



GEOTECHNICAL BORING LOG

Prepared By *JPM* Date *5-3-08*

Checked By *JPM* Date *5-3-08*

SHEET 1 OF 2

BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade		GEOLOGIST: G. Pillappa							
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 (ATL)		DRILLER: L. Carter/ J. Landeros		GROUND WATER (ft)							
BORING NO.: B-721		DRILL METHOD: Mud Rotary/Core		SAMPLE METHODS: SPT/Core		0 HR. NA							
GROUND ELEV.: -1.5 ft (NAVD88)		NORTHING: 397,338 US ft (NAD83/90)		EASTING: 876,120 US ft (NAD83/90)		24 HR. NA							
TOTAL DEPTH: 127.4 ft		BORING DIAMETER: 4" to 36.0', 3" to 127.4'		CASING DEPTH: 4" to 36.0', 3" to 117.2'		HAMMER (ID): 140 lb. Auto (MEC-03)							
DATE STARTED: 4/21/08		COMPLETED: 4/23/08		CORE SIZE: HQ3		BITS USED: 2 7/8" Tricone							
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
-1.5	0.0	WOH	WOH	WOH	Ground Surface							-1.5	0.0
-4.0	2.5	WOH	9	16	SEE LEGEND FOR ROCK HARDNESS CRITERIA BASED ON SPT DATA					721-1		MUCK, very dense, gray (10YR3/1), very soft, wet, mostly organic, strong HCl reaction	
-6.5	5.0	WOH	11	10						721-2A&B		2.5ft: very dark brown (10YR3/3), to dark yellowish brown (10YR4/4)	3.5
-9.0	7.5		10	19						721-3		LIMESTONE, boundstone, light olive gray (5YR6/2), soft, wet, strong HCl reaction (Miami Formation)	
-11.5	10.0		7	4						721-4		5.0ft: white (10YR8/1), very soft, fossiliferous, oolitic	
-14.0	12.5		8	11						721-5		7.5ft: light gray (10YR7/1), soft	
-16.5	15.0		33	29						721-6		10.0ft: white (10YR8/1), very soft	
-21.2	19.7		4	4						721-7		12.5ft: soft	
-26.0	24.5		24	27						721-8		15.0ft: light gray (10YR7/1), hard	
-31.0	29.5		22	7						721-9		19.7ft: white (10YR8/1), very soft	
-36.0	34.5		5	5						721-10		24.0ft: LIMESTONE, boundstone, white (10YR8/1), medium hard, wet, trace shell fragments, strong HCl reaction (Upper Fort Thompson Formation)	24.0
-37.5	36.0									721-11		25.5ft: very soft, trace coralline	
-38.7	37.2									RUN-1		31.5ft: loss of circulation	
-43.7	42.2									RUN-2		34.5ft: light gray (10YR7/1)	
-48.7	47.2									RUN-3		36.0ft: Switch sampling method to coring	
-53.7	52.2									RUN-4		LIMESTONE, boundstone, white (10YR8/1), to light gray (10YR7/1), medium hard to hard, indurated, trace coralline, fossiliferous, trace clayey sand, strong HCl reaction, few vugs	
-58.7	57.2									RUN-5		37.2ft: hard	
-63.7	62.2									RUN-6		42.2ft: white (10YR8/1), to 45.7ft then gray (10YR6/1), very hard	
-68.7	67.2									RUN-7		47.2ft: light gray (10YR7/2) to 47.7ft, hard	47.7
-73.7	72.2									RUN-8		LIMESTONE, boundstone, white (10YR8/1), hard, indurated, trace vugs, fossiliferous, trace to few shell molds and casts, strong HCl reaction (Lower Fort Thompson Formation)	
										RUN-9		52.2ft: medium hard to hard, friable to indurated, trace clayey sand	
												57.2ft: moderately hard to hard, indurated	
												62.2ft: moderately hard to hard	
												67.2ft: hard	
												67.2 to 72.2ft: possible sand interbeds	

TURKEY POINT COL BORE TURKEY POINT GPJ TURKEY POINT COL GDT 5/3/08



BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade		GEOLOGIST: G. Pillappa						
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 (ATL)		DRILLER: L. Carter/ J. Landeros		GROUND WATER (ft)						
BORING NO.: B-721		DRILL METHOD: Mud Rotary/Core		SAMPLE METHODS: SPT/Core		0 HR.	NA					
GROUND ELEV.: -1.5 ft (NAVD88)		NORTHING: 397,338 US ft (NAD83/90)		EASTING: 876,120 US ft (NAD83/90)		24 HR.	NA					
TOTAL DEPTH: 127.4 ft		BORING DIAMETER: 4" to 36.0', 3" to 127.4'		CASING DEPTH: 4" to 36.0', 3" to 117.2'		HAMMER (ID): 140 lb. Auto (MEC-03)						
DATE STARTED: 4/21/08		COMPLETED: 4/23/08		CORE SIZE: HQ3		BITS USED: 2 7/8" Tricone						
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			
-76.3					Continued from previous page							
-78.7	77.2											LIMESTONE, boundstone, white (10YR8/1), hard, indurated, trace vugs, fossiliferous, trace to few shell molds and casts, strong HCl reaction (Lower Fort Thompson Formation) (continued) 77.2ft: moderately hard to hard, trace to few shell molds and casts 82.2ft: hard 94.2ft: possible 0.9ft-thick sand interbed 112.2ft: white (10YR8/1), to very pale brown (10YR8/4), to light gray (10YR7/1) Silty SAND (SM), pale yellow (5Y7/4), medium dense, wet, trace limestone fragments, weak HCl reaction, fine grained sand (Tamiami Formation) 117.2ft: Switch sampling method to SPT 125.9ft: olive (5Y5/3) Boring Terminated at Elevation -128.9 ft
-83.7	82.2											
-88.7	87.2											
-93.7	92.2											
-98.7	97.2											
-103.7	102.2											
-108.7	107.2											
-113.7	112.2											
-118.7	117.2	9	5	6								
-127.4	125.9	13	14	8								

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



BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade		GEOLOGIST: G. Pillappa	
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 (ATL)		DRILLER: L. Carter/ J. Landeros			GROUND WATER (ft) 0 HR. NA 24 HR. NA
BORING NO.: B-721		DRILL METHOD: Mud Rotary/Core		SAMPLE METHODS: SPT/Core			
GROUND ELEV.: -1.5 ft (NAVD88)		NORTHING: 397,338 US ft (NAD83/90)		EASTING: 876,120 US ft (NAD83/90)			
TOTAL DEPTH: 127.4 ft		CASING DEPTH: 4" to 36.0', 3" to 117.2'				HAMMER (ID): 140 lb. Auto (MEC-03)	
DATE STARTED: 4/21/08		COMPLETED: 4/23/08		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. (%)	ROD (%)		REC. (%)	ROD (%)		
										Begin Coring @ 36.0 ft
-37.5	36.0	1.2	1.02	(1.2)	(0.0)	RUN-1	(11.3)	(8.1)	LIMESTONE, boundstone, white (10YR8/1), medium hard, wet, trace shell fragments, strong HCl reaction (Upper Fort Thompson Formation) (continued)	
-38.7	37.2	5.0	0.10/0.2	100%	0%	RUN-2	97%	69%		
			1.45	(4.6)	(2.6)				LIMESTONE, boundstone, white (10YR8/1), to light gray (10YR7/1), medium hard to hard, indurated, trace coralline, fossiliferous, trace clayey sand, strong HCl reaction, few vugs	
			3.36	92%	52%					
			2.14						37.2ft: hard	
			2.36							
			2.37						42.2ft: white (10YR8/1), to 45.7ft then gray (10YR6/1), very hard	
			4.33	(5.0)	(5.0)	RUN-3				
			3.42	100%	100%				47.2ft: light gray (10YR7/2) to 47.7ft, hard	
			2.45							
			2.17						47.7ft: LIMESTONE, boundstone, white (10YR8/1), hard, indurated, trace vugs, fossiliferous, trace to few shell molds and casts, strong HCl reaction (Lower Fort Thompson Formation)	
			2.01							
			1.52	(5.0)	(5.0)	RUN-4	(48.7)	(27.8)	52.2ft: medium hard to hard, friable to indurated, trace clayey sand	
			1.49	100%	100%		73%	42%		
			2.20						57.2ft: moderately hard to hard, indurated	
			1.47							
			1.39						62.2ft: moderately hard to hard	
			1.15	(5.0)	(2.8)	RUN-5				
			1.31	100%	56%				67.2ft: hard	
			2.02							
			1.32						67.2 to 72.2ft: possible sand interbeds	
			1.34							
			0.40	(4.6)	(3.7)	RUN-6			77.2ft: moderately hard to hard, trace to few shell molds and casts	
			1.41	92%	74%					
			2.03						82.2ft: hard	
			2.43							
			1.29	(4.0)	(1.5)	RUN-7			87.2ft: moderately hard to hard, trace to few shell molds and casts	
			0.57	80%	30%					
			0.21						92.2ft: hard	
			1.59							
			2.00	(1.8)	(0.0)	RUN-8			94.2ft: possible 0.9ft-thick sand interbed	
			2.03	36%	0%					
			1.10						97.2ft: moderately hard to hard, trace to few shell molds and casts	
			1.05	(4.5)	(3.4)	RUN-9				
			3.37	90%	68%				102.2ft: moderately hard to hard, trace to few shell molds and casts	
			1.10							
			0.53	(3.3)	(0.8)	RUN-10			107.2ft: moderately hard to hard, trace to few shell molds and casts	
			1.27	66%	16%					
			1.52						112.2ft: moderately hard to hard, trace to few shell molds and casts	
			1.34							
			0.59	(3.9)	(2.2)	RUN-11			117.2ft: moderately hard to hard, trace to few shell molds and casts	
			2.12	78%	44%					
			1.43						122.2ft: moderately hard to hard, trace to few shell molds and casts	
			0.55	(3.1)	(1.9)	RUN-12				
			1.07	62%	38%				127.4ft: moderately hard to hard, trace to few shell molds and casts	
			1.12							
			1.31	(2.6)	(1.2)	RUN-13			132.4ft: moderately hard to hard, trace to few shell molds and casts	
			0.45	52%	24%					
			1.41						137.4ft: moderately hard to hard, trace to few shell molds and casts	
			0.40	(3.2)	(1.7)	RUN-14				
			4.08	64%	34%				142.4ft: moderately hard to hard, trace to few shell molds and casts	
			3.07							
			2.49						147.4ft: moderately hard to hard, trace to few shell molds and casts	
			2.30	(5.0)	(2.8)	RUN-15				
			0.31	100%	56%				152.4ft: moderately hard to hard, trace to few shell molds and casts	
			1.26							
			1.11						157.4ft: moderately hard to hard, trace to few shell molds and casts	
			0.42	(3.0)	(1.3)	RUN-16				
			0.37	60%	26%				162.4ft: moderately hard to hard, trace to few shell molds and casts	
			0.02							
			0.39						167.4ft: moderately hard to hard, trace to few shell molds and casts	
			0.26							
			0.04						172.4ft: moderately hard to hard, trace to few shell molds and casts	
			0.10							
			0.59						177.4ft: moderately hard to hard, trace to few shell molds and casts	
			2.42							
			1.10						182.4ft: moderately hard to hard, trace to few shell molds and casts	
			2.10							
			2.19						187.4ft: moderately hard to hard, trace to few shell molds and casts	
			1.12							
			0.59						192.4ft: moderately hard to hard, trace to few shell molds and casts	
			1.22							
			0.39						197.4ft: moderately hard to hard, trace to few shell molds and casts	
			0.29							
			0.35						202.4ft: moderately hard to hard, trace to few shell molds and casts	

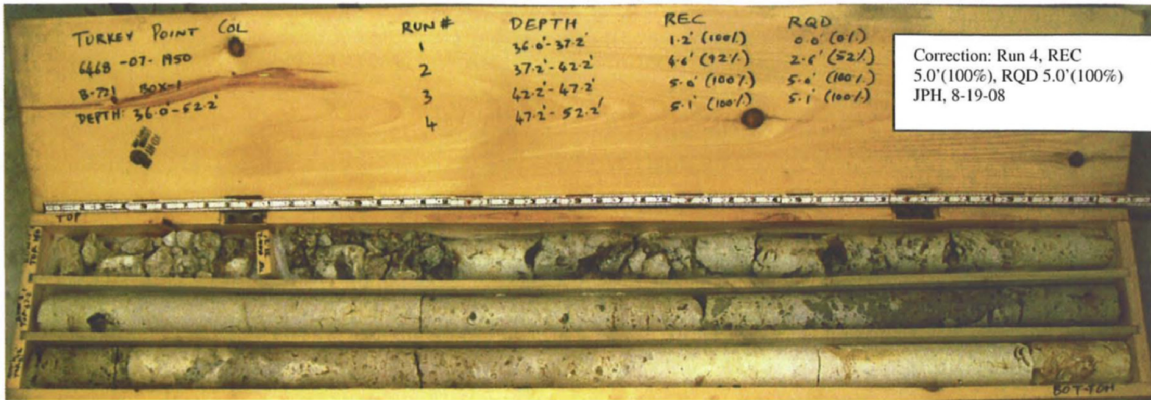
TURKEY POINT COL CORE TURKEY POINT COL GDT 5:30:08



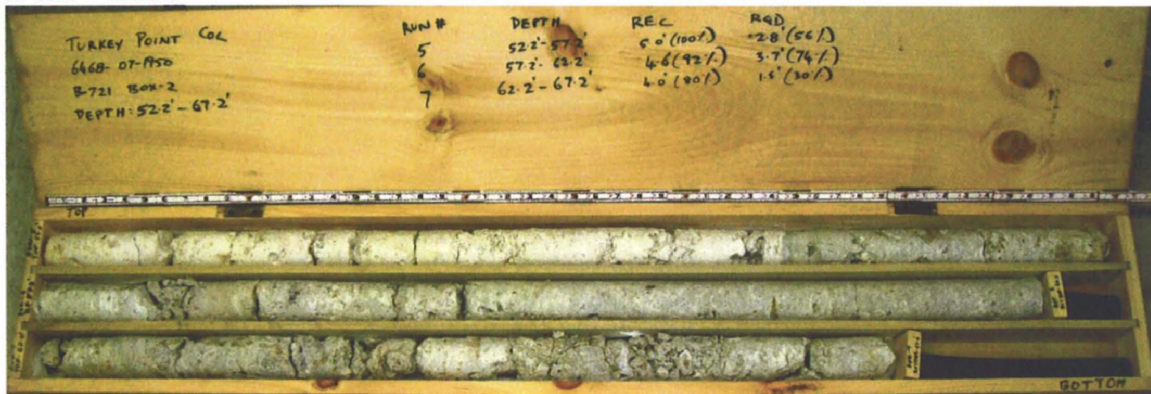
BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade		GEOLOGIST: G. Pillappa	
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 (ATL)		DRILLER: L. Carter/ J. Landeros		GROUND WATER (ft)	
BORING NO.: B-721		DRILL METHOD: Mud Rotary/Core		SAMPLE METHODS: SPT/Core		0 HR. NA	
GROUND ELEV.: -1.5 ft (NAVD88)		NORTHING: 397,338 US ft (NAD83/90)		EASTING: 876,120 US ft (NAD83/90)		24 HR. NA	
TOTAL DEPTH: 127.4 ft		CASING DEPTH: 4" to 36.0', 3" to 117.2'				HAMMER (ID): 140 lb. Auto (MEC-03)	
DATE STARTED: 4/21/08		COMPLETED: 4/23/08		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. (ft)	RQD (ft)		
			0:51 0:36							Continued from previous page
-113.7	112.2	5.0	0:41 1:03 0:32 0:36 1:56	(0.4) 8%	(0.0) 0%	RUN-17	(0.0) 0%	(NA)		112.2ft: white (10YR8/1), to very pale brown (10YR8/4), to light gray (10YR7/1) -115.5 Silty SAND (SM), pale yellow (5Y7/4), medium dense, wet, trace limestone fragments, weak HCl reaction, fine grained sand (Tamiami Formation) 114.0 -118.7
-118.7	117.2									Coring Terminated at Elevation -118.7

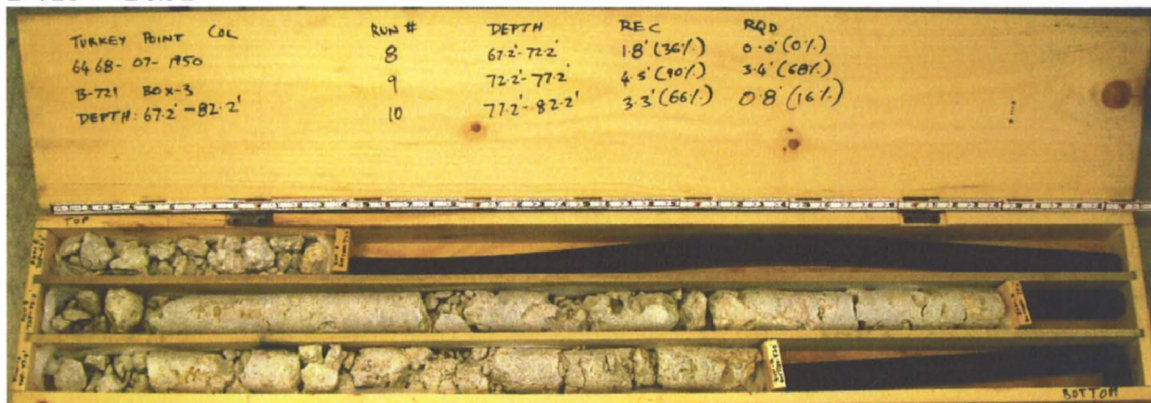
TURKEY POINT COL. CORE. TURKEY POINT.GPJ TURKEY POINT COL.GDT 5:30:08



B-721 - Box 1



B-721 - Box 2



B-721 - Box 3



B-721 - Box 4



B-721 - Box 5



GEOTECHNICAL BORING LOG

Prepared By Date

Checked By Date

SHEET 1 OF 2

BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade		GEOLOGIST: G. Pillappa							
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 (ATL)		DRILLER: L. Carter/ J. Rosser		GROUND WATER (ft)							
BORING NO.: B-722		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR.	NA						
GROUND ELEV.: -1.0 ft (NAVD88)		NORTHING: 397,434 US ft (NAD83/90)		EASTING: 875,980 US ft (NAD83/90)		24 HR.	NA						
TOTAL DEPTH: 103.2 ft		BORING DIAMETER: 4" to 25.0', 3" to 103.2'		CASING DEPTH: 4" to 25.0'		HAMMER (ID): 140 lb. Auto (MEC-03)							
DATE STARTED: 4/29/08		COMPLETED: 4/30/08		CORE SIZE: HQ3		BITS USED: 2 15/16" Tricone							
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
-1.0					Ground Surface								
-1.0	0.0	WOH	WOH	WOH									
-3.5	2.5	18	15	16						722-1		MUCK, light brownish gray (10YR6/3), to very dark gray (10YR3/1), very soft, dry to wet, mostly organic, strong HCl reaction	
-6.0	5.0	10	10	8						722-2		LIMESTONE, boundstone, white (10YR8/1), to very dark gray (10YR3/1), medium hard, wet, strong HCl reaction, oolitic (Miami Formation)	
-8.5	7.5	16	10	15						722-3		5.0ft: white (10YR8/1), very soft	
-11.0	10.0	8	10	7						722-4		7.5ft: soft	
-13.5	12.5	10	14	10						722-5		10.0ft: very soft	
-16.0	15.0	8	14	34						722-6		12.5ft: soft	
-20.7	19.7	4	5	5						722-7		15.0ft: moderately hard	
-25.7	24.7									722-8		19.7ft: very soft	
-26.2	25.2	50/0.5								722-9		24.5ft: LIMESTONE, boundstone, white (10YR8/1), hard, wet, strong HCl reaction, fossiliferous (Upper Fort Thompson Formation)	
-29.2	28.2									RUN-1		25.2ft: Switch sampling method to coring	
-34.2	33.2									RUN-2		25.2ft: white (2.5Y8/1), moderately hard to hard, indurated, few vugs, coralline, fossiliferous	
-39.2	38.2									RUN-3		28.2ft: hard, recrystallized calcite	
-44.2	43.2									RUN-4		33.2ft: white (2.5Y8/1, 10YR8/1), trace vugs, trace clayey sand	
-49.2	48.2									RUN-5		38.2ft: light gray (10YR7/1), to white (10YR8/1)	
-54.2	53.2									RUN-6		43.2ft: white (10YR8/1) to light gray (10YR7/1) to 48.4ft	
-58.7	57.7									RUN-7		48.4ft: LIMESTONE, boundstone, white (10YR8/1), hard, indurated, trace to few shell molds and casts, fossiliferous, strong HCl reaction (Lower Fort Thompson Formation)	
-59.2	58.2									RUN-8		53.2ft: hard to moderately hard, indurated to moderately indurated, trace vugs, trace fine clayey sand, few shell molds and casts	
-64.2	63.2									RUN-9		57.7ft: hard, indurated, no vugs	
-69.2	68.2									RUN-10		58.2ft: white (10YR8/1), to very pale brown (10YR7/4), hard to moderately hard, indurated to moderately indurated, trace vugs	
-74.2	73.2									RUN-11		63.2ft: white (10YR8/1), hard, indurated	
										RUN-12		68.2ft: possible interbedded sand layers; based on poor recovery and drill rates	
												73.2ft: white (10YR8/1), to very pale brown	

TURKEY POINT COL BORE TURKEY POINT/GPI TURKEY POINT COL GDT 8/19/08



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SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 (ATL)		DRILLER: L. Carter/ J. Rosser		GROUND WATER (ft)									
BORING NO.: B-722		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR.	NA								
GROUND ELEV.: -1.0 ft (NAVD88)		NORTHING: 397,434 US ft (NAD83/90)		EASTING: 875,980 US ft (NAD83/90)		24 HR.	NA								
TOTAL DEPTH: 103.2 ft		BORING DIAMETER: 4" to 25.0', 3" to 103.2'		CASING DEPTH: 4" to 25.0'		HAMMER (ID): 140 lb. Auto (MEC-03)									
DATE STARTED: 4/29/08		COMPLETED: 4/30/08		CORE SIZE: HQ3		BITS USED: 2 15/16" Tricone									
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	
-75.8					Continued from previous page										
-79.2	78.2										RUN-13		(10YR7/4), hard to moderately hard, indurated to moderately indurated LIMESTONE, boundstone, white (10YR8/1), hard, indurated, trace to few shell molds and casts, fossiliferous, strong HCl reaction (Lower Fort Thompson Formation) <i>(continued)</i> 78.2ft: white (10YR8/1), hard, indurated, few vugs 83.2 to 86.2ft: possible interbedded sand layers; based on poor recovery and drill rates 88.2ft: white (2.5Y8/1) 93.2ft: white (10YR8/1), soft to hard, friable to indurated, trace vugs, trace clayey sand, possible interbedded sand layers 98.2ft: hard, few to little shell molds and casts		
-84.2	83.2										RUN-14				
-89.2	88.2										RUN-15				
-94.2	93.2										RUN-16				
-99.2	98.2										RUN-17				
													-104.2	103.2	Boring Terminated at Elevation -104.2 ft

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



BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade		GEOLOGIST: G. Pillappa	
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 (ATL)		DRILLER: L. Carter/ J. Rosser		GROUND WATER (ft)	
BORING NO.: B-722		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR. NA	
GROUND ELEV.: -1.0 ft (NAVD88)		NORTHING: 397,434 US ft (NAD83/90)		EASTING: 875,980 US ft (NAD83/90)		24 HR. NA	
TOTAL DEPTH: 103.2 ft		CASING DEPTH: 4" to 25.0'				HAMMER (ID): 140 lb. Auto (MEC-03)	
DATE STARTED: 4/29/08		COMPLETED: 4/30/08		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 @ 25.2 ft
-26.2	25.2	3.0	5:16 2:12 0:54	(2.4) 80%	(1.0) 33%	RUN-1	(21.1) 91%	(14.9) 64%		LIMESTONE, boundstone, white (10YR8/1), hard, wet, strong HCl reaction, fossiliferous (Upper Fort Thompson Formation) (continued)
-29.2	28.2	5.0	1:02 1:04 1:18 1:22 1:25	(5.0) 100%	(3.8) 76%	RUN-2				25.2ft: white (2.5Y8/1), moderately hard to hard, indurated, few vugs, coralline, fossiliferous 28.2ft: hard, recrystallized calcite
-34.2	33.2	5.0	1:21 1:56 2:10 2:43 6:29	(3.7) 74%	(3.0) 60%	RUN-3				33.2ft: white (2.5Y8/1, 10YR8/1), trace vugs, trace clayey sand
-39.2	38.2	5.0	1:16 1:36 1:32 1:26 1:55	(4.8) 96%	(2.1) 42%	RUN-4				38.2ft: light gray (10YR7/1), to white (10YR8/1)
-44.2	43.2	5.0	1:52 1:49 1:45 1:49 1:37	(5.0) 100%	(4.8) 96%	RUN-5				43.2ft: white (10YR8/1) to light gray (10YR7/1) to 48.4ft
-49.2	48.2	5.0	1:11 1:30 1:25 1:16 1:09	(4.9) 98%	(4.9) 98%	RUN-6	(40.9) 75%	(20.6) 38%		LIMESTONE, boundstone, white (10YR8/1), hard, indurated, trace to few shell molds and casts, fossiliferous, strong HCl reaction (Lower Fort Thompson Formation)
-54.2	53.2	4.5	1:09 1:13 0:45 0:54	(4.3) 96%	(3.0) 67%	RUN-7				53.2ft: hard to moderately hard, indurated to moderately indurated, trace vugs, trace fine clayey sand, few shell molds and casts
-58.7	57.7	0.5	1:12/0.5	(0.4) 80%	(0.0) 0%	RUN-8				57.7ft: hard, indurated, no vugs
-59.2	58.2	5.0	0:35/0.5 1:34 0:43 2:56 2:04 2:32	(4.1) 82%	(2.9) 58%	RUN-9				58.2ft: white (10YR8/1), to very pale brown (10YR7/4), hard to moderately hard, indurated to moderately indurated, trace vugs
-64.2	63.2	5.0	2:18 1:47 2:27 1:37 0:41	(3.7) 74%	(2.1) 42%	RUN-10				63.2ft: white (10YR8/1), hard, indurated
-69.2	68.2	5.0	0:39 0:27 1:03 3:04 4:03	(1.8) 36%	(0.6) 12%	RUN-11				68.2ft: possible interbedded sand layers; based on poor recovery and drill rates
-74.2	73.2	5.0	3:39 2:04 3:47 2:49 3:44	(4.9) 98%	(2.2) 44%	RUN-12				73.2ft: white (10YR8/1), to very pale brown (10YR7/4), hard to moderately hard, indurated to moderately indurated
-79.2	78.2	5.0	2:35 1:52 1:41 1:53 2:36	(4.7) 94%	(1.5) 30%	RUN-13				78.2ft: white (10YR8/1), hard, indurated, few vugs
-84.2	83.2	5.0	0:36 0:04 0:32 2:07 3:08	(2.3) 46%	(1.8) 36%	RUN-14				83.2 to 86.2ft: possible interbedded sand layers; based on poor recovery and drill rates
-89.2	88.2	5.0	2:27 1:44 1:27 2:24 0:45	(4.3) 86%	(1.8) 36%	RUN-15				88.2ft: white (2.5Y8/1)
-94.2	93.2	5.0	0:39 0:09 1:51 0:27 0:56	(1.7) 34%	(0.0) 0%	RUN-16				93.2ft: white (10YR8/1), soft to hard, friable to indurated, trace vugs, trace clayey sand, possible interbedded sand layers
-99.2	98.2	5.0	0:47 0:39	(4.0) (0.0)	(0.0) (0.0)	RUN-17				98.2ft: hard, few to little shell molds and casts

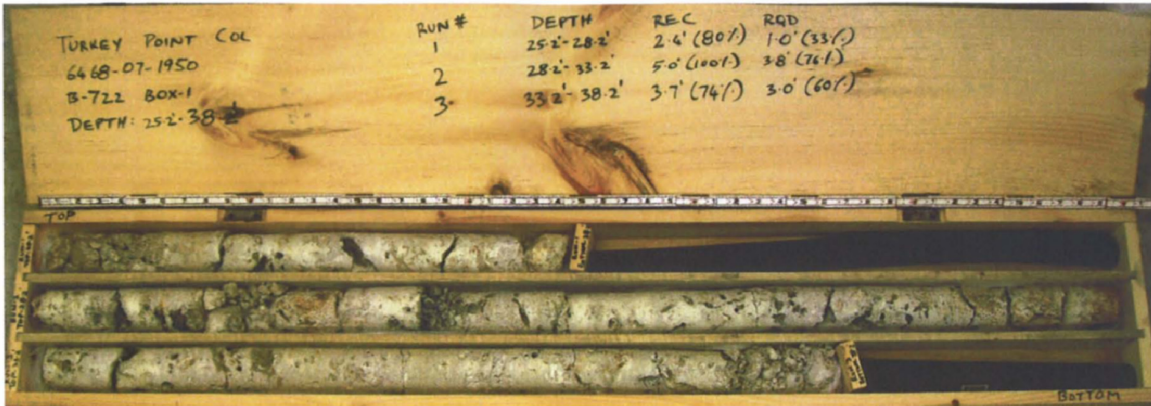
TURKEY POINT COL CORE TURKEY POINT GFI TURKEY POINT COL GDT 8/19/08



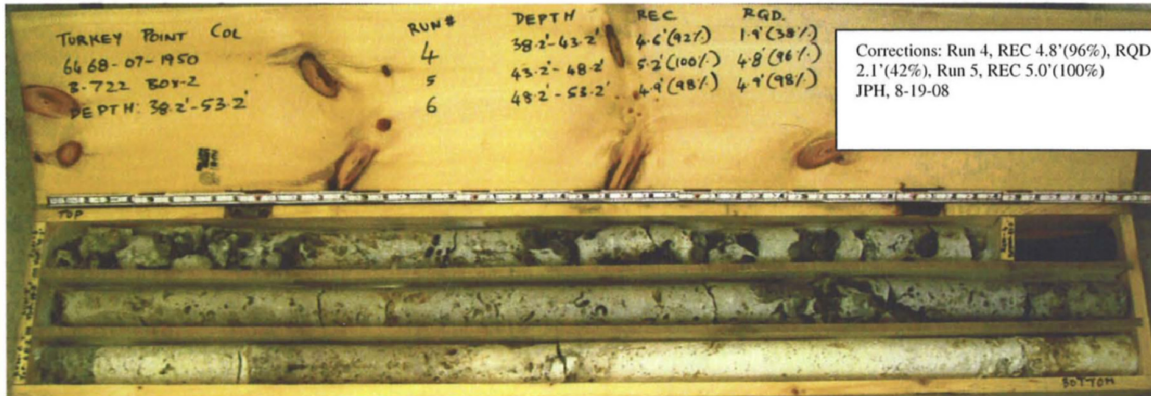
BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade	GEOLOGIST: G. Pillappa	
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 (ATL)		DRILLER: L. Carter/ J. Rosser		GROUND WATER (ft) 0 HR. NA 24 HR. NA
BORING NO.: B-722		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		
GROUND ELEV.: -1.0 ft (NAVD88)		NORTHING: 397,434 US ft (NAD83/90)		EASTING: 875,980 US ft (NAD83/90)		
TOTAL DEPTH: 103.2 ft		CASING DEPTH: 4" to 25.0'			HAMMER (ID): 140 lb. Auto (MEC-03)	
DATE STARTED: 4/29/08		COMPLETED: 4/30/08		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		L O G	DESCRIPTION AND REMARKS
				REC (ft) %	RQD (ft) %		REC (ft) %	RQD (ft) %		
			0:46 0:43 1:04	80%	0%					Continued from previous page
-104.2	103.2									-104.2 103.2 Coring Terminated at Elevation -104.2

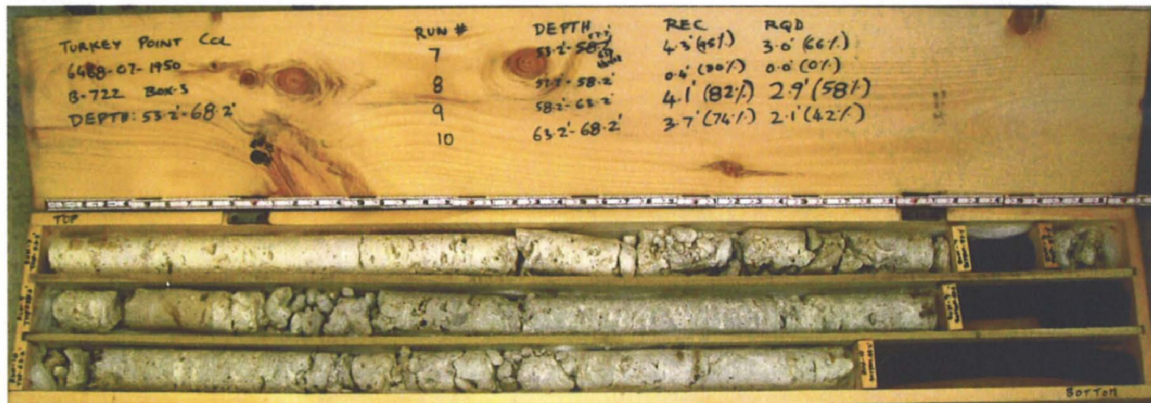
TURKEY POINT COL CORE TURKEY POINT COL.GPJ TURKEY POINT COL.GDT 8/19/08



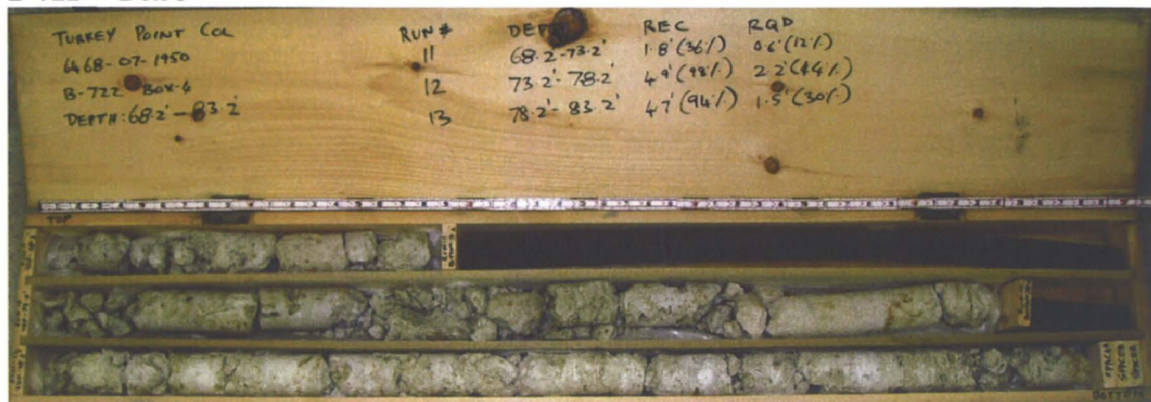
B-722 - Box 1



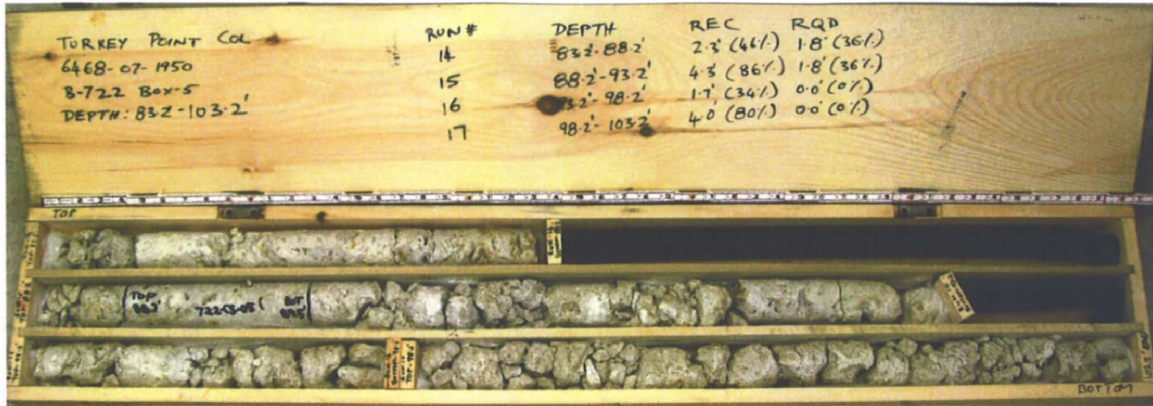
B-722 - Box 2



B-722 - Box 3



B-722 - Box 4



B-722 - Box 5



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-723		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR.	NA						
GROUND ELEV.: -1.0 ft (NAVD88)		NORTHING: 397,421 US ft (NAD83/90)		EASTING: 875,675 US ft (NAD83/90)		24 HR.	NA						
TOTAL DEPTH: 100.6 ft		BORING DIAMETER: 4" to 25.1', 3" to 100.6'		CASING DEPTH: 4" to 25.1'		HAMMER (ID): 140 lb. Auto (M06)							
DATE STARTED: 4/22/08		COMPLETED: 4/23/08		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
-1.0					Ground Surface							-1.0	0.0
-1.0	0.0	WOH	WOH	WOH							723-1		MUCK, very dark grayish brown (2.5Y3/2), very soft to soft, wet, trace fine grained sand, strong HCl reaction
-3.7	2.7	WOH	WOH	4							723-2A&B		
-6.1	5.1	6	6	9							723-3		LIMESTONE, boundstone, white (2.5Y8/1), very soft, wet, few fine grained sand, strong HCl reaction, oolitic (Miami Formation)
-8.6	7.6	2	18	6							723-4		5.1ft: some fine grained sand 7.6ft: soft
-11.0	10.0	4	3	6							723-5		10.0ft: very soft, little fine grained sand
-13.2	12.2	9	16	13							723-6		12.2ft: soft, few sand
-16.1	15.1	20	26	19							723-7		15.1ft: medium hard, trace fine to medium grained sand
-22.9	21.9	6	9	23							723-8		
-27.3	26.3										723-9		LIMESTONE, boundstone, white (2.5Y8/1), hard, wet, strong HCl reaction, trace fine grained sand (Upper Fort Thompson Formation)
-28.6	27.6	4	18	50/0.3							RUN-1		27.6ft: Switch sampling method to coring
-31.6	30.6										RUN-2		27.6ft: moderately hard to hard, moderately indurated to indurated, little vugs, recrystallized calcite
-36.6	35.6										RUN-3		35.6ft: hard, indurated, coralline
-41.6	40.6										RUN-4		
-46.6	45.6										RUN-5		45.6ft: gray (2.5Y6/1)
-51.6	50.6										RUN-6		LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, trace vugs, strong HCl reaction (Lower Fort Thompson Formation)
-56.6	55.6										RUN-7		55.6ft: medium hard to moderately hard, friable to moderately indurated, few sand
-61.6	60.6										RUN-8		60.6ft: medium hard to hard, friable to indurated, few to little sand
-66.6	65.6										RUN-9		
-71.6	70.6										RUN-10		70.6ft: trace vugs, trace to few sand

TURKEY POINT COL BORE TURKEY POINT GPT TURKEY POINT COL GDT 5:30:08



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-723		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR. NA									
GROUND ELEV.: -1.0 ft (NAVD88)		NORTHING: 397,421 US ft (NAD83/90)		EASTING: 875,675 US ft (NAD83/90)		24 HR. NA									
TOTAL DEPTH: 100.6 ft		BORING DIAMETER: 4" to 25.1', 3" to 100.6'		CASING DEPTH: 4" to 25.1'		HAMMER (ID): 140 lb. Auto (M06)									
DATE STARTED: 4/22/08		COMPLETED: 4/23/08		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		
-75.8					Continued from previous page										
-76.6	75.6												Limestone, boundstone, white (2.5Y8/1), hard, indurated, trace vugs, strong HCl reaction (Lower Fort Thompson Formation) (continued) 75.6ft: moderately indurated to indurated, trace shell molds and casts 80.6ft: medium hard to hard, friable to indurated, few vugs, some fine grained sand, few shell molds and casts 85.6ft: little fine grained sand, trace vugs 90.6ft: hard, indurated 95.6ft: moderately hard to hard, moderately indurated to indurated, possible interbedded sand layers: based on drilling rates and recovery		
-81.6	80.6														
-86.6	85.6														
-91.6	90.6														
-96.6	95.6														
													-101.6	100.6	Boring Terminated at Elevation -101.6 ft

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



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-723		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR. NA	
GROUND ELEV.: -1.0 ft (NAVD88)		NORTHING: 397,421 US ft (NAD83/90)		EASTING: 875,675 US ft (NAD83/90)		24 HR. NA	
TOTAL DEPTH: 100.6 ft		CASING DEPTH: 4" to 25.1'				HAMMER (ID): 140 lb. Auto (M06)	
DATE STARTED: 4/22/08		COMPLETED: 4/23/08		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 @ 27.6 ft	
-28.6	27.6	3.0	1:28 0:48	(3.0) 100%	(2.4) 80%	RUN-1	(15.8) 76%	(10.7) 51%		LIMESTONE, boundstone, white (2.5Y8/1), hard, wet, strong HCl reaction, trace fine grained sand (Upper Fort Thompson Formation) (continued)	
-31.6	30.6	5.0	0:58 1:31 0:57 1:15 0:49	(4.0) 80%	(2.0) 40%	RUN-2				27.6ft: moderately hard to hard, moderately indurated to indurated, little vugs, recrystallized calcite	
-36.6	35.6	5.0	0:19 0:10 0:12 0:20 0:54	(1.5) 30%	(0.9) 18%	RUN-3				35.6ft: hard, indurated, coralline	
-41.6	40.6	5.0	1:10 1:01 0:51 0:52 0:55	(4.4) 88%	(2.9) 58%	RUN-4				45.6ft: gray (2.5Y6/1)	
-46.6	45.6	5.0	1:28 1:47 1:59 1:56 1:23	(4.9) 98%	(4.5) 90%	RUN-5	(36.1) 69%	(14.4) 28%		-49.5	LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, trace vugs, strong HCl reaction (Lower Fort Thompson Formation)
-51.6	50.6	5.0	1:52 1:44 1:52 1:50 1:15	(4.8) 96%	(4.0) 80%	RUN-6				48.5	
-56.6	55.6	5.0	0:34 1:44 1:10 1:05 0:50	(3.7) 74%	(0.0) 0%	RUN-7					55.6ft: medium hard to moderately hard, friable to moderately indurated, few sand
-61.6	60.6	5.0	0:43 2:21 1:01 0:50 1:17	(3.5) 70%	(1.6) 32%	RUN-8					60.6ft: medium hard to hard, friable to indurated, few to little sand
-66.6	65.6	5.0	0:11 0:19 0:20 1:24 1:12	(2.8) 56%	(0.0) 0%	RUN-9					70.6ft: trace vugs, trace to few sand
-71.6	70.6	5.0	1:26 1:11 0:31 2:08 1:24	(3.9) 78%	(1.9) 38%	RUN-10					75.6ft: moderately indurated to indurated, trace shell molds and casts
-76.6	75.6	5.0	1:51 1:56 0:59 1:01 1:29	(4.7) 94%	(2.2) 44%	RUN-11					80.6ft: medium hard to hard, friable to indurated, few vugs, some fine grained sand, few shell molds and casts
-81.6	80.6	5.0	1:07 1:18 1:35 0:46 0:47	(4.5) 90%	(1.6) 32%	RUN-12					85.6ft: little fine grained sand, trace vugs
-86.6	85.6	5.0	1:00 2:00 1:49 1:05 0:31	(4.3) 86%	(1.1) 22%	RUN-13					90.6ft: hard, indurated
-91.6	90.6	5.0	1:09 0:41 0:52 1:34 1:14	(1.3) 26%	(0.0) 0%	RUN-14					95.6ft: moderately hard to hard, moderately indurated to indurated, possible interbedded sand layers; based on drilling rates and recovery
-96.6	95.6	5.0	2:02 0:55 0:44 0:28 0:46	(0.6) 12%	(0.0) 0%	RUN-15					
-101.6	100.6									-101.6	100.6
Coring Terminated at Elevation -101.6											

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