



BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade		GEOLOGIST: H. Lyatuu/G. Pillappa	
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 (CLT)		DRILLER: Warren/Banks/Sloan/Rosser		GROUND WATER (ft)	
BORING NO.: B-611		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR. NA	
GROUND ELEV.: -1.5 ft (NAVD88)		NORTHING: 397,087 US ft (NAD83/90)		EASTING: 876,735 US ft (NAD83/90)		24 HR. NA	
TOTAL DEPTH: 151.5 ft		CASING DEPTH: 4" to 25.0', 3" to 120.1'				HAMMER (ID): 140 lb. Auto (MEC-04)	
DATE STARTED: 2/26/08		COMPLETED: 3/24/08		CORE SIZE: HQ3		CORE BARREL TYPE: Triple Tube Wireline (Split inner liners)	

ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	RUN		SAMP. NO.	STRATA		LOG	DESCRIPTION AND REMARKS
				REC. (%)	RQD (%)		REC. (%)	RQD (%)		
										Begin Coring @ 25.9 ft
-27.4	25.9	5.0	1.37 2.11 1.48 2.10 4.14	(4.7) 94%	(4.0) 80%	RUN-1 611-CS-01	(20.6) 94%	(18.5) 84%		LIMESTONE, boundstone, white (7.5YR8/1), hard, wet, strong HCl reaction, trace shells (Upper Fort Thompson Formation) (continued) 25.9ft: white (10YR8/1), hard, indurated, fossiliferous, coralline, strong HCl reaction, little vugs
-32.4	30.9	5.0	1.31 1.11 1.10 1.40 1.25	(5.0) 100%	(5.0) 100%	RUN-2				
-37.4	35.9	3.7	1.34 1.11 1.34	(3.7) 100%	(3.7) 100%	RUN-3 611-CS-02				35.9ft: few vugs
-41.1	39.6		2.14/0.7							
-42.4	40.9	1.3	5.16/1.3	(1.3) 100%	(0.7) 54%	RUN-4				40.9 to 41.5ft: Drilled out/washed out due to rig change and tool change
-43.0	41.5	3.6	0.32 0.49 0.39	(3.3) 92%	(3.0) 83%	RUN-5 611-CS-03				
-46.6	45.1	5.0	0.21/0.6 0.49 0.41 0.40 0.30 0.41	(4.8) 96%	(4.3) 86%	RUN-6				45.1ft: gray (5Y6/1) to 47.9ft
-51.6	50.1	5.0	0.52 0.46 0.28 0.27 0.18	(4.9) 98%	(3.0) 60%	RUN-7	(37.5) 74%	(21.1) 42%	-49.4	LIMESTONE, boundstone, white (10YR8/1), to white (5YR8/1), hard, indurated, strong HCl reaction, trace shells, few vugs (Lower Fort Thompson Formation) 50.1ft: white (5YR8/1)
-56.6	55.1	5.0	0.26 0.17 0.24 0.23 0.30	(4.6) 92%	(4.0) 80%	RUN-8				
-61.6	60.1	5.0	0.37 0.28 0.26 0.32 0.34	(2.1) 42%	(0.6) 12%	RUN-9				
-66.6	65.1	5.0	0.33 0.40 0.28 0.36 0.27	(4.6) 92%	(2.2) 44%	RUN-10 611-CS-05				
-71.6	70.1	5.0	0.16 0.27 0.30 0.19 0.41	(2.6) 52%	(1.4) 28%	RUN-11				70.1ft: trace fine sand
-76.6	75.1	5.0	0.18 0.28 0.22 0.28 0.50	(1.2) 24%	(0.0) 0%	RUN-12				
-81.6	80.1	5.0	0.42 0.19 0.33 0.18 0.21	(2.0) 40%	(0.5) 10%	RUN-13				
-86.6	85.1	5.0	0.28 0.30 0.28 0.48 0.37	(4.4) 88%	(2.0) 40%	RUN-14				
-91.6	90.1	5.0	0.14 0.23 0.23 0.18 0.21	(4.9) 98%	(3.8) 76%	RUN-15 611-CS-06				
-96.6	95.1	5.0	0.13 0.12 0.15 0.16 0.15	(3.6) 72%	(1.4) 28%	RUN-16				
-101.6	100.1			(1.8) 30%	(NA)				-100.2	Silty SAND (SM), white (5Y8/1), wet, some shell fragments, strong HCl reaction, grades to limestone

TURKEY POINT COL CORE, TURKEY POINT GPJ, TURKEY POINT COL, GDT - 5/30/08



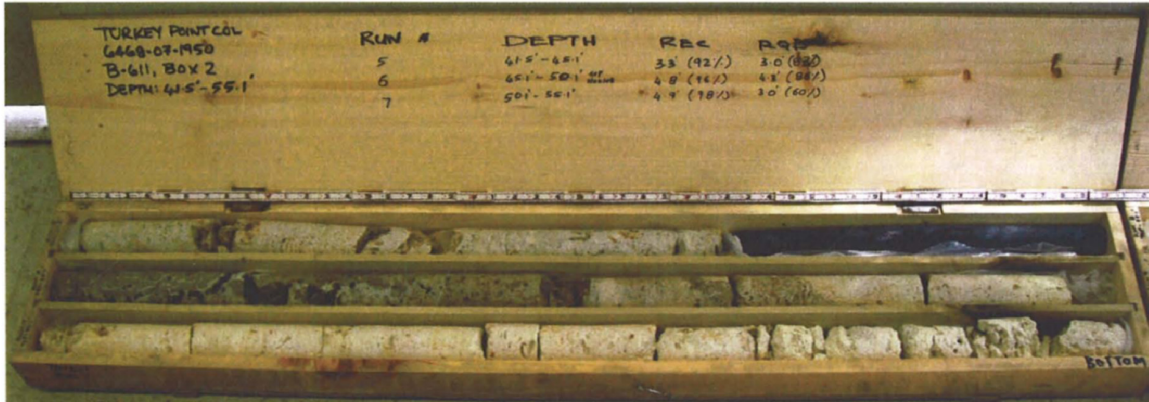
BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: H. Lyatuu/G. Pillappa
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 (CLT)	DRILLER: Warren/Banks/Sloan/Rosser	GROUND WATER (ft) 0 HR. NA 24 HR. NA
BORING NO.: B-611	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	
GROUND ELEV.: -1.5 ft (NAVD88)	NORTHING: 397,087 US ft (NAD83/90)	EASTING: 876,735 US ft (NAD83/90)	
TOTAL DEPTH: 151.5 ft	CASING DEPTH: 4" to 25.0', 3" to 120.1'		HAMMER (ID): 140 lb. Auto (MEC-04)
DATE STARTED: 2/26/08	COMPLETED: 3/24/08	CORE SIZE: HQ3	CORE BARREL TYPE: Triple Tube Wireline (Split inner liners)

ELEV (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	RUN		SAMP. NO.	STRATA		LOG	DESCRIPTION AND REMARKS
				REC (ft) %	RQD (ft) %		REC (ft) %	RQD (ft) %		
										Continued from previous page
-106.6	105.1	5.0	0:40 0:32 0:39 0:37 0:40	(2.2) 44%	(0.0) 0%	RUN-17				Silty SAND (SM), white (5Y8/1), wet, some shell fragments, strong HCl reaction, grades to limestone (continued)
-111.6	110.1	5.0	0:24 0:25 0:26 0:21 0:27	(4.8) 96%	(4.3) 86%	RUN-18 611-CS-07	(7.6) 92%	(4.8) 58%		LIMESTONE, boundstone, white (5Y8/1), hard, indurated, sandy, fossiliferous, strong HCl reaction, few vugs, little shell molds and casts
-116.6	115.1	5.0	0:18 0:20 0:23 0:16 0:17	(2.4) 48%	(0.5) 10%	RUN-19	(0.0) 0%	(NA)		Silty SAND with gravel (SM), light brownish gray (10YR6/2), medium dense, wet, fine to coarse grained sand, fine to coarse gravel, weak HCl reaction (Tamiami Formation)
-121.6	120.1	5.0	0:12 0:14 0:10 0:14 0:17	(0.0) 0%	(0.0) 0%	RUN-20				Coring Terminated at Elevation -121.6

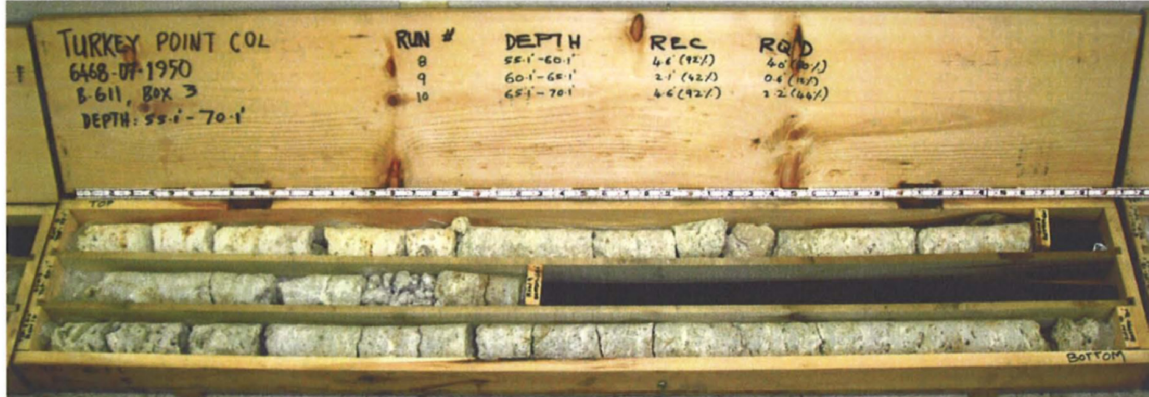
TURKEY POINT COL CORE TURKEY POINT COL GDT 5:30:08



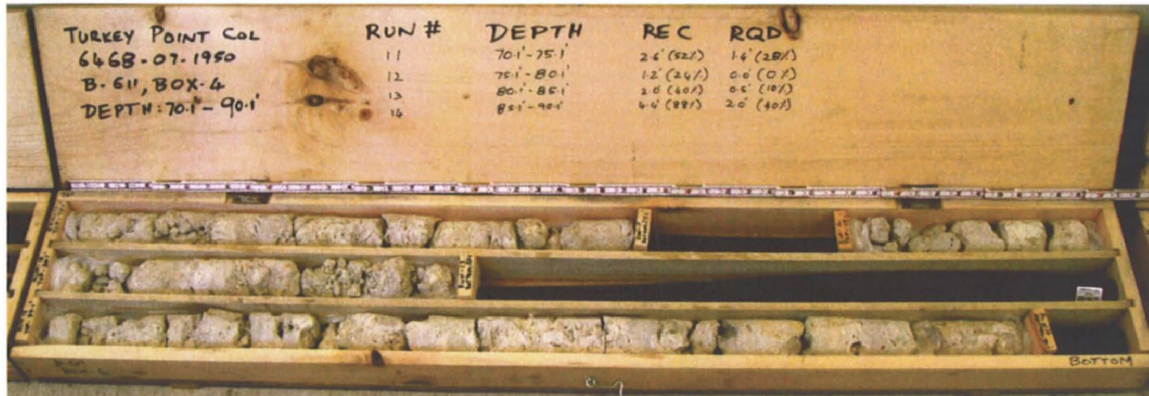
B-611 - Box 1



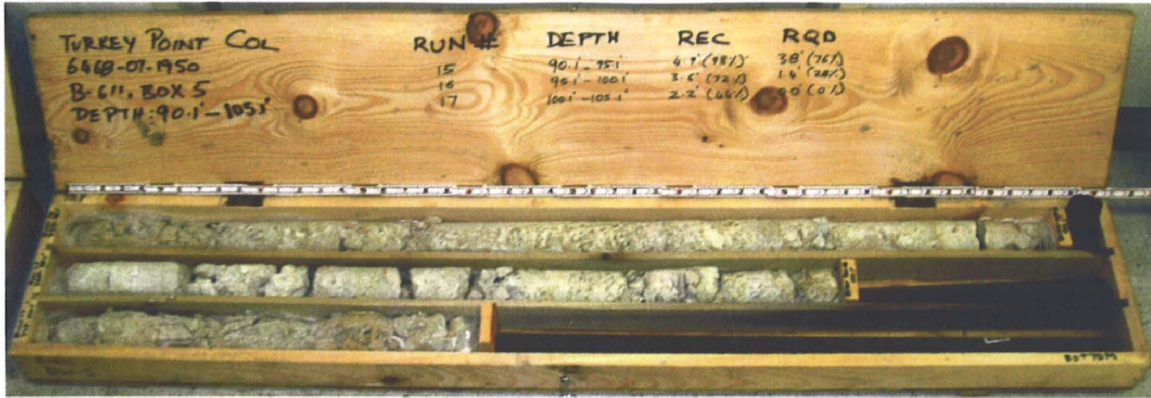
B-611 - Box 2



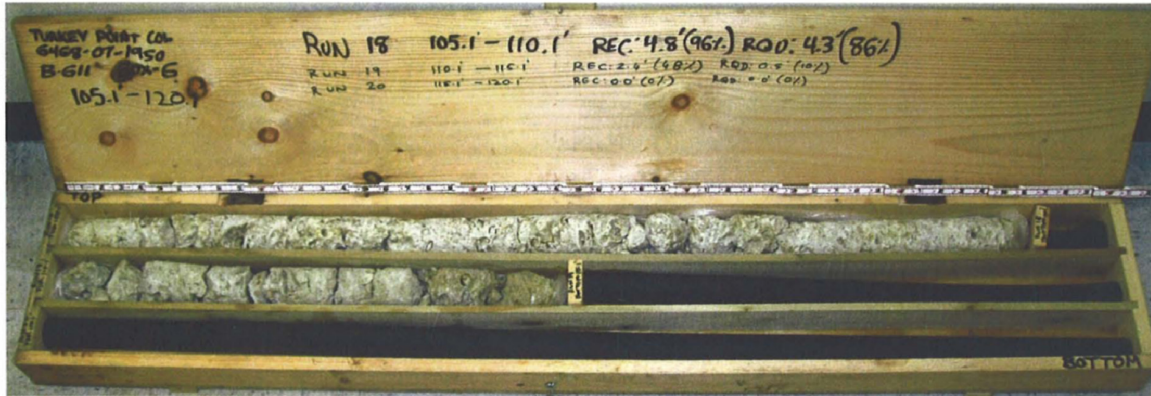
B-611 - Box 3



B-611 - Box 4



B-611 - Box 5



B-611 - Box 6



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-612		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR. NA									
GROUND ELEV.: -1.5 ft (NAVD88)		NORTHING: 397,086 US ft (NAD83/90)		EASTING: 876,869 US ft (NAD83/90)		24 HR. NA									
TOTAL DEPTH: 125.1 ft		BORING DIAMETER: 4" to 16.0', 3" to 125.1'		CASING DEPTH: 4" to 16.0', 3" to 118.6'		HAMMER (ID):140 lb. Auto (MEC-03)									
DATE STARTED: 3/25/08		COMPLETED: 3/26/08		CORE SIZE: HQ3		BITS USED: 4" & 3" Roller Cones									
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION		
		0.5ft	0.5ft	0.5ft	0	20	40	60	80					100	
-1.5					Ground Surface									0.0	
-1.5	0.0	WOR	WOR	WOR	0						612-1			-1.5	MUCK, grayish brown (2.5Y5/2), very soft, wet, no HCl reaction
-4.0	2.5	4	5	8							612-2A&B			-4.5	3.0
-6.5	5.0	7	11	10							612-3				LIMESTONE, boundstone, pale yellow (2.5Y8/3), very soft, wet, sandy, strong HCl reaction, oolitic (Miami Formation) 5.0ft: soft
-9.0	7.5	5	6	7							612-4				7.5ft: white (2.5Y8/1), to light gray (2.5Y7/1), very soft
-11.5	10.0	4	4	6							612-5				10.0ft: white (2.5Y8/1)
-14.0	12.5	4	8	8							612-6				12.5ft: white (2.5Y8/1), to gray (2.5Y6/1), fossiliferous
-16.5	15.0	12	15	50/0.4							612-7				15.0ft: white (2.5Y8/1), hard
-17.9	16.4										RUN-1				16.4ft: Switch sampling method to coring
-19.6	18.1										RUN-2				16.4ft: white (10YR8/1), mottled light brownish gray (10YR6/1), hard, indurated, strong HCl reaction, oolitic, vertical solution cavities
-24.6	23.1										RUN-3			-25.5	24.0
-29.6	28.1										RUN-4				LIMESTONE, boundstone, white (10YR8/1), to light gray (10YR7/1), hard, indurated, fossiliferous, trace sand, trace recrystallized calcite, strong HCl reaction, few vugs (Upper Fort Thompson Formation)
-34.6	33.1										RUN-5				27.0ft: loss of circulation
-39.6	38.1										RUN-6				28.1ft: white (10YR8/1), to gray (10YR5/1), to olive yellow (10YR6/8)
-44.6	43.1										RUN-7				33.1ft: white (10YR8/1), moderately hard to hard
-49.6	48.1										RUN-8			-49.0	47.5
-54.6	53.1										RUN-9				LIMESTONE, boundstone, white (10YR8/1), to light gray (10YR7/1), hard, indurated, fossiliferous, strong HCl reaction (Lower Fort Thompson Formation) 52.1 to 53.1ft: soft
-59.6	58.1										RUN-10				53.1ft: white (10YR8/1), soft to hard, moderately indurated to indurated, sandy
-64.6	63.1										RUN-11				58.1ft: white (10YR8/1), to light gray (10YR7/1), hard, indurated
-69.6	68.1										RUN-12				
-74.6	73.1										RUN-13				

TURKEY POINT COL BORE TURKEY POINT GPI TURKEY POINT COL GDI 8/14/08



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-612		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR. NA	
GROUND ELEV.: -1.5 ft (NAVD88)		NORTHING: 397,086 US ft (NAD83/90)		EASTING: 876,869 US ft (NAD83/90)		24 HR. NA	
TOTAL DEPTH: 125.1 ft		BORING DIAMETER: 4" to 16.0', 3" to 125.1'		CASING DEPTH: 4" to 16.0', 3" to 118.6'		HAMMER (ID): 140 lb. Auto (MEC-03)	
DATE STARTED: 3/25/08		COMPLETED: 3/26/08		CORE SIZE: HQ3		BITS USED: 4" & 3" Roller Cones	

ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80				100
-76.3													Continued from previous page
-79.6	78.1												LIMESTONE, boundstone, white (10YR8/1), to light gray (10YR7/1), hard, indurated, fossiliferous, strong HCl reaction (Lower Fort Thompson Formation) (continued)
-83.6	82.1												82.1ft: moderately hard, some vugs 83.1ft: hard, few vugs
-84.6	83.1												
-89.6	88.1												88.1ft: moderately hard
-94.6	93.1												93.1ft: hard, interbedded sand lenses
-99.6	98.1												98.1ft: few shell molds and casts
-104.6	103.1												
-109.6	108.1												108.1ft: white (10YR8/1), to light gray (10YR7/2), to greenish gray (10Y5/1), hard to moderately hard
-114.6	113.1												113.1ft: greenish gray (10Y5/1), hard
-120.1	118.6	3	3	2									-116.5 Silty SAND (SM), gray (2.5Y6/1), loose, wet, fine grained sand, strong HCl reaction (Tamiami Formation) 118.6ft: Switch sampling method to SPT
-125.1	123.6	6	25	12									-126.2 123.6ft: light gray (10YR7/1), hard, medium to coarse grained sand, some shell fragments SILT (ML), light olive gray (5Y6/2), very stiff, wet, strong HCl reaction Boring Terminated at Elevation -126.6 ft

TURKEY POINT COL BORE TURKEY POINT COL GDT 8/14/08



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-612		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR.	NA
GROUND ELEV.: -1.5 ft (NAVD88)		NORTHING: 397,086 US ft (NAD83/90)		EASTING: 876,869 US ft (NAD83/90)		24 HR.	NA
TOTAL DEPTH: 125.1 ft		CASING DEPTH: 4" to 16.0', 3" to 118.6'				HAMMER (ID): 140 lb. Auto (MEC-03)	
DATE STARTED: 3/25/08		COMPLETED: 3/26/08		CORE SIZE: HQ3		CORE BARREL TYPE: Triple Tube Wireline (Split inner liners)	

ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	RUN		SAMP. NO.	STRATA		LOG	DESCRIPTION AND REMARKS
				REC. (%)	RQD (%)		REC. (%)	RQD (%)		
										Begin Coring @ 16.4 ft
-17.9	16.4	1.7	1:42 1:06/0.7	(1.7) 100%	(1.0) 59%	RUN-1	(2.5) 33%	(1.0) 13%		LIMESTONE, boundstone, pale yellow (2.5Y8/3), very soft, wet, sandy, strong HCl reaction, oolitic (Miami Formation) <i>(continued)</i>
-19.6	18.1	5.0	0:48 0:27 0:35 0:40 0:44	(0.5) 10%	(0.0) 0%	RUN-2				16.4ft: white (10YR8/1), mottled light brownish gray (10YR6/1), hard, indurated, strong HCl reaction, oolitic, vertical solution cavities 18.1ft: fossiliferous, few vugs
-24.6	23.1	5.0	0:46 1:53 0:45 0:28 0:31	(4.4) 88%	(2.8) 56%	RUN-3	(20.0) 85%	(14.8) 63%		25.5ft: Limestone, boundstone, white (10YR8/1), to light gray (10YR7/1), hard, indurated, fossiliferous, trace sand, trace recrystallized calcite, strong HCl reaction, few vugs (Upper Fort Thompson Formation)
-29.6	28.1	5.0	0:09 0:03 0:22 0:05 0:51	(1.5) 30%	(0.0) 0%	RUN-4				27.0ft: loss of circulation 28.1ft: white (10YR8/1), to gray (10YR5/1), to olive yellow (10YR6/8)
-34.6	33.1	5.0	1:46 0:55 0:58 0:58 1:20	(5.0) 100%	(3.5) 70%	RUN-5				33.1ft: white (10YR8/1), moderately hard to hard
-39.6	38.1	5.0	1:47 1:22 1:27 1:04 1:10	(5.0) 100%	(4.5) 90%	RUN-6				
-44.6	43.1	5.0	1:23 1:24 0:57 1:31 1:21	(5.0) 100%	(4.6) 92%	RUN-7				43.1ft: white (10YR8/1), to gray (10YR5/1) at 45.5ft to 47.5ft, hard, little vugs
-49.6	48.1	5.0	1:04 1:38 1:15 0:49 0:35	(5.0) 100%	(4.9) 98%	RUN-8	(55.4) 82%	(35.8) 53%		49.0ft: LIMESTONE, boundstone, white (10YR8/1), to light gray (10YR7/1), hard, indurated, fossiliferous, strong HCl reaction (Lower Fort Thompson Formation) 52.1 to 53.1ft: soft
-54.6	53.1	5.0	0:24 0:37 0:33 0:54 0:46	(5.0) 100%	(4.0) 80%	RUN-9				53.1ft: white (10YR8/1), soft to hard, moderately indurated to indurated, sandy
-59.6	58.1	5.0	1:08 1:48 1:52 0:45 1:46	(4.7) 94%	(4.1) 82%	RUN-10				58.1ft: white (10YR8/1), to light gray (10YR7/1), hard, indurated
-64.6	63.1	5.0	1:02 0:37 0:52 0:52 0:26	(3.5) 70%	(1.9) 38%	RUN-11				
-69.6	68.1	5.0	0:33 0:27 1:01 1:38 0:20	(3.2) 64%	(0.6) 12%	RUN-12				
-74.6	73.1	5.0	0:55 0:37 0:08 0:19 1:10	(2.4) 48%	(0.9) 18%	RUN-13				
-79.6	78.1	4.0	1:01 1:02 1:06 1:15	(4.0) 100%	(3.3) 83%	RUN-14				
-83.6	82.1	1.0	0:29	(0.8) 80%	(0.4) 40%	RUN-15				82.1ft: moderately hard, some vugs
-84.6	83.1	5.0	0:35 0:09 0:48 0:32 0:49	(4.1) 82%	(1.0) 20%	RUN-16				83.1ft: hard, few vugs
-89.6	88.1	5.0	1:04 0:46 0:30	(3.2) 64%	(0.4) 8%	RUN-17				88.1ft: moderately hard

TURKEY POINT COL CORE TURKEY POINT G.P.I. TURKEY POINT COL GDT 3-14-08



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	
BORING NO.: B-612		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core	
GROUND ELEV.: -1.5 ft (NAVD88)		NORTHING: 397,086 US ft (NAD83/90)		EASTING: 876,869 US ft (NAD83/90)	
TOTAL DEPTH: 125.1 ft		CASING DEPTH: 4" to 16.0', 3" to 118.6'			HAMMER (ID): 140 lb. Auto (MEC-03)
DATE STARTED: 3/25/08		COMPLETED: 3/26/08	CORE SIZE: HQ3	CORE BARREL TYPE: Triple Tube Wireline (Split inner liners)	

ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	RUN		SAMP. NO.	STRATA		LOG	DESCRIPTION AND REMARKS
				REC. (ft) %	RQD (ft) %		REC. (ft) %	RQD (ft) %		
			0.30 0.26							Continued from previous page
-94.6	93.1	5.0	0.26 1.18 0.42 0.44 0.40	(2.6) 52%	(0.9) 18%	RUN-18				LIMESTONE, boundstone, white (10YR8/1), to light gray (10YR7/1), hard, indurated, fossiliferous, strong HCl reaction (Lower Fort Thompson Formation) (continued) 93.1ft: hard, interbedded sand lenses
-99.6	98.1	5.0	0.36 0.50 0.32 0.27 1.03	(5.0) 100%	(4.2) 84%	RUN-19				98.1ft: few shell molds and casts
-104.6	103.1	5.0	0.43 0.53 0.48 1.03 0.45	(5.0) 100%	(5.0) 100%	RUN-20				
-109.6	108.1	5.0	0.31 0.19 0.35 0.24 0.39	(5.0) 100%	(3.6) 72%	RUN-21				108.1ft: white (10YR8/1), to light gray (10YR7/2), to greenish gray (10Y5/1), hard to moderately hard 113.1ft: greenish gray (10Y5/1), hard
-114.6	113.1	5.0	0.37 0.22 0.24 0.41 0.18	(1.3) 26%	(0.0) 0%	RUN-22	(0.0) 0%	(NA)		Silty SAND (SM), gray (2.5Y6/1), loose, wet, fine grained sand, strong HCl reaction (Tamiami Formation)
-119.6	118.1									Coring Terminated at Elevation -119.6

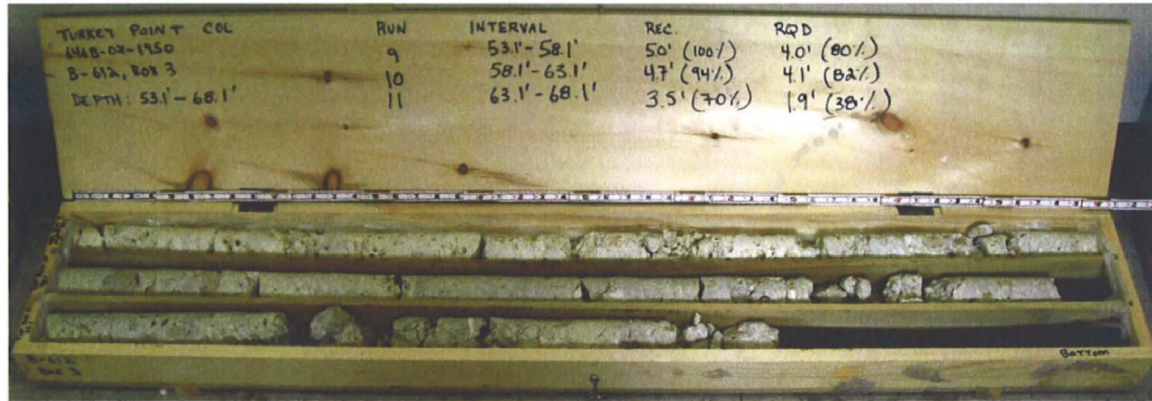
TURKEY POINT COL CORE TURKEY POINT GP TURKEY POINT COL GDT 8/14 08



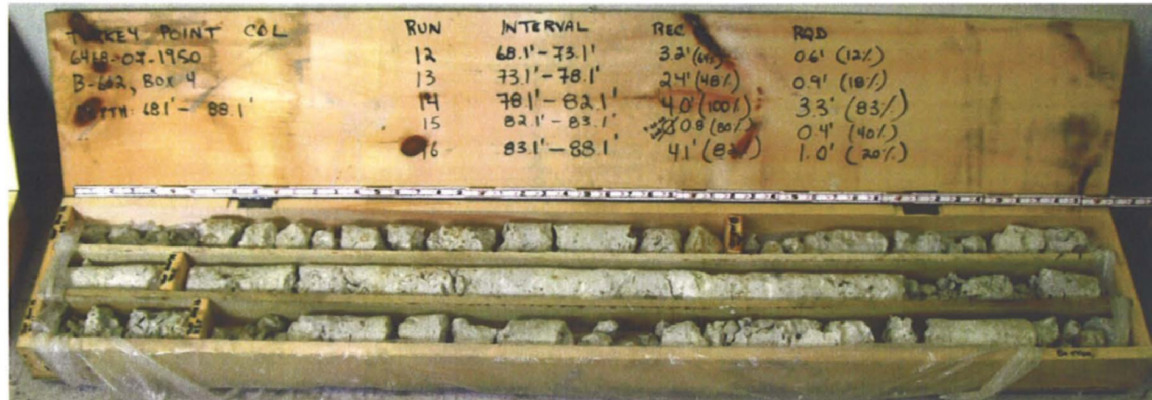
B-612 - Box 1



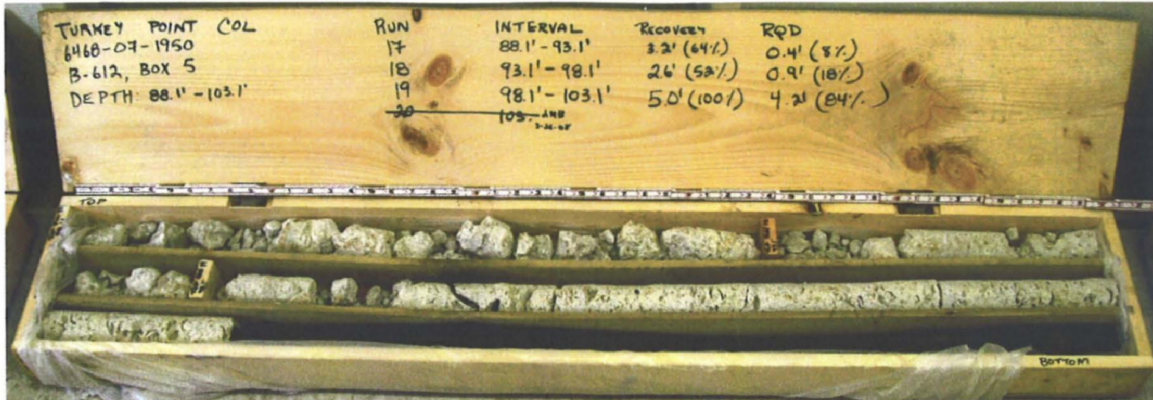
B-612 - Box 2



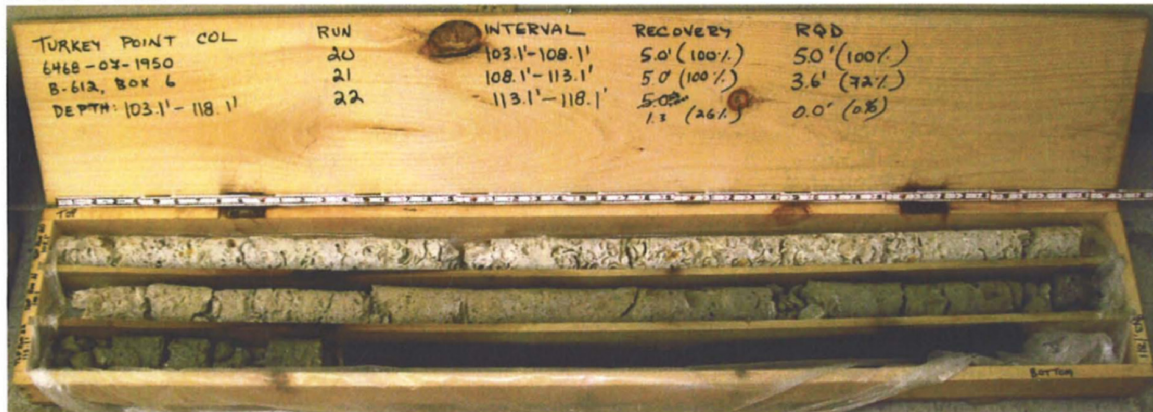
B-612 - Box 3



B-612 - Box 4



B-612 - Box 5



B-612 - Box 6



GEOTECHNICAL BORING LOG

Prepared By JM Date 8-19-08

Checked By SO Date 8/19/08

SHEET 1 OF 3

BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade		GEOLOGIST: J. Liles									
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 (Miller)		DRILLER: R. White/ J. Dugger/ C. White		GROUND WATER (ft)									
BORING NO.: B-613		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR. NA									
GROUND ELEV.: -1.4 ft (NAVD88)		NORTHING: 397,162 US ft (NAD83/90)		EASTING: 876,809 US ft (NAD83/90)		24 HR. NA									
TOTAL DEPTH: 150.2 ft		BORING DIAMETER: 3" to 150.2'		CASING DEPTH: 3" to 115.0'		HAMMER (ID):140 lb. Auto (M06)									
DATE STARTED: 3/25/08		COMPLETED: 3/26/08		CORE SIZE: HQ3		BITS USED: 2 7/8" Roller Cone									
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION		
		0.5ft	0.5ft	0.5ft	0	20	40	60	80					100	
-1.4					Ground Surface									0.0	
-1.4	0.0	WOH	WOH	WOH											
-4.2	2.8														
-6.5	5.1	2	3	4											
-8.9	7.5	8	10	7											
-11.1	9.7	15	42	11											
-13.1	11.7	3	5	10											
-16.4	15.0	2	11	21											
-21.4	20.0	5	10	13											
-27.7	26.3	3	3	8											
-32.9	31.5														
-33.3	31.9	50/0.4													
-36.3	34.9														
-41.3	39.9														
-46.3	44.9														
-51.3	49.9														
-56.3	54.9														
-61.3	59.9														
-66.3	64.9														
-71.3	69.9														
-76.3	74.9														

TURKEY POINT COL BORE TURKEY POINT GP TURKEY POINT COL GDI 8'18 08



BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade		GEOLOGIST: J. Liles							
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 (Miller)		DRILLER: R. White/ J. Dugger/ C. White		GROUND WATER (ft)							
BORING NO.: B-613		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR. NA							
GROUND ELEV.: -1.4 ft (NAVD88)		NORTHING: 397,162 US ft (NAD83/90)		EASTING: 876,809 US ft (NAD83/90)		24 HR. NA							
TOTAL DEPTH: 150.2 ft		BORING DIAMETER: 3" to 150.2'		CASING DEPTH: 3" to 115.0'		HAMMER (ID): 140 lb. Auto (M06)							
DATE STARTED: 3/25/08		COMPLETED: 3/26/08		CORE SIZE: HQ3		BITS USED: 2 7/8" Roller Cone							
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80				100
-76.2					Continued from previous page								
-81.3	79.9												LIMESTONE, boundstone, white (2.5Y8/1), moderately hard to hard, moderately indurated to indurated, trace vugs, strong HCl reaction, fossiliferous, few gastropod shell molds and casts (Lower Fort Thompson Formation)
-86.3	84.9												(continued) 74.9ft: medium hard to moderately hard, friable to moderately indurated
-91.3	89.9												84.9ft: trace fine to medium grained sand, few vugs
-96.3	94.9												89.9ft: moderately hard, moderately indurated
-101.3	99.9												99.9ft: some vugs, little shell molds and casts
-106.3	104.9												
-111.3	109.9												
-116.3	114.9												
-118.3	116.9	9	10	1									POORLY GRADED SAND (SP), light gray (2.5Y7/1), wet, fine grained sand, strong HCl reaction, trace limestone fragments and shells (Tamiami Formation) 116.9ft: Switch sampling method to SPT 116.9ft: medium dense, shell fragments
-127.5	126.1	4	7	11									126.1ft: greenish gray (10Y6/1)
-137.6	136.2	3	2	2									136.2ft: no recovery, very loose
-140.1	138.7	2	3	5									138.7ft: loose
-150.1	148.7	4	6	7									

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



BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade		GEOLOGIST: J. Liles						
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 (Miller)		DRILLER: R. White/ J. Dugger/ C. White		GROUND WATER (ft)						
BORING NO.: B-613		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR. NA						
GROUND ELEV.: -1.4 ft (NAVD88)		NORTHING: 397,162 US ft (NAD83/90)		EASTING: 876,809 US ft (NAD83/90)		24 HR. NA						
TOTAL DEPTH: 150.2 ft		BORING DIAMETER: 3" to 150.2'		CASING DEPTH: 3" to 115.0'		HAMMER (ID): 140 lb. Auto (M06)						
DATE STARTED: 3/25/08		COMPLETED: 3/26/08		CORE SIZE: HQ3		BITS USED: 2 7/8" Roller Cone						
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG MOI	SOIL AND ROCK DESCRIPTION
		0.5ft	0.5ft	0.5ft	0	20	40	60	80			
-151.0					Continued from previous page							
												148.7ft: medium dense Boring Terminated at Elevation -151.6 ft

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



BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade	GEOLOGIST: J. Liles
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 (Miller)		DRILLER: R. White/ J. Dugger/ C. White	
BORING NO.: B-613		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core	
GROUND ELEV.: -1.4 ft (NAVD88)		NORTHING: 397,162 US ft (NAD83/90)		EASTING: 876,809 US ft (NAD83/90)	
TOTAL DEPTH: 150.2 ft		CASING DEPTH: 3" to 115.0'			HAMMER (ID): 140 lb. Auto (M06)
DATE STARTED: 3/25/08		COMPLETED: 3/26/08	CORE SIZE: HQ3	CORE BARREL TYPE: Triple Tube Wireline (Split inner liners)	

ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	RUN		SAMP. NO.	STRATA		LOG	DESCRIPTION AND REMARKS
				REC. (ft) %	RQD (ft) %		REC. (ft) %	RQD (ft) %		
										Begin Coring @ 31.9 ft
-33.3	31.9	3.0	1:01 1:02 1:10	(3.0) 100%	(1.0) 33%	RUN-1	(14.1) 93%	(8.4) 55%		LIMESTONE, boundstone, white (2.5Y8/1), very soft, wet, trace clayey sand, strong HCl reaction (Upper Fort Thompson Formation) (continued)
-36.3	34.9	5.0	1:05 0:54 1:08 1:09 0:18	(4.1) 82%	(2.3) 46%	RUN-2				31.9ft: white (2.5Y8/1), moderately hard, moderately indurated, coralline, few vugs 34.9ft: fossiliferous, little vugs
-41.3	39.9	5.0	0:44 0:53 0:57 2:02 1:52	(4.8) 96%	(3.6) 72%	RUN-3				39.9ft: few vugs
-46.3	44.9	5.0	1:08 1:49 2:03 2:10 1:00	(4.9) 98%	(3.5) 70%	RUN-4				44.9ft: light gray (2.5Y7/2), moderately hard to hard, moderately indurated to indurated
-51.3	49.9	5.0	0:58 0:38 0:50 0:47 0:42	(5.0) 100%	(3.6) 72%	RUN-5	(33.8) 51%	(12.9) 20%		LIMESTONE, boundstone, white (2.5Y8/1), moderately hard to hard, moderately indurated to indurated, trace vugs, strong HCl reaction, fossiliferous, few gastropod shell molds and casts (Lower Fort Thompson Formation)
-56.3	54.9	5.0	0:25 0:10 0:37 0:38 0:39	(3.1) 62%	(1.6) 32%	RUN-6				
-61.3	59.9	5.0	0:48 1:06 0:26 0:19 0:38	(1.8) 36%	(0.7) 14%	RUN-7				59.9ft: medium hard to moderately hard, friable to moderately indurated, sandy
-66.3	64.9	5.0	0:11 0:06 0:05 0:06 0:11	(0.0) 0%	(0.0) 0%	RUN-8				64.9ft: no recovery, very fast/soft drilling
-71.3	69.9	5.0	0:09 0:08 0:17 0:14 0:14	(1.1) 22%	(0.0) 0%	RUN-9				69.9ft: moderately hard, moderately indurated, very fast/soft drilling
-76.3	74.9	5.0	0:06 1:28 0:37 3:01 2:26	(3.2) 64%	(0.0) 0%	RUN-10				74.9ft: medium hard to moderately hard, friable to moderately indurated
-81.3	79.9	5.0	1:07 1:10 1:21 1:11 0:30	(2.9) 58%	(1.0) 20%	RUN-11				
-86.3	84.9	5.0	0:30 1:08 0:53 1:15 0:56	(2.9) 58%	(1.3) 26%	RUN-12				84.9ft: trace fine to medium grained sand, few vugs
-91.3	89.9	5.0	0:35 0:33 0:54 0:48 0:25	(0.2) 4%	(0.0) 0%	RUN-13				89.9ft: moderately hard, moderately indurated
-96.3	94.9	5.0	0:44 0:23 0:28 0:19 0:48	(1.4) 28%	(0.0) 0%	RUN-14				
-101.3	99.9	5.0	0:52 0:40 0:46 0:46 0:45	(4.6) 92%	(2.6) 52%	RUN-15				99.9ft: some vugs, little shell molds and casts
-106.3	104.9	5.0	0:46 0:37	(3.2) (0.0)	(0.0)	RUN-16				

TURKEY POINT COL CORE TURKEY POINT GPJ TURKEY POINT COL GDI S:18 08



BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade		GEOLOGIST: J. Liles	
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 (Miller)		DRILLER: R. White/ J. Dugger/ C. White		GROUND WATER (ft)	
BORING NO.: B-613		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR. NA	
GROUND ELEV.: -1.4 ft (NAVD88)		NORTHING: 397,162 US ft (NAD83/90)		EASTING: 876,809 US ft (NAD83/90)		24 HR. NA	
TOTAL DEPTH: 150.2 ft		CASING DEPTH: 3" to 115.0'				HAMMER (ID): 140 lb. Auto (M06)	
DATE STARTED: 3/25/08		COMPLETED: 3/26/08		CORE SIZE: HQ3		CORE BARREL TYPE: Triple Tube Wireline (Split inner liners)	

ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	RUN		SAMP. NO.	STRATA		LOG	DESCRIPTION AND REMARKS
				REC. (ft) %	RQD (ft) %		REC. (ft) %	RQD (ft) %		
										Continued from previous page
-111.3	109.9		0.36 0.35 0.25	64%	0%					LIMESTONE, boundstone, white (2.5Y8/1), moderately hard to hard, moderately indurated to indurated, trace vugs, strong HCl reaction, fossiliferous, few gastropod shell molds and casts (Lower Fort Thompson Formation) <i>(continued)</i>
		5.0	0.34 0.32 0.26 0.25 0.55	(1.6) 32%	(0.0) 0%	RUN-17				
-116.3	114.9						(0.4) 10%	(NA)		-114.4 POORLY GRADED SAND (SP), light gray (2.5Y7/1), wet, fine grained sand, strong HCl reaction, trace limestone fragments and shells (Tamiami Formation)
-118.3	116.9	2.0	0.08 0.36	(0.4) 20%	(0.4) 20%	RUN-18				-118.3 116.9ft: Switch sampling method to SPT Coring Terminated at Elevation -118.3

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