff, wet, fine to medium grained sand, strong HCl reaction (Tamiami Formation)
-120.6	118.9		0:10							-120.6 118.9
										Coring Terminated at Elevation -120.6

TURKEY POINT COL CORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 8/18/08

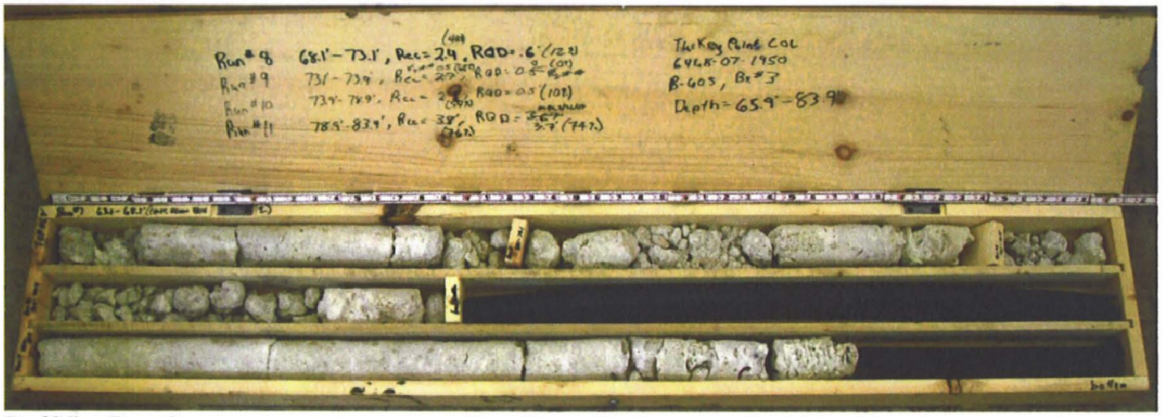


Correction: Run 1, REC 2.5'(83%), RQD 2.0'(66%), see note on Core Boring Log. JPH, 8-18-08

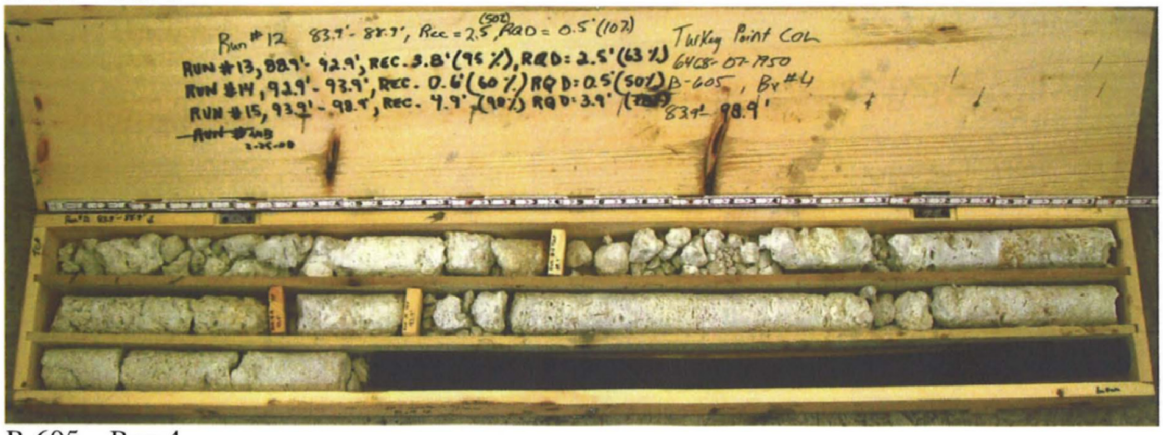
B-605 – Box 1



B-605 – Box 2



B-605 – Box 3



B-605 – Box 4

B-605 – Box 5

B-605 – Box 6

MACTEC

GEOTECHNICAL BORING LOG

Prepared By [illegible] Date 5-30-08
Checked By [illegible] Date 5-30-08

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: L. Bisson
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 (ATL)	DRILLER: L. Carter/ J. Landeros	GROUND WATER (ft)
BORING NO.: B-606	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.4 ft (NAVD88)	NORTHING: 396,959 US ft (NAD83/90)	EASTING: 876,738 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 151.2 ft	BORING DIAMETER: 4" to 16.0', 3" to 151.2'	CASING DEPTH: 4" to 16.0', 3" to 125.9'	HAMMER (ID):140 lb. Auto (MEC-03)
DATE STARTED: 2/28/08	COMPLETED: 3/6/08	CORE SIZE: HQ3	BITS USED: 4" & 3" Roller Cones

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
-1.4					Ground Surface				-1.4 / 0.0
-1.4 / -3.9	0.0 / 2.5	WOR	WOR	WOR	0 WOR	606-1			MUCK, light brownish gray (2.5Y6/2), very soft, wet, organic, trace shell fragments
-6.4	5.0	2	4	8	12	606-2A/B			-4.4 / 3.0 2.5ft: black (2.5Y2.5/1), soft
-8.9	7.5	9	19	10	29 (SEE LEGEND FOR ROCK HARDNESS CRITERIA BASED ON SPT DATA)	606-3			LIMESTONE, boundstone, white (10YR8/1), to light gray (10YR7/1), very soft, wet trace calcite crystals, trace shell fragments (Miami Formation)
-11.4	10.0	5	4	4	8	606-4			5.0ft: white (10YR8/1), soft 7.5ft: very soft
-13.9	12.5	4	6	9	15	606-5			
-16.4	15.0	8	8	7	15	606-6			12.5ft: very pale brown (10YR8/2)
-17.8	16.4	3	6	50/0.1	56/0.6	606-7			15.0ft: hard
-19.8	18.4					RUN-1			16.4ft: Switch sampling method to coring
-24.8	23.4					RUN-2			16.4ft: light gray (10YR7/2), hard, indurated, fossiliferous, strong HCl reaction, little vugs 18.4ft: white (10YR8/1), to light gray (10YR8/2)
-28.8	27.4					RUN-3			-25.4 / 24.0 LIMESTONE, boundstone, light gray (10YR7/2), hard, indurated, coralline, fossiliferous, strong HCl reaction, few vugs (Upper Fort Thompson Formation)
-29.8	28.4					RUN-4			
-32.8	31.4					RUN-5			27.4ft: light gray (10YR7/2) 28.4ft: light gray (10YR7/2), to pale brown (10YR6/3), some friable cemented sand
-33.3	31.9					RUN-6			31.4ft: white (10YR8/1), soft to hard, friable to indurated, trace vugs
-34.8	33.4					RUN-7 606-CS-01			
-39.8	38.4					RUN-8 606-CS-02			31.9ft: white (10YR8/1), to pale brown (10YR6/3), hard, indurated 33.4ft: white (10YR8/1), to light gray (10YR7/1), few vugs
-44.8	43.4					RUN-9			38.4ft: white (10YR8/1)
-46.4	45.0					RUN-10			43.4ft: no recovery (limestone)
-49.8	48.4					RUN-11			45ft: grayish brown (10YR5/2), to light gray (10YR7/1) from 46.0ft to 48.4ft
-54.8	53.4					RUN-12 606-CS-04			-49.8 / 48.4 LIMESTONE, boundstone, white (10YR8/1), hard, indurated, fossiliferous, strong HCl reaction, few vugs (Lower Fort Thompson Formation)
-59.8	58.4					RUN-13			53.4ft: trace coral
-64.8	63.4					RUN-14			
-68.8	67.4					RUN-15			63.4ft: white (10YR8/1), to light gray (10YR7/1)
-69.8	68.4					RUN-16			67.4ft: no recovery (limestone)
-74.8	73.4					RUN-17			68.4ft: light gray (10YR7/1)
						RUN-18			73.4ft: white (10YR8/1), trace vugs

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: L. Bisson
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 (ATL)	DRILLER: L. Carter/ J. Landeros	GROUND WATER (ft)
BORING NO.: B-606	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.4 ft (NAVD88)	NORTHING: 396,959 US ft (NAD83/90)	EASTING: 876,738 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 151.2 ft	BORING DIAMETER: 4" to 16.0', 3" to 151.2'	CASING DEPTH: 4" to 16.0', 3" to 125.9'	HAMMER (ID):140 lb. Auto (MEC-03)
DATE STARTED: 2/28/08	COMPLETED: 3/6/08	CORE SIZE: HQ3	BITS USED: 4" & 3" Roller Cones

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
-76.2					Continued from previous page				
-79.8	78.4					606-CS-05			LIMESTONE, boundstone, white (10YR8/1), hard, indurated, fossiliferous, strong HCl reaction, few vugs (Lower Fort Thompson Formation) *(continued)*
-84.8	83.4					RUN-19 606-CS-06			
-89.8	88.4					RUN-20			
-94.8	93.4					RUN-21			88.4ft: white (2.5Y8/1), moderately hard, trace sand
-99.8	98.4					RUN-22			93.4ft: white (2.5Y8/1), to very pale brown (2.5Y8/2), hard, trace vugs
-104.8	103.4					RUN-23			98.4ft: white (10YR8/1)
-109.8	108.4					RUN-24			
-114.8	113.4					RUN-25			108.4ft: white (5Y8/1)
-119.8	118.4					RUN-26			-117.4 116.0
-131.1	129.7	2	6	5	11	606-8			Silty SAND (SM), greenish gray (10Y6/1), medium dense, wet, fine grained sand, strong HCl reaction, trace shell fragments (Tamiami Formation) 119.4ft: fine to coarse grained sand, fine gravel
-141.1	139.7	3	6	13	19	606-9			
-151.1	149.7	12	12	19	31	606-10			139.7ft: olive gray (5Y5/2), dense

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: L. Bisson
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 (ATL)	DRILLER: L. Carter/ J. Landeros	GROUND WATER (ft)
BORING NO.: B-606	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.4 ft (NAVD88)	NORTHING: 396,959 US ft (NAD83/90)	EASTING: 876,738 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 151.2 ft	BORING DIAMETER: 4" to 16.0', 3" to 151.2'	CASING DEPTH: 4" to 16.0', 3" to 125.9'	HAMMER (ID):140 lb. Auto (MEC-03)
DATE STARTED: 2/28/08	COMPLETED: 3/6/08	CORE SIZE: HQ3	BITS USED: 4" & 3" Roller Cones

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
-151.0					Continued from previous page				
		4	7	7	14	606-11			-152.6 149.7ft: olive gray (5Y4/2), medium dense, fine to medium grained sand 151.2
									Boring Terminated at Elevation -152.6 ft

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: L. Bisson
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 (ATL)	DRILLER: L. Carter/ J. Landeros	GROUND WATER (ft)
BORING NO.: B-606	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.4 ft (NAVD88)	NORTHING: 396,959 US ft (NAD83/90)	EASTING: 876,738 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 151.2 ft	CASING DEPTH: 4" to 16.0', 3" to 125.9'		HAMMER (ID): 140 lb. Auto (MEC-03)
DATE STARTED: 2/28/08	COMPLETED: 3/6/08	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 @ 16.4 ft
-17.8	16.4	2.0	0:54 1:21	(2.0) 100%	(1.2) 60%	RUN-1	(7.0) 92%	(5.1) 67%		LIMESTONE, boundstone, white (10YR8/1), to light gray (10YR7/1). very soft, wet trace calcite crystals, trace shell fragments (Miami Formation) *(continued)*
-19.8	18.4	5.0	0:49 0:45 0:32 0:28 0:42	(5.0) 100%	(3.9) 78%	RUN-2				16.4ft: light gray (10YR7/2), hard, indurated, fossiliferous, strong HCl reaction, little vugs 18.4ft: white (10YR8/1), to light gray (10YR8/2)
-24.8	23.4									-25.4 — 24.0
-28.8	27.4	4.0	0:33 0:29 0:52 0:30	(3.2) 80%	(0.7) 18%	RUN-3	(21.4) 88%	(13.3) 55%		LIMESTONE, boundstone, light gray (10YR7/2), hard, indurated, coralline, fossiliferous, strong HCl reaction, few vugs (Upper Fort Thompson Formation)
-29.8	28.4	1.0	0:18	(1.0) 100%	(0.0) 0%	RUN-4				27.4ft: light gray (10YR7/2)
-32.8	31.4	3.0	1:18 0:45 1:16	(2.0) 67%	(0.5) 17%	RUN-5				28.4ft: light gray (10YR7/2), to pale brown (10YR6/3), some friable cemented sand
-33.3	31.9	0.5	0:52/0.5	(0.5) 100%	(0.0) 0%	RUN-6				31.4ft: white (10YR8/1), soft to hard, friable to indurated, trace vugs
-34.8	33.4	1.5	0:51/0.5 1:14			RUN-7 *606-CS-01*				31.9ft: white (10YR8/1), to pale brown (10YR6/3), hard, indurated
-39.8	38.4	5.0	1:06 0:46 0:42 0:33 0:41	(1.5) 100% (4.8) 96%	(1.5) 100% (3.9) 78%	RUN-8 *606-CS-02*				33.4ft: white (10YR8/1), to light gray (10YR7/1), few vugs
-44.8	43.4	5.0	0:58 0:55 1:02 0:57 1:00	(5.0) 100%	(4.7) 94%	RUN-9				38.4ft: white (10YR8/1)
-46.4	45.0	1.6	0:48 0:51/0.6	(0.0) 0%	(0.0) 0%	RUN-10				43.4ft: no recovery (limestone)
-49.8	48.4	3.4	0:03/0.4 1:21 1:26	(3.4) 100%	(2.0) 59%	RUN-11				45ft: grayish brown (10YR5/2), to light gray (10YR7/1) from 46.0ft to 48.4ft
										-49.8 — 48.4
-54.8	53.4	5.0	1:26 1:35 1:43 1:44 2:02 1:45	(4.9) 98%	(4.9) 98%	RUN-12 *606-CS-04*	(56.8) 84%	(35.2) 52%		LIMESTONE, boundstone, white (10YR8/1), hard, indurated, fossiliferous, strong HCl reaction, few vugs (Lower Fort Thompson Formation)
-59.8	58.4	5.0	1:02 0:38 0:41 0:15 0:31	(4.7) 94%	(3.7) 74%	RUN-13				53.4ft: trace coral
-64.8	63.4	5.0	0:29 0:28 0:27 0:18 0:28	(4.7) 94%	(2.3) 46%	RUN-14				
-68.8	67.4	4.0	0:43 0:37 0:38 1:09	(2.8) 70%	(1.2) 30%	RUN-15				63.4ft: white (10YR8/1), to light gray (10YR7/1)
-69.8	68.4	1.0	0:24	(0.0) 0%	(0.0) 0%	RUN-16				67.4ft: no recovery (limestone)
-74.8	73.4	5.0	1:22 0:27 0:37 1:37 0:07	(2.8) 56%	(1.8) 36%	RUN-17				68.4ft: light gray (10YR7/1)
-79.8	78.4	5.0	0:03 0:04 1:58 2:23 1:48	(3.0) 60%	(2.4) 48%	RUN-18 *606-CS-05*				73.4ft: white (10YR8/1), trace vugs
-84.8	83.4	5.0	1:18 1:15 1:16 1:04 0:52	(5.0) 100%	(3.3) 66%	RUN-19 *606-CS-06*				
-89.8	88.4	5.0	0:43 0:58 1:52 1:43 2:07	(5.0) 100%	(3.1) 62%	RUN-20				
		5.0	1:36 0:32 1:16	(4.7) 94%	(2.8) 56%	RUN-21				88.4ft: white (2.5Y8/1), moderately hard, trace sand

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

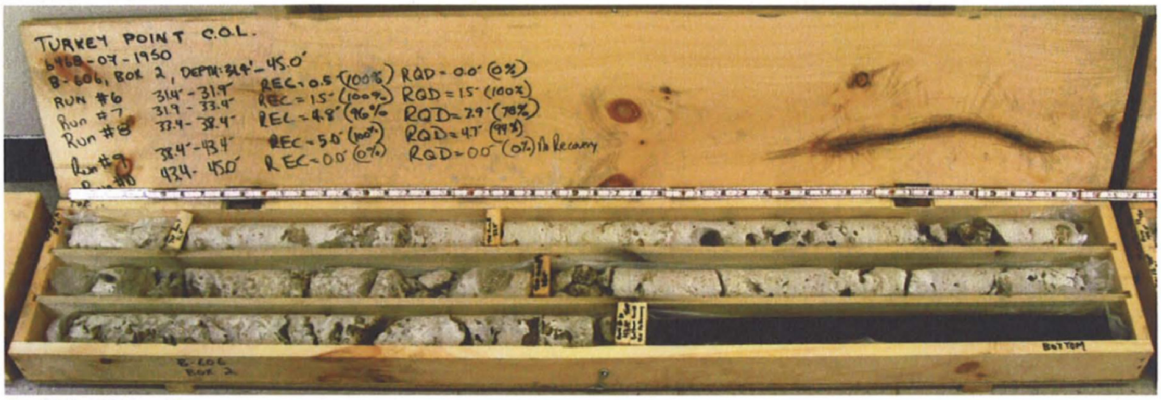
MACTEC

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: L. Bisson
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 (ATL)	DRILLER: L. Carter/ J. Landeros	GROUND WATER (ft)
BORING NO.: B-606	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.4 ft (NAVD88)	NORTHING: 396,959 US ft (NAD83/90)	EASTING: 876,738 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 151.2 ft	CASING DEPTH: 4" to 16.0', 3" to 125.9'		HAMMER (ID): 140 lb. Auto (MEC-03)
DATE STARTED: 2/28/08	COMPLETED: 3/6/08	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
-94.8	93.4		0:46 1:30							LIMESTONE, boundstone, white (10YR8/1), hard, indurated, fossiliferous, strong HCl reaction, few vugs (Lower Fort Thompson Formation) *(continued)*
-99.8	98.4	5.0	1:12 0:31 0:28 0:04 0:45	(4.0) 80%	(2.5) 50%	RUN-22				93.4ft: white (2.5Y8/1), to very pale brown (2.5Y8/2), hard, trace vugs
-104.8	103.4	5.0	0:52 1:14 1:18 0:59 1:49	(5.0) 100%	(2.6) 52%	RUN-23				98.4ft: white (10YR8/1)
-109.8	108.4	5.0	1:19 0:56 0:39 0:45 0:41	(5.0) 100%	(2.9) 58%	RUN-24				
-114.8	113.4	5.0	0:34 0:58 0:36 0:43 0:22	(3.8) 76%	(1.7) 34%	RUN-25				108.4ft: white (5Y8/1)
-119.8	118.4	5.0	0:23 0:18 0:12 0:16 0:07	(1.4) 28%	(0.0) 0%	RUN-26	(0.0) 0%	(NA)		-117.4 116.0 Silty SAND (SM), greenish gray (10Y6/1), medium dense, wet, fine grained sand, strong HCl reaction, trace shell fragments (Tamiami Formation) -119.8 118.4
										Coring Terminated at Elevation -119.8

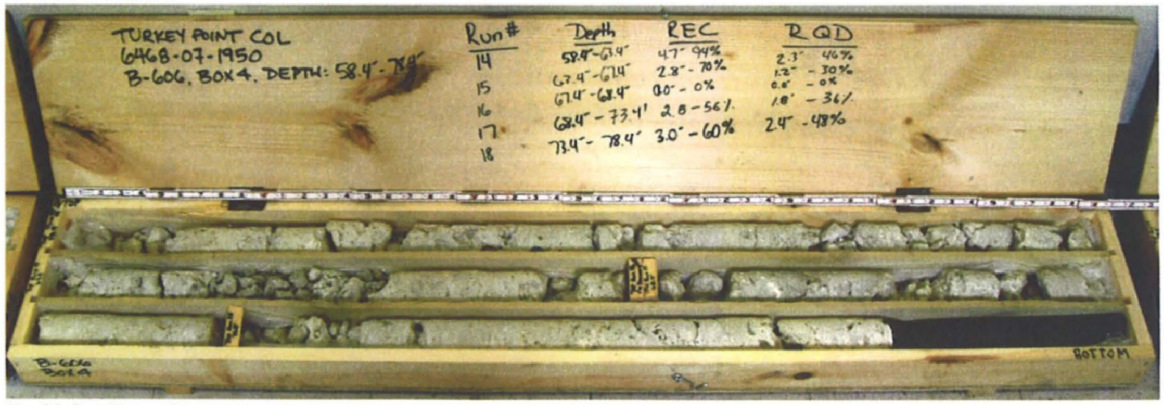
TURKEY POINT COL CORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 5/30/08

B-606 – Box 1

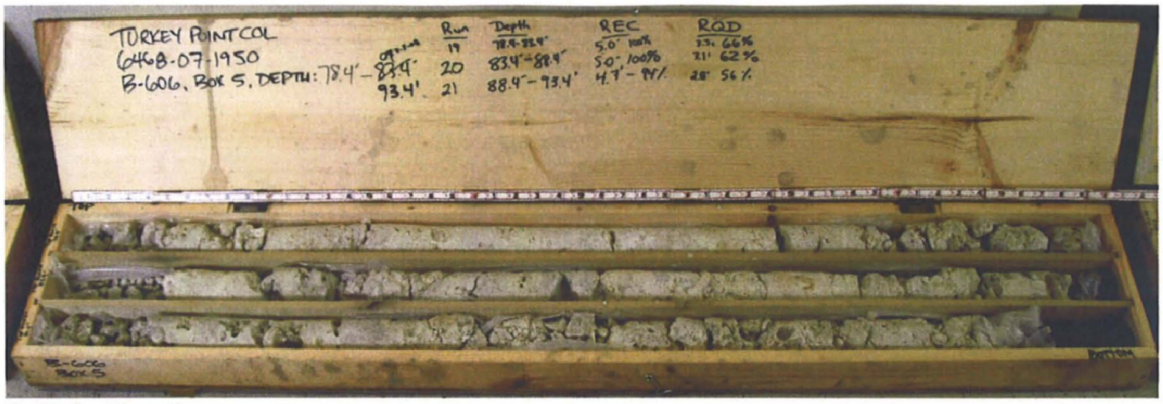


B-606 – Box 2

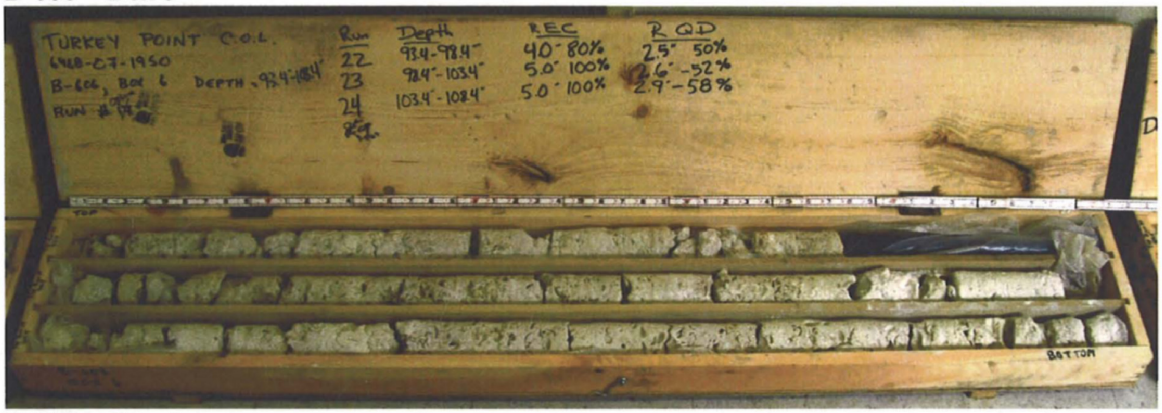
B-606 – Box 3



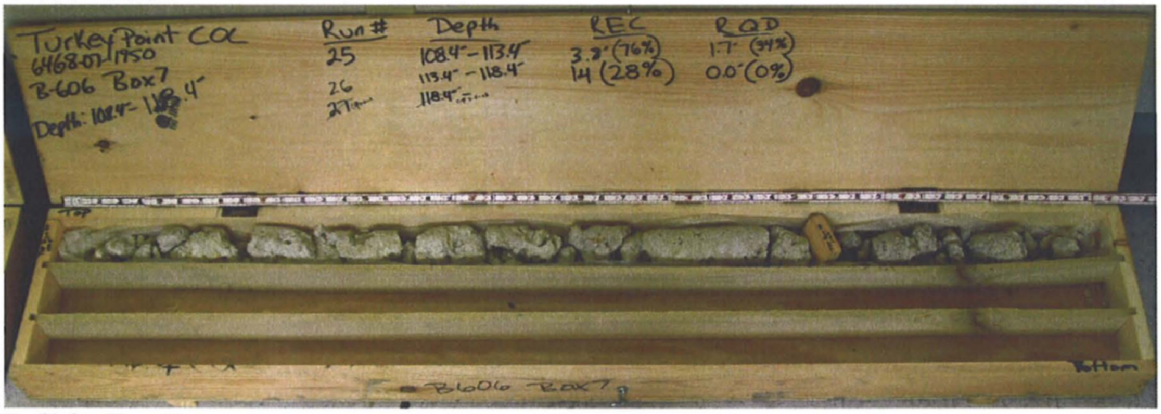
B-606 – Box 4



B-606 – Box 5



B-606 – Box 6



B-606 – Box 7

MACTEC

GEOTECHNICAL BORING LOG

Prepared By [illegible] Date 7-10-08
Checked By [illegible] Date 7-10-08

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: L. Bisson
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 (ATL)	DRILLER: L. Carter/ J. Landeros	GROUND WATER (ft)
BORING NO.: B-607	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.5 ft (NAVD88)	NORTHING: 396,830 US ft (NAD83/90)	EASTING: 876,644 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 152.5 ft	BORING DIAMETER: 4" to 16.0', 3" to 152.5'	CASING DEPTH: 4" to 16.0', 3" to 120.0'	HAMMER (ID):140 lb. Auto (MEC-03)
DATE STARTED: 3/7/08	COMPLETED: 3/9/08	CORE SIZE: HQ3	BITS USED: 4" & 3" Roller Cones

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
-1.5					Ground Surface				-1.5 / 0.0
-1.5 / -4.0	0.0 / 2.5	WOR	WOR	WOR	WOR 0	607-1			MUCK, light brownish gray (2.5Y6/2), to dark olive brown (2.5Y3/3), to black (2.5Y2.5/1), very soft, wet, organic, trace roots and shell fragments, no HCl reaction
-4.0	2.5								-4.0 / 2.5
-6.5	5.0	2	10	14	24	607-2			LIMESTONE, boundstone, pale yellow (2.5Y8/2), soft, wet, trace fines, fossiliferous, strong HCl reaction, oolitic (Miami Formation)
					SEE LEGEND FOR ROCK HARDNESS CRITERIA BASED ON SPT DATA				
-9.0	7.5	8	7	7	14	607-3			5.0ft: white (2.5Y8/1), very soft
-11.5	10.0	8	6	4	10	607-4			7.5ft: very pale brown (10YR8/2), to pale brown (10YR6/3), loose
-14.0	12.5	4	4	4	8	607-5			10.0ft: white (2.5Y8/1)
-16.5	15.0	6	10	18	28	607-6			12.5ft: light gray (2.5Y7/1), soft
-17.5	16.0	11	50/0.1		61/0.6	607-7			15.0ft: very pale brown (10YR8/2), hard
-19.8	18.3					RUN-1			16.0ft: Switch sampling method to coring
-24.8	23.3					RUN-2			16.0ft: white (2.5Y8/1), hard, indurated, trace fines, fossiliferous, strong HCl reaction, locally inconnected vugs
-25.5									-25.5 / 24.0
-29.8	28.3					RUN-3, 607-CS-01			LIMESTONE, boundstone, very pale brown (10YR8/2), hard, indurated, fossiliferous, trace fines, strong HCl reaction, trace vugs (Upper Fort Thompson Formation)
-34.8	33.3					RUN-4			
-39.8	38.3					RUN-5, 607-CS-02			33.3ft: white (2.5Y8/1), extremely indurated, recrystallized calcite, few vugs
-44.8	43.3					RUN-6, 607-CS-03			38.3ft: indurated
-49.8	48.3					RUN-7			43.3ft: moderately hard, trace sand
									45.9ft: gray (2.5Y6/1) to 47.7ft
									-49.2 / 47.7
-54.8	53.3					RUN-8, 607-CS-04			LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, fossiliferous, trace to few vugs, strong HCl reaction (Lower Fort Thompson Formation)
-59.8	58.3					RUN-9			53.3ft: medium hard to hard
-64.8	63.3					RUN-10, 607-CS-05			58.3ft: hard, trace vugs
-69.8	68.3					RUN-11			63.3ft: moderately hard, moderately indurated, sandy
-74.8	73.3					RUN-12			68.3ft: light gray (2.5Y7/2), indurated
						RUN-13			73.3ft: white (2.5Y8/1)

TURKEY POINT COL BORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 7/10/08

MACTEC

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: L. Bisson
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 (ATL)	DRILLER: L. Carter/ J. Landeros	GROUND WATER (ft)
BORING NO.: B-607	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.5 ft (NAVD88)	NORTHING: 396,830 US ft (NAD83/90)	EASTING: 876,644 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 152.5 ft	BORING DIAMETER: 4" to 16.0', 3" to 152.5'	CASING DEPTH: 4" to 16.0', 3" to 120.0'	HAMMER (ID):140 lb. Auto (MEC-03)
DATE STARTED: 3/7/08	COMPLETED: 3/9/08	CORE SIZE: HQ3	BITS USED: 4" & 3" Roller Cones

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
-76.3					Continued from previous page				
-79.8	78.3								LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, fossiliferous, trace to few vugs, strong HCl reaction (Lower Fort Thompson Formation) *(continued)*
-81.8	80.3					RUN-14			78.3ft: moderately indurated
-84.8	83.3					RUN-15			80.3ft: hard, indurated, trace sand, few vugs
-89.8	88.3					RUN-16			
-94.8	93.3					RUN-17			88.3ft: moderately hard to hard
-99.8	98.3					RUN-18			
-104.8	103.3					RUN-19 607-CS-06			
-109.8	108.3					RUN-20			
-114.8	113.3					RUN-21			108.3ft: hard to soft, indurated to friable
-119.8	118.3					RUN-22			-116.5 — 115.0
-131.0	129.5	5	11	10	21	607-8			Silty SAND (SM), light gray (2.5Y7/1), medium dense, wet, fine grained sand, strong HCl reaction, trace shell fragments (Tamiami Formation) 118.3ft: Switch sampling method to SPT
-141.0	139.5	3	4	7	11	607-9			129.5ft: olive (5Y5/3), weak to strong HCl reaction, fine to medium grained sand
-151.0	149.5	9	10	12	22	607-10			-141.0 — 139.5 Clayey, Silty SAND (SC-SM), olive (5Y5/3), medium dense, wet, weak HCl reaction, fine to coarse sand

TURKEY POINT COL BORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 7/10/08

MACTEC

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: L. Bisson
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 (ATL)	DRILLER: L. Carter/ J. Landeros	GROUND WATER (ft)
BORING NO.: B-607	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.5 ft (NAVD88)	NORTHING: 396,830 US ft (NAD83/90)	EASTING: 876,644 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 152.5 ft	BORING DIAMETER: 4" to 16.0', 3" to 152.5'	CASING DEPTH: 4" to 16.0', 3" to 120.0'	HAMMER (ID):140 lb. Auto (MEC-03)
DATE STARTED: 3/7/08	COMPLETED: 3/9/08	CORE SIZE: HQ3	BITS USED: 4" & 3" Roller Cones

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	
-151.1					Continued from previous page					
-152.5	151.0	6	6	9	15	607-11			-152.5 149.5ft: weak to strong HCl reaction	151.0
		4	5	11	16	607-12			-154.0 Silty SAND (SC-SM), olive (5Y5/3), medium dense, wet, fine to coarse sand, fine gravel, weak HCl reaction	152.5
									Boring Terminated at Elevation -154.0 ft	

TURKEY POINT COL BORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 7/10/08