



BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade		GEOLOGIST: G. Pillappa	
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-55 LC (RAL)		DRILLER: R. Banks/ J. Rosser		GROUND WATER (ft)	
BORING NO.: B-712		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR. NA	
GROUND ELEV.: -1.1 ft (NAVD88)		NORTHING: 397,082 US ft (NAD83/90)		EASTING: 876,022 US ft (NAD83/90)		24 HR. NA	
TOTAL DEPTH: 128.3 ft		CASING DEPTH: 4" to 28.1', 3" to 122.0'				HAMMER (ID): 140 lb. Auto (MEC-02)	
DATE STARTED: 3/19/08		COMPLETED: 3/21/08		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) %	ROD (ft) %		REC. (ft) %	ROD (ft) %		
										Begin Coring @ 30.5 ft
-31.6	30.5	0.5	1.40/0.5	(0.3)	(0.0)	RUN-1	(12.8)	(5.9)		LIMESTONE, boundstone, white (10YR8/1), very soft, moist, strong HCl reaction, trace shell fragments (Upper Fort Thompson Formation)
-32.1	31.0	5.0	0.57	60%	0%	RUN-2	63%	29%		26.5ft: loss of circulation
-32.9	31.8		0.50	(2.0)	(0.0)					29.0ft: hard
			0.52	40%	0%					30.5ft: Switch sampling method to coring (continued)
			0.58							30.5ft: white, (5Y8/1), hard, indurated, strong HCl reaction, little vugs
			0.36							31.8ft: fossiliferous, coralline, some vugs
		5.0	0.30	(3.2)	(1.5)	RUN-3				36.8ft: dark greenish gray (4/10Y), few vugs
			0.21	64%	30%					
			0.20							
-42.9	41.8	5.0	0.17	(4.2)	(3.1)	RUN-4				41.8ft: pale yellow (2.5Y8/4)
			1.09	84%	62%					
			0.26							
			0.21							
-47.9	46.8	5.0	0.29	(4.1)	(2.3)	RUN-5				46.8ft: white (2.5Y8/1), to 48.4ft then gray (N5/) to 50.8ft
			1.08	82%	46%					
			0.47							
			0.37							
			0.56							
-52.9	51.8	5.0	0.45	(5.0)	(5.0)	RUN-6	(40.8)	(26.7)	-51.9	LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, few vugs, fossiliferous, strong HCl reaction (Lower Fort Thompson Formation)
			0.49	100%	100%		64%	42%		50.8
			0.48							
			0.46							
			0.37							
-57.9	56.8	5.0	0.27	(1.6)	(0.0)	RUN-7				56.8ft: white (5Y8/1)
			0.32	32%	0%					
			0.10							
			0.19							
			0.12							
-62.9	61.8	5.0	0.48	(5.0)	(3.9)	RUN-8				66.8ft: white (8/N)
			0.37	100%	78%					
			0.45							
			0.43							
			0.42							
-67.9	66.8	5.0	0.40	(3.8)	(3.3)	RUN-9				71.8ft: white (5Y8/1)
			0.30	76%	66%					
			0.43							
			0.41							
			0.39							
-72.9	71.8	5.0	0.19	(2.0)	(0.0)	RUN-10				
			0.30	40%	0%					
			0.28							
			0.23							
			0.31							
-77.9	76.8	5.0	0.14	(3.3)	(1.9)	RUN-11				
			0.30	66%	38%					
			0.21							
			0.36							
			0.35							
-82.9	81.8	5.0	0.41	(1.1)	(0.5)	RUN-12				
			0.25	22%	10%					
			0.22							
			0.17							
			0.23							
-87.9	86.8	5.0	0.16	(3.8)	(2.3)	RUN-13				
			0.40	76%	46%					
			1.28							
			0.48							
			0.26							
-92.9	91.8	5.0	0.39	(2.1)	(1.5)	RUN-14				
			0.27	42%	30%					
			0.27							
			0.17							
			0.15							
-97.9	96.8	5.0	0.11	(3.1)	(2.2)	RUN-15				96.8ft: medium hard to hard, trace fine grained sand, few to little shell molds and casts
			0.14	62%	44%					
			0.15							
			0.20							
			0.43							
-102.9	101.8	5.0	0.31	(3.5)	(2.0)	RUN-16				101.8ft: hard to medium hard
			0.15	70%	40%					
			0.25							
			0.28							

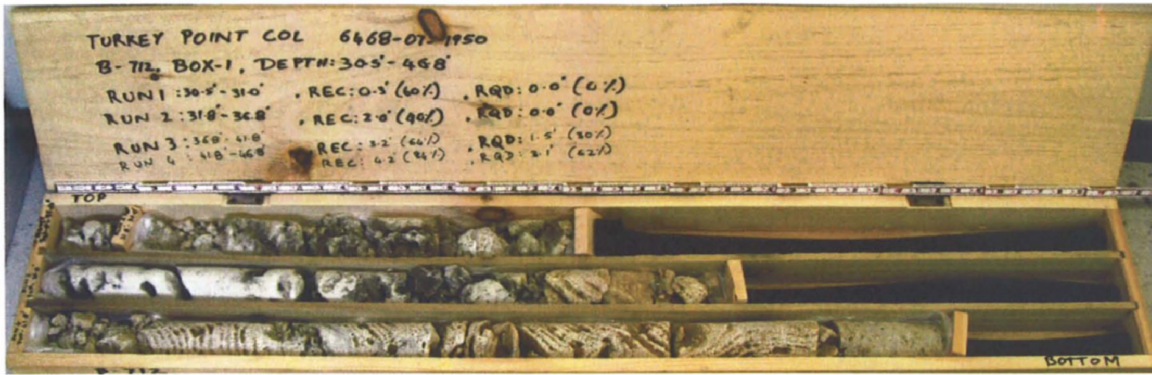
TURKEY POINT CORE TURKEY POINT G.P.I. TURKEY POINT COL.GDI 7:10:08



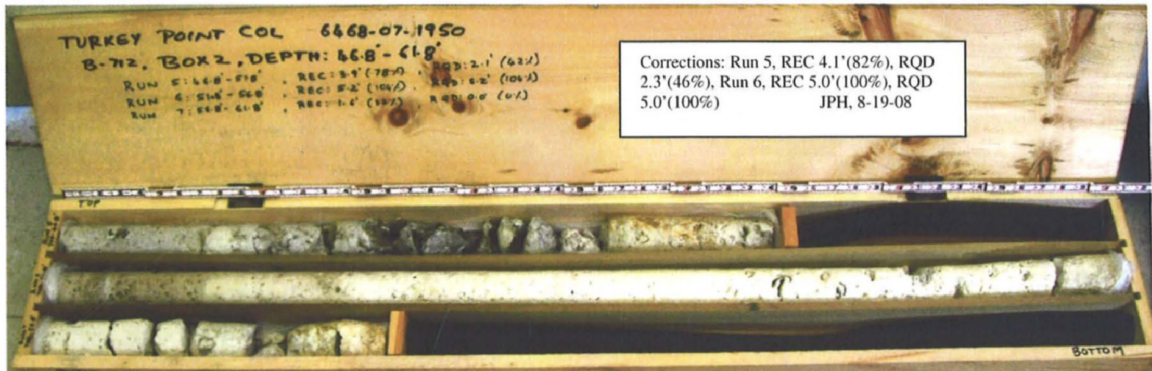
BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade	GEOLOGIST: G. Pillappa
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-55 LC (RAL)		DRILLER: R. Banks/ J. Rosser	
BORING NO.: B-712		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core	
GROUND ELEV.: -1.1 ft (NAVD88)		NORTHING: 397,082 US ft (NAD83/90)		EASTING: 876,022 US ft (NAD83/90)	
TOTAL DEPTH: 128.3 ft		CASING DEPTH: 4" to 28.1', 3" to 122.0'			HAMMER (ID): 140 lb. Auto (MEC-02)
DATE STARTED: 3/19/08		COMPLETED: 3/21/08		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
-107.9	106.8	5.0	0:26 0:24	(4.1) 82%	(3.1) 62%	RUN-17				LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, few vugs, fossiliferous, strong HCl reaction (Lower Fort Thompson Formation) (continued) 106.8ft: hard
-112.9	111.8	5.0	0:26 0:17 0:24 0:30 0:29	(1.4) 28%	(0.0) 0%	RUN-18				
-117.9	116.8	5.0	0:38 0:21 0:35 0:26 0:21	(0.8) 16%	(0.0) 0%	RUN-19	(0.8) 12%	(NA)		-116.1 Silty SAND (SM), and interbedded LIMESTONE, boundstone, white (5Y8/1), hard indurated, fossiliferous, trace fine sand, strong HCl reaction (Tamiami Formation) 115.0
-122.9	121.8		0:21 0:18 0:22 0:11 0:30							-122.9 Coring Terminated at Elevation -122.9 121.8

TURKEY POINT COL CORE TURKEY POINT GPI TURKEY POINT COL GDI 7/10/08



B-712 - Box 1



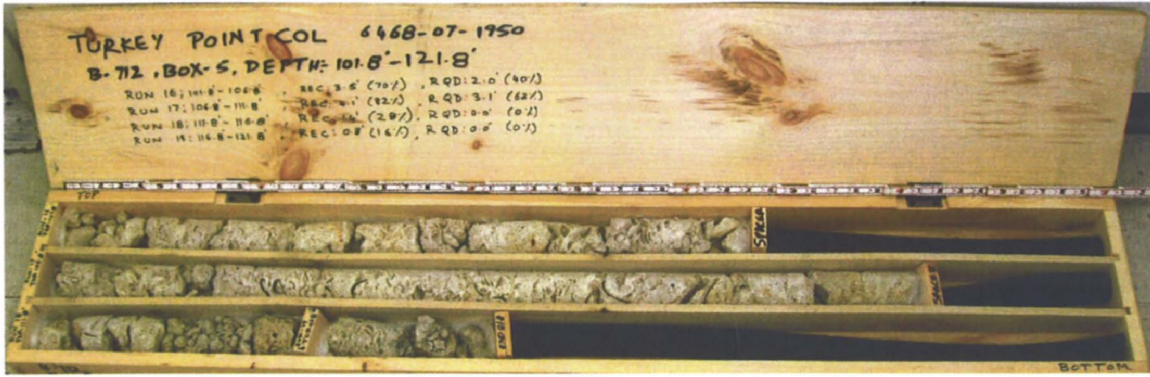
B-712 - Box 2



B-712 - Box 3



B-712 - Box 4



B-712 - Box 5



GEOTECHNICAL BORING LOG

Prepared By ADD Date 5-30-08

Checked By ADD Date 5-30-08

SHEET 1 OF 3

BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade		GEOLOGIST: O. Rodriguez/G. Pillappa							
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 (ATL)		DRILLER: L. Carter/ J. Landeros		GROUND WATER (ft)							
BORING NO.: B-713		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR.	NA						
GROUND ELEV.: -1.1 ft (NAVD88)		NORTHING: 397,179 US ft (NAD83/90)		EASTING: 875,959 US ft (NAD83/90)		24 HR.	NA						
TOTAL DEPTH: 152.5 ft		BORING DIAMETER: 4" to 31.0', 3" to 152.5'		CASING DEPTH: 4" to 31.0', 3" to 118.4'		HAMMER (ID): 140 lb. Auto (MEC-03)							
DATE STARTED: 4/15/08		COMPLETED: 4/19/08		CORE SIZE: HQ3		BITS USED: 2 15/16" 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
-1.1					Ground Surface							0.0	
-1.1	0.0	WOH	WOH	WOH	0						713-1		MUCK, dark grayish brown (10YR4/2), to pale brown (10YR6/3), very soft, wet, mostly organic
-4.1	3.0										713-2		2.5
-6.1	5.0	31	37	30							713-3		LIMESTONE, boundstone, pale yellow (2.5Y8/2), hard, wet, trace to few fine to coarse sand, strong HCl reaction, oolitic (Miami Formation)
-8.6	7.5	7	8	7							713-4		5.0ft: very soft
-11.1	10.0	9	20	11							713-5		7.5ft: white (10YR8/1), to light gray (10YR7/2), medium hard
-13.6	12.5	5	15	11							713-6		10.0ft: white (10YR8/1), soft
-16.1	15.0	11	7	15							713-7		12.5ft: white (10YR8/1), to light gray (10YR7/1)
		7	20	50/0.4							713-8		15.0ft: white (10YR8/1), hard
-20.6	19.5	4	5	5							713-9		19.5ft: very soft
-25.8	24.7	3	2	WOH							713-10		24.0
		10	44	50/0.5							RUN-1		LIMESTONE, boundstone, light gray (10YR7/2), very soft, moist, strong HCl reaction (Upper Fort Thompson Formation)
-30.7	29.6										RUN-2		24.0ft: loss of circulation
-32.2	31.1										RUN-3		29.6ft: white (10YR8/1), hard
-34.3	33.2										RUN-4		31.1ft: Switch sampling method to coring
											RUN-5		31.1ft: hard, indurated, coralline, trace vugs, fossiliferous
-39.3	38.2										RUN-6		38.2ft: white (10YR8/1), to pale yellow (5Y8/3), few vugs
-44.3	43.2										RUN-7		43.2ft: white (10YR8/1) and pale brown (10YR8/2), to 46.4ft then gray (10YR6/2)
-49.3	48.2										RUN-8		48.2ft: gray (10YR6/2) to 48.5ft
-54.3	53.2										RUN-9		LIMESTONE, boundstone, white (10YR8/1), hard, indurated, fossiliferous, few vugs, strong HCl reaction (Lower Fort Thompson Formation)
-59.3	58.2										RUN-10		53.2ft: hard to moderately hard, indurated to moderately indurated
-64.3	63.2												58.2ft: hard, indurated
-69.3	68.2												63.2ft: medium hard to hard, friable to indurated
-74.3	73.2												68.2ft: hard, indurated, no vugs, trace shell molds and casts

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



BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade		GEOLOGIST: O. Rodriguez/G. Pillappa						
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 (ATL)		DRILLER: L. Carter/ J. Landeros		GROUND WATER (ft)						
BORING NO.: B-713		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR.	NA					
GROUND ELEV.: -1.1 ft (NAVD88)		NORTHING: 397,179 US ft (NAD83/90)		EASTING: 875,959 US ft (NAD83/90)		24 HR.	NA					
TOTAL DEPTH: 152.5 ft		BORING DIAMETER: 4" to 31.0', 3" to 152.5'		CASING DEPTH: 4" to 31.0', 3" to 118.4'		HAMMER (ID): 140 lb. Auto (MEC-03)						
DATE STARTED: 4/15/08		COMPLETED: 4/19/08		CORE SIZE: HQ3		BITS USED: 2 15/16" 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			
-75.9					Continued from previous page							
-79.3	78.2										RUN-11	LIMESTONE, boundstone, white (10YR8/1), hard, indurated, fossiliferous, few vugs, strong HCl reaction (Lower Fort Thompson Formation) (continued)
-84.3	83.2										RUN-12	83.2ft: hard, indurated
-89.3	88.2										RUN-13	88.2ft: hard to moderately hard, indurated to moderately indurated, trace vugs
-94.3	93.2										RUN-14	93.2ft: hard, moderately indurated
-99.3	98.2										RUN-15	98.2ft: indurated
-104.3	103.2										RUN-16	103.2ft: little to some shell molds and casts
-109.3	108.2										RUN-17	108.2ft: hard to moderately hard, moderately indurated, little vugs
-114.3	113.2										RUN-18	113.2ft: moderately hard, moderately indurated to friable
-119.6	118.5	10	8	7							713-11	POORLY GRADED SAND (SP), pale yellow (5Y8/2), medium dense, wet, strong HCl reaction, trace cemented sand (Tamiami Formation)
-130.6	129.5	6	3	4							713-12	129.5ft: Silty SAND (SM), pale yellow (5Y8/3), loose, wet, strong HCl reaction, trace cemented sand fragments
-140.6	139.5	8	7	8							713-13	139.5ft: greenish gray (10Y6/1), medium dense
-150.6	149.5											

TURKEY POINT COL BORE TURKEY POINT GP TURKEY POINT COL GDT 5/30/08



BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade		GEOLOGIST: O. Rodriguez/G. Pillappa							
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 (ATL)		DRILLER: L. Carter/ J. Landeros		GROUND WATER (ft)							
BORING NO.: B-713		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR.	NA						
GROUND ELEV.: -1.1 ft (NAVD88)		NORTHING: 397,179 US ft (NAD83/90)		EASTING: 875,959 US ft (NAD83/90)		24 HR.	NA						
TOTAL DEPTH: 152.5 ft		BORING DIAMETER: 4" to 31.0', 3" to 152.5'		CASING DEPTH: 4" to 31.0', 3" to 118.4'		HAMMER (ID): 140 lb. Auto (MEC-03)							
DATE STARTED: 4/15/08		COMPLETED: 4/19/08		CORE SIZE: HQ3		BITS USED: 2 15/16" 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				
-150.7					Continued from previous page								
-152.1	151.0	12	20	20						713-14			149.5ft: light olive gray (5Y6/2), dense
		10	9	10						713-15			151.0ft: greenish gray (10Y6/1), medium dense
													Boring Terminated at Elevation -153.6 ft

TURKEY POINT COL BORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 3/30/08



BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade	GEOLOGIST: O. Rodriguez/G. Pillappa	
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 (ATL)		DRILLER: L. Carter/ J. Landeros		GROUND WATER (ft)
BORING NO.: B-713		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR. NA
GROUND ELEV.: -1.1 ft (NAVD88)		NORTHING: 397,179 US ft (NAD83/90)		EASTING: 875,959 US ft (NAD83/90)		24 HR. NA
TOTAL DEPTH: 152.5 ft		CASING DEPTH: 4" to 31.0', 3" to 118.4'			HAMMER (ID): 140 lb. Auto (MEC-03)	
DATE STARTED: 4/15/08		COMPLETED: 4/19/08		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 @ 31.1 ft
-32.2	31.1	2.1	0.54	(2.1)	(2.1)	RUN-1	(17.0)	(15.5)		LIMESTONE, boundstone, light gray (10YR7/2), very soft, moist, strong HCl reaction (Upper Fort Thompson Formation)
-34.3	33.2	5.0	0.45	100%	100%		98%	89%		
			0:11/0.1	(5.0)	(5.0)	RUN-2				24.0ft: loss of circulation (<i>continued</i>) 31.1ft: hard, indurated, coralline, trace vugs, fossiliferous
			0.46	100%	100%					
			0.59							
			1.13							
			1.03							
			0.54							
-39.3	38.2	5.0	0.56	(4.8)	(4.2)	RUN-3				38.2ft: white (10YR8/1), to pale yellow (5Y8/3), few vugs
			1.59	96%	84%					
			2.27							
			2.36							
			1.59							
-44.3	43.2	5.0	1.22	(4.8)	(4.2)	RUN-4				43.2ft: white (10YR8/1) and pale brown (10YR8/2), to 46.4ft then gray (10YR6/2)
			2.44	96%	84%					
			2.57							
			2.30							
			1.35							
-49.3	48.2	5.0	1.11	(4.7)	(4.0)	RUN-5	(48.0)	(24.0)		48.2ft: gray (10YR6/2) to 48.5ft
			2.08	94%	80%		73%	37%		LIMESTONE, boundstone, white (10YR8/1), hard, indurated, fossiliferous, few vugs, strong HCl reaction (Lower Fort Thompson Formation)
			2.31							
			1.50							
			2.02							
-54.3	53.2	5.0	1.06	(4.5)	(3.0)	RUN-6				53.2ft: hard to moderately hard, indurated to moderately indurated
			1.03	90%	60%					
			0.42							
			1.01							
			0.33							
-59.3	58.2	5.0	0.41	(4.7)	(2.3)	RUN-7				58.2ft: hard, indurated
			1.59	94%	46%					
			1.00							
			0.50							
			1.00							
-64.3	63.2	5.0	0.45	(4.3)	(2.0)	RUN-8				63.2ft: medium hard to hard, friable to indurated
			2.23	86%	40%					
			1.36							
			2.57							
			1.07							
-69.3	68.2	5.0	2.51	(2.1)	(0.7)	RUN-9				68.2ft: hard, indurated, no vugs, trace shell molds and casts
			1.08	42%	14%					
			1.28							
			1.30							
			3.35							
-74.3	73.2	5.0	0.30	(2.6)	(0.0)	RUN-10				73.2ft: hard, indurated, no vugs, trace shell molds and casts
			1.34	52%	0%					
			0.53							
			3.02							
			1.49							
-79.3	78.2	5.0	1.04	(3.6)	(1.0)	RUN-11				78.2ft: soft to hard, friable to indurated, trace fine sand, few shell molds and casts
			0.51	72%	20%					
			1.04							
			1.39							
			2.15							
-84.3	83.2	5.0	1.29	(4.0)	(1.7)	RUN-12				83.2ft: hard, indurated
			0.16	80%	34%					
			0.53							
			2.02							
			4.19							
-89.3	88.2	5.0	1.43	(3.4)	(2.5)	RUN-13				88.2ft: hard to moderately hard, indurated to moderately indurated, trace vugs
			0.57	68%	50%					
			0.59							
			0.24							
			0.24							
-94.3	93.2	5.0	0.56	(3.0)	(1.2)	RUN-14				93.2ft: hard, moderately indurated
			0.16	60%	24%					
			0.27							
			0.22							
			0.39							
-99.3	98.2	5.0	0.16	(3.6)	(1.8)	RUN-15				98.2ft: indurated
			0.29	72%	36%					
			1.10							
			1.27							
			1.12							
-104.3	103.2	5.0	1.55	(5.0)	(3.3)	RUN-16				103.2ft: little to some shell molds and casts
			1.16	100%	66%					

TURKEY POINT COL CORE: TURKEY POINT GPJ TURKEY POINT COL.GDT 5:30-08



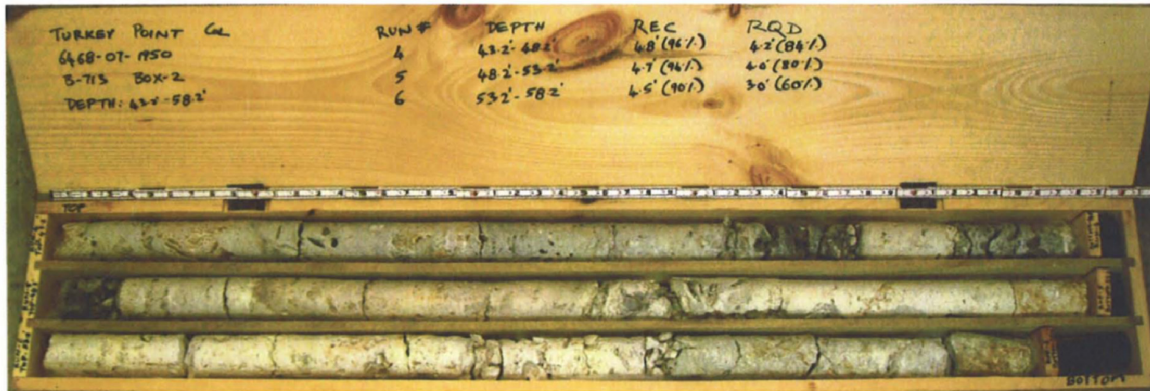
BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade	GEOLOGIST: O. Rodriguez/G. Pillappa	
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 (ATL)		DRILLER: L. Carter/ J. Landeros		GROUND WATER (ft) 0 HR. NA 24 HR. NA
BORING NO.: B-713		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		
GROUND ELEV.: -1.1 ft (NAVD88)		NORTHING: 397,179 US ft (NAD83/90)		EASTING: 875,959 US ft (NAD83/90)		
TOTAL DEPTH: 152.5 ft		CASING DEPTH: 4" to 31.0', 3" to 118.4'			HAMMER (ID): 140 lb. Auto (MEC-03)	
DATE STARTED: 4/15/08		COMPLETED: 4/19/08		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) %		
			0.54 1.15 1.08							Continued from previous page
-109.3	108.2	5.0	0.21 0.57 1.16 1.51 0.34	(2.1) 42%	(0.5) 10%	RUN-17				LIMESTONE, boundstone, white (10YR8/1), hard, indurated, fossiliferous, few vugs, strong HCl reaction (Lower Fort Thompson Formation) (continued) 108.2ft: hard to moderately hard, moderately indurated, little vugs
-114.3	113.2	5.0	0.07 0.06 0.11 1.16 0.56	(0.7) 14%	(0.0) 0%	RUN-18	(0.0) 0%	(NA)		113.2ft: moderately hard, moderately indurated to friable POORLY GRADED SAND (SP), pale yellow (5Y8/2), medium dense, wet, strong HCl reaction, trace cemented sand (Tamiami Formation)
-119.3	118.2									-119.3 Coring Terminated at Elevation -119.3

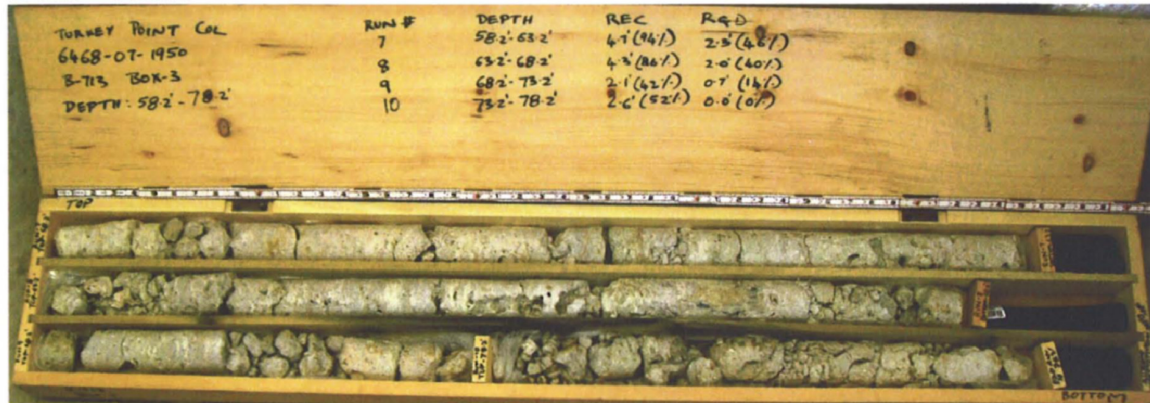
TURKEY POINT COL CORE, TURKEY POINT GPJ TURKEY POINT COL.GDT 5:30 08



B-713 - Box 1



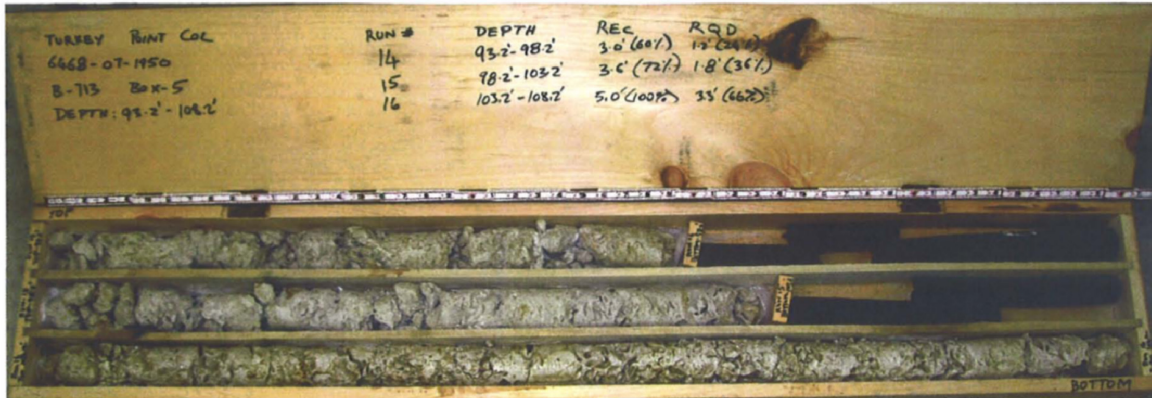
B-713 - Box 2



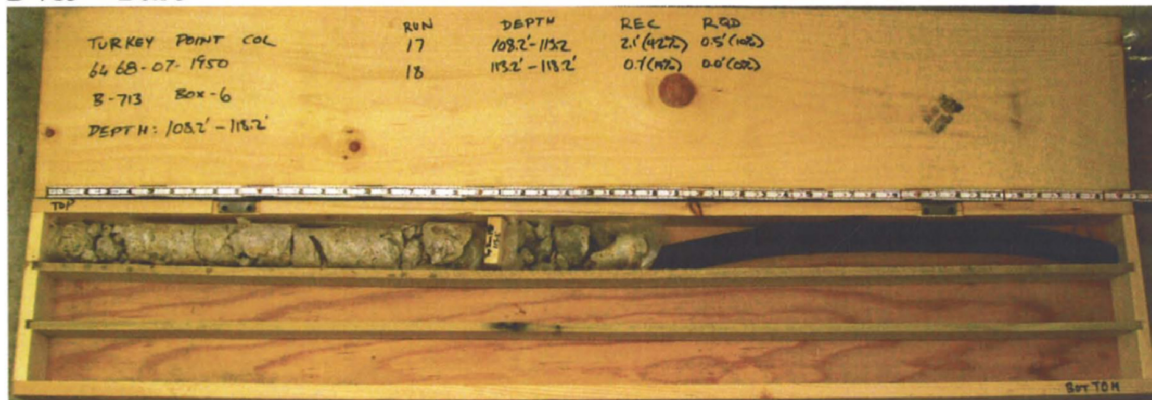
B-713 - Box 3



B-713 - Box 4



B-713 - Box 5



B-713 - Box 6