



GEOTECHNICAL BORING LOG

Prepared By JPM Date 5-3-08Checked 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					Ground Surface										
-1.5	0.0	WOH	WOH	WOH	0						721-1		-1.5	0.0	MUCK, very dense, gray (10YR3/1), very soft, wet, mostly organic, strong HCl reaction
-4.0	2.5										721-2A&B		-5.0	3.5	2.5ft: very dark brown (10YR3/3), to dark yellowish brown (10YR4/4)
-6.5	5.0	WOH	9	16							721-3				LIMESTONE, boundstone, light olive gray (5YR6/2), soft, wet, strong HCl reaction (Miami Formation
-9.0	7.5	11	10	7							721-4				5.0ft: white (10YR8/1), very soft, fossiliferous, oolitic
-11.5	10.0	10	19	8							721-5				7.5ft: light gray (10YR7/1), soft
-14.0	12.5	7	4	6							721-6				10.0ft: white (10YR8/1), very soft
-16.5	15.0	8	11	11							721-7				12.5ft: soft
		33	29	50							721-8				15.0ft: light gray (10YR7/1), hard
-21.2	19.7	4	4	7							721-9				19.7ft: white (10YR8/1), very soft
-26.0	24.5	24	27	8							721-10		-25.5	24.0	LIMESTONE, boundstone, white (10YR8/1), medium hard, wet, trace shell fragments, strong HCl reaction (Upper Fort Thompson Formation)
-31.0	29.5	22	7	3							721-11				29.5ft: very soft, trace coralline
-36.0	34.5										RUN-1				31.5ft: loss of circulation
-37.5	36.0	5	5	3							RUN-2				34.5ft: light gray (10YR7/1)
-38.7	37.2										RUN-3				36.0ft: Switch sampling method to coring
-43.7	42.2										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
-48.7	47.2										RUN-5				37.2ft: hard
-53.7	52.2										RUN-6		-49.2	47.7	42.2ft: white (10YR8/1), to 45.7ft then gray (10YR6/1), very hard
-58.7	57.2										RUN-7				47.2ft: light gray (10YR7/2) to 47.7ft. hard
-63.7	62.2										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)
-68.7	67.2										RUN-9				52.2ft: medium hard to hard, friable to indurated, trace clayey sand
-73.7	72.2														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 GP1 TURKEY POINT COL GDT 5/3/08



SHEET 2 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	MOI			
-76.3					Continued from previous page									
-78.7	77.2									RUN-10		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		
-83.7	82.2									RUN-11				
-88.7	87.2									RUN-12				
-93.7	92.2									RUN-13				
-98.7	97.2									RUN-14		94.2ft: possible 0.9ft-thick sand interbed		
-103.7	102.2									RUN-15				
-108.7	107.2									RUN-16				
-113.7	112.2									RUN-17				
-118.7	117.2	9	5	6						721-12		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		
-127.4	125.9	13	14	8						721-13				
												-115.5	114.0	
												-128.9	127.4	
												Boring Terminated at Elevation -128.9 ft		

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



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	
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		L O G	DESCRIPTION AND REMARKS
				REC (ft) %	ROD (ft) %		REC (ft) %	ROD (ft) %		
										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%		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
-43.7	42.2		1.45 3.36 2.14 2.36 2.37	(4.6) 92%	(2.6) 52%					37.2ft: hard
		5.0	4.33 3.42 2.45 2.17 2.01	(5.0) 100%	(5.0) 100%	RUN-3				42.2ft: white (10YR8/1), to 45.7ft then gray (10YR6/1), very hard
-48.7	47.2									
		5.0	1.52 1.49 2.20 1.47 1.39	(5.0) 100%	(5.0) 100%	RUN-4	(48.7) 73%	(27.8) 42%	-49.2	47.2ft: light gray (10YR7/2) to 47.7ft, hard
-53.7	52.2									LIMESTONE, boundstone, white (10YR8/1), hard, indurated, trace vugs, fossiliferous, trace to few shell molds and casts, strong HCl reaction (Lower Fort Thompson Formation)
		5.0	1.15 1.31 2.02 1.32 1.34	(5.0) 100%	(2.8) 56%	RUN-5				52.2ft: medium hard to hard, friable to indurated, trace clayey sand
-58.7	57.2									
		5.0	0.40 1.41 2.03 2.43 1.29	(4.6) 92%	(3.7) 74%	RUN-6				57.2ft: moderately hard to hard, indurated
-63.7	62.2									
		5.0	0.57 0.21 1.59 2.00 2.03	(4.0) 80%	(1.5) 30%	RUN-7				62.2ft: moderately hard to hard
-68.7	67.2									
		5.0	1.10 1.05 3.37 1.10 0.53	(1.8) 36%	(0.0) 0%	RUN-8				67.2ft: hard
-73.7	72.2									67.2 to 72.2ft: possible sand interbeds
		5.0	1.27 1.52 1.34 0.59 2.12	(4.5) 90%	(3.4) 68%	RUN-9				
-78.7	77.2									
		5.0	1.43 0.55 1.07 1.12 1.31	(3.3) 66%	(0.8) 16%	RUN-10				77.2ft: moderately hard to hard, trace to few shell molds and casts
-83.7	82.2									
		5.0	0.45 1.41 0.40 4.08 3.07	(3.9) 78%	(2.2) 44%	RUN-11				82.2ft: hard
-88.7	87.2									
		5.0	2.49 2.30 0.31 1.26 1.11	(3.1) 62%	(1.9) 38%	RUN-12				
-93.7	92.2									
		5.0	0.42 0.37 0.02 0.39 0.26	(2.6) 52%	(1.2) 24%	RUN-13				94.2ft: possible 0.9ft-thick sand interbed
-98.7	97.2									
		5.0	0.04 0.10 0.59 2.42 1.10	(3.2) 64%	(1.7) 34%	RUN-14				
-103.7	102.2									
		5.0	2.10 2.19 1.12 0.59 1.22	(5.0) 100%	(2.8) 56%	RUN-15				
-108.7	107.2									
		5.0	0.39 0.29 0.35	(3.0) 60%	(1.3) 26%	RUN-16				

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

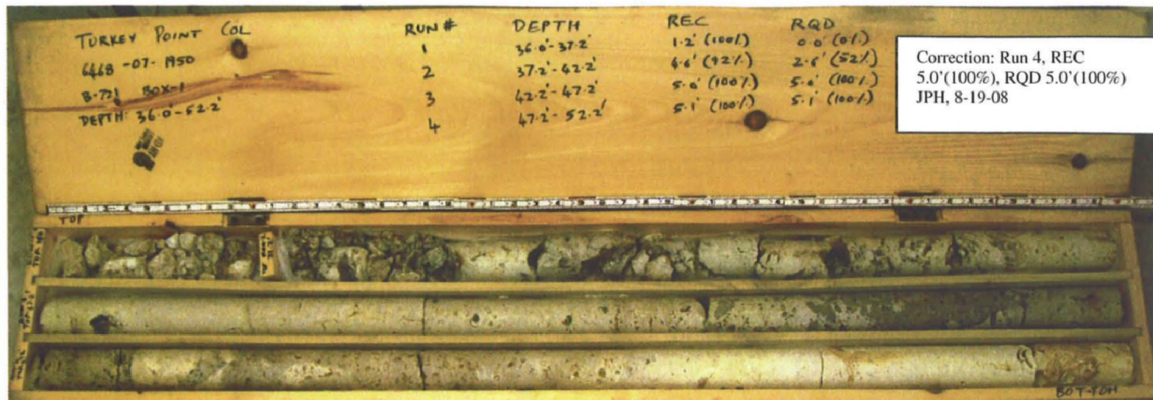


SHEET 2 OF 2

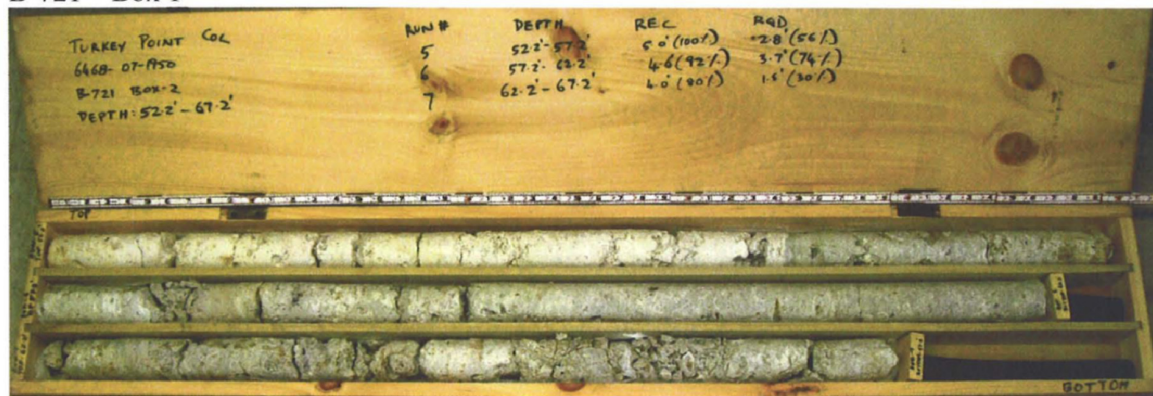
BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: G. Pillappa
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 (ATL)	DRILLER: L. Carter/ J. Landeros	GROUND WATER (ft)
BORING NO.: B-721	DRILL METHOD: Mud Rotary/Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND 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	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		L O G	DESCRIPTION AND REMARKS
				REC. (ft) %	RQD (ft) %		REC. (ft) %	RQD (ft) %		
										Continued from previous page
-113.7	112.2		0:51 0:36							
		5.0	0:41 1:03 0:32 0:36 1:56	(0.4) 8%	(0.0) 0%	RUN-17				112.2ft: white (10YR8/1), to very pale brown (10YR8/4), to light gray (10YR7/1)
							(0.0) 0%	(NA)		-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	117.2									-118.7
										Coring Terminated at Elevation -118.7

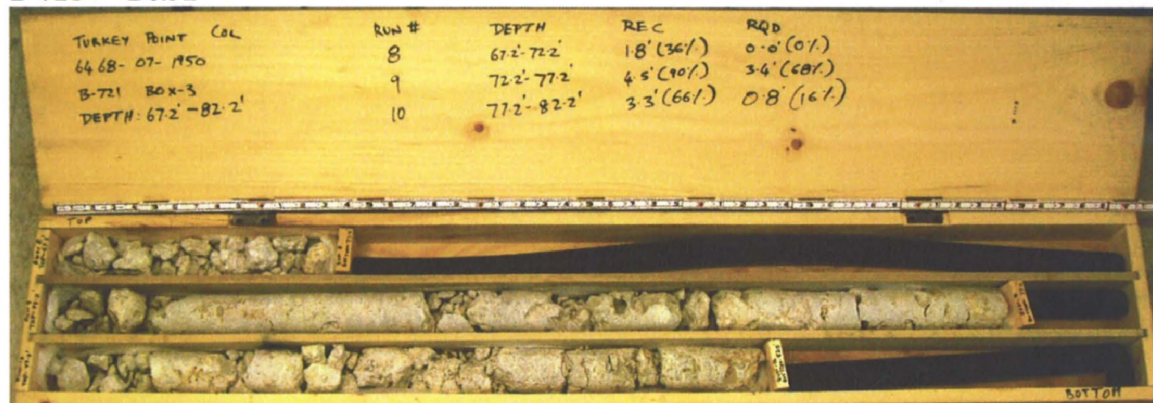
TURKEY POINT COL CORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 5/30/08



B-721 – Box 1



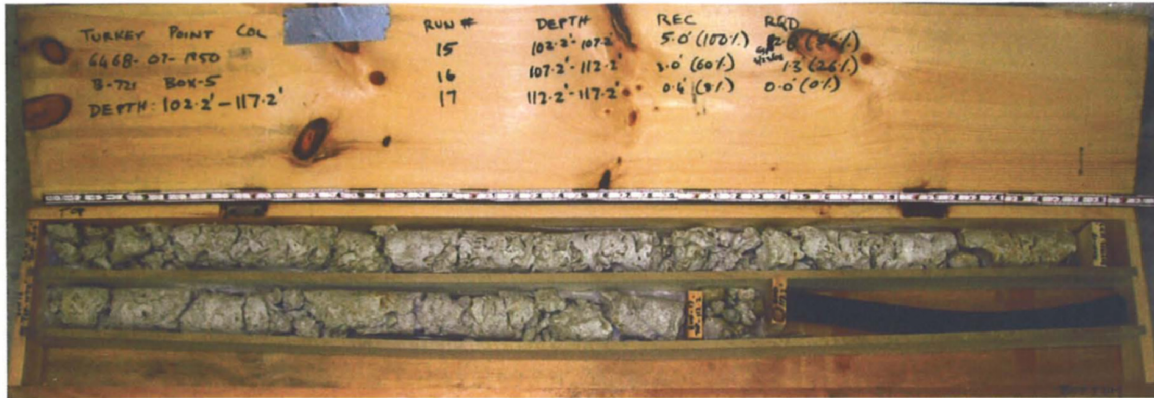
B-721 – Box 2



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.	DEPTH	BLOW COUNT			BLOWS PER FOOT						SAMP.	LOG	SOIL AND ROCK DESCRIPTION				
(ft)	(ft)	0.5ft	0.5ft	0.5ft	0	20	40	60	80	100	NO.						
-1.0					Ground Surface												
-1.0	0.0	WOH	WOH	WOH	0							722-1	-1.0	0.0	MUCK, light brownish gray (10YR6/3), to very dark gray (10YR3/1), very soft, dry to wet, mostly organic, strong HCl reaction		
-3.5	2.5	18	15	16								722-2	-3.5	2.5	LIMESTONE, boundstone, white (10YR8/1), to very dark gray (10YR3/1), medium hard, wet, strong HCl reaction, oolitic (Miami Formation)		
-6.0	5.0	10	10	8								722-3			5.0ft: white (10YR8/1), very soft		
-8.5	7.5	16	10	15								722-4			7.5ft: soft		
-11.0	10.0	8	10	7								722-5			10.0ft: very soft		
-13.5	12.5	10	14	10								722-6			12.5ft: soft		
-16.0	15.0	8	14	34								722-7			15.0ft: moderately hard		
-20.7	19.7	4	5	5								722-8			19.7ft: very soft		
-25.7	24.7	50/0.5										722-9	-25.5	24.5	LIMESTONE, boundstone, white (10YR8/1), hard, wet, strong HCl reaction, fossiliferous (Upper Fort Thompson Formation)		
-26.2	25.2													RUN-1			25.2ft: Switch sampling method to coring
-29.2	28.2											RUN-2			25.2ft: white (2.5Y8/1), moderately hard to hard, indurated, few vugs, coralline, fossiliferous		
-34.2	33.2											RUN-3			28.2ft: hard, recrystallized calcite		
-39.2	38.2											RUN-4			33.2ft: white (2.5Y8/1, 10YR8/1), trace vugs, trace clayey sand		
-44.2	43.2											RUN-5			38.2ft: light gray (10YR7/1), to white (10YR8/1)		
-49.2	48.2											RUN-6	-49.4	48.4	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											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											RUN-8			57.7ft: hard, indurated, no vugs		
-59.2	58.2											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											RUN-10			63.2ft: white (10YR8/1), hard, indurated		
-69.2	68.2											RUN-11			68.2ft: possible interbedded sand layers; based on poor recovery and drill rates		
-74.2	73.2											RUN-12			73.2ft: white (10YR8/1), to very pale brown		

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



SHEET 2 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					
-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) (continued) 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 COL GPI TURKEY POINT COL GDT 8/19/08



SHEET 1 OF 2

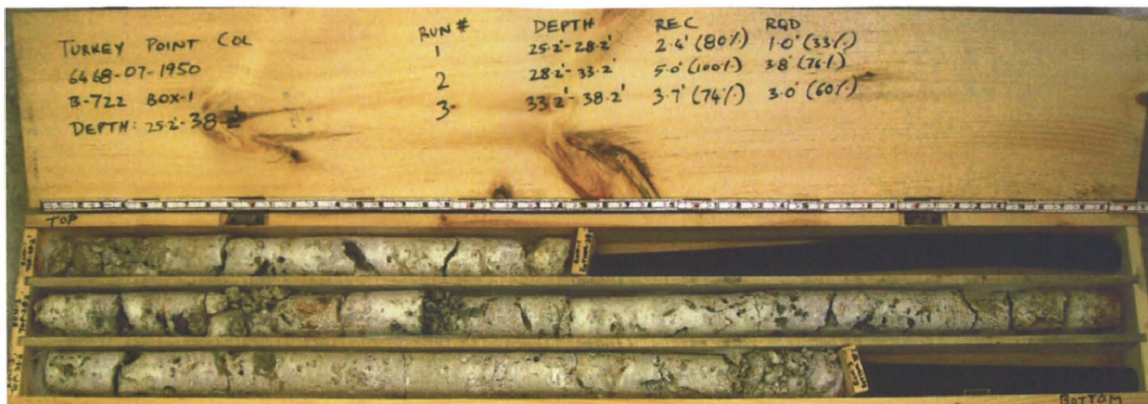
BECHTEL PROJECT NO.: 25409				MACTEC PROJECT NO.: 6468-07-1950				COUNTY: Miami-Dade		GEOLOGIST: G. Pillappa			
SITE DESCRIPTION: Turkey Point COL				DRILL MACHINE: CME-550 (ATL)				DRILLER: L. Carter/ J. Rosser				GROUND WATER (ft) 0 HR. NA 24 HR. NA	
BORING NO.: B-722				DRILL METHOD: Mud Rotary/ Core				SAMPLE METHODS: SPT/Core					
GROUND ELEV.: -1.0 ft (NAVD88)				NORTHING: 397,434 US ft (NAD83/90)				EASTING: 875,980		US ft (NAD83/90)		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		L O G	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	(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) 25.2ft: white (2.5Y8/1), moderately hard to hard, indurated, few vugs, coralline, fossiliferous 28.2ft: hard, recrystallized calcite			
-29.2	28.2	5.0	0:54 1:02 1:04 1:18 1:22 1:25	(5.0) 100%	(3.8) 76%	RUN-2							
-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%		-49.4	48.4		
-54.2	53.2	4.5	1:09 1:13 0:45 0:54 1:12/0.5	(4.3) 96%	(3.0) 67%	RUN-7				LIMESTONE, boundstone, white (10YR8/1), hard, indurated, trace to few shell molds and casts, fossiliferous, strong HCl reaction (Lower Fort Thompson Formation)			
-58.7	57.7	0.5	0:35/0.5	(0.4) 80%	(0.0) 0%	RUN-8				53.2ft: hard to moderately hard, indurated to moderately indurated, trace vugs, trace fine clayey sand, few shell molds and casts			
-59.2	58.2	5.0	1:34 0:43 2:56 2:04 2:32	(4.1) 82%	(2.9) 58%	RUN-9				57.7ft: hard, indurated, no vugs 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)	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

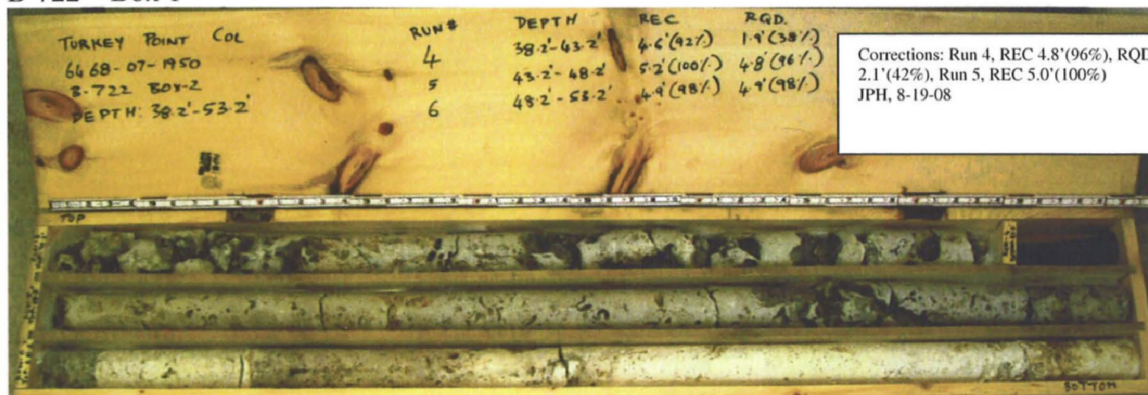
BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade	GEOLOGIST: G. Pillappa	
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 (ATL)		DRILLER: L. Carter/ J. Rosser		GROUND WATER (ft)
BORING NO.: B-722		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		
GROUND ELEV.: -1.0 ft (NAVD88)		NORTHING: 397,434 US ft (NAD83/90)		EASTING: 875,980 US ft (NAD83/90)		0 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		L O G	DESCRIPTION AND REMARKS
				REC. (ft) %	RQD (ft) %		REC. (ft) %	RQD (ft) %		
										Continued from previous page
-104.2	103.2		0:46 0:43 1:04	80%	0%					-104.2
										Coring Terminated at Elevation -104.2

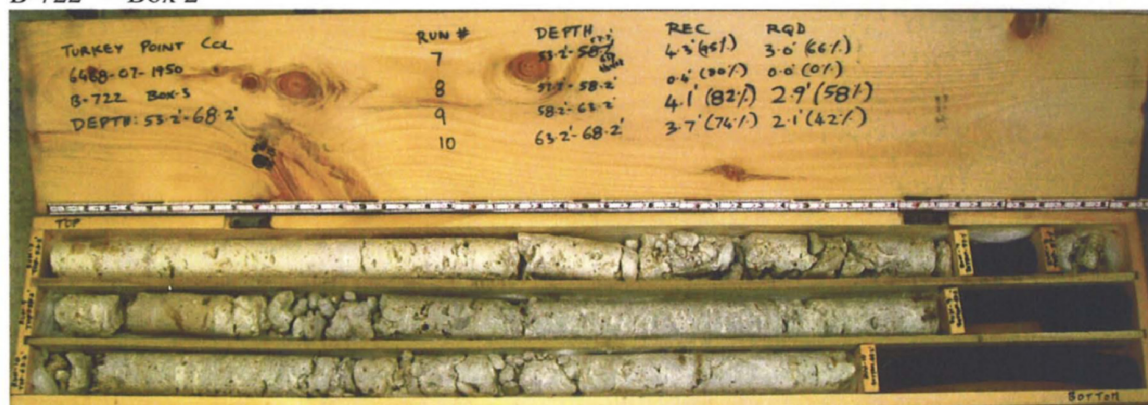
TURKEY POINT COL.CORE TURKEY POINT.GPJ TURKEY POINT.COL.GDT 8/19/08



B-722 - Box 1



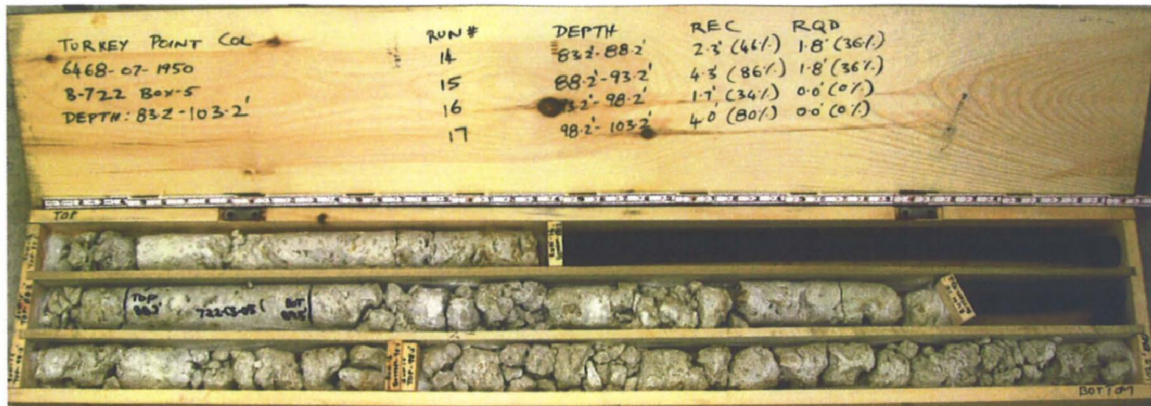
B-722 - Box 2



B-722 - Box 3



B-722 - Box 4



B-722 - Box 5



GEOTECHNICAL BORING LOG

Prepared By 277 Date 5-30-08Checked By HTM Date 5-30-08

SHEET 1 OF 2

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.	MOI	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	0						723-1		MUCK, very dark grayish brown (2.5Y3/2), very soft to soft, trace fine grained sand, strong HCl reaction
-3.7	2.7	WOH	WOH	4	4						723-2A&B		
-6.1	5.1	6	6	9	15						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	24						723-4		5.1ft: some fine grained sand
-11.0	10.0	4	3	6	9						723-5		7.6ft: soft
-13.2	12.2	9	16	13	29						723-6		10.0ft: very soft, little fine grained sand
-16.1	15.1	20	26	19	45						723-7		12.2ft: soft, few sand
-22.9	21.9	6	9	23	32						723-8		15.1ft: medium hard, trace fine to medium grained sand
-27.3	26.3	4	18	50/0.3	68/0.8						723-9		
-28.6	27.6										RUN-1		LIMESTONE, boundstone, white (2.5Y8/1), hard, wet, strong HCl reaction, trace fine grained sand (Upper Fort Thompson Formation)
-31.6	30.6										RUN-2		27.6ft: Switch sampling method to coring
-36.6	35.6										RUN-3		27.6ft: moderately hard to hard, moderately indurated to indurated, little vugs, recrystallized calcite
-41.6	40.6										RUN-4		35.6ft: hard, indurated, coralline
-46.6	45.6										RUN-5		
-51.6	50.6										RUN-6		45.6ft: gray (2.5Y6/1)
-56.6	55.6										RUN-7		
-61.6	60.6										RUN-8		LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, trace vugs, strong HCl reaction (Lower Fort Thompson Formation)
-66.6	65.6										RUN-9		55.6ft: medium hard to moderately hard, friable to moderately indurated, few sand
-71.6	70.6										RUN-10		60.6ft: medium hard to hard, friable to indurated, few to little sand
													70.6ft: trace vugs, trace to few sand

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



SHEET 2 OF 2

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										RUN-11		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										RUN-12				
-86.6	85.6										RUN-13				
-91.6	90.6										RUN-14				
-96.6	95.6										RUN-15				
													-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



SHEET 1 OF 1

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 REC (ft) %		RQD (ft) %	SAMP. NO.	STRATA REC (ft) %		RQD (ft) %	L O G	DESCRIPTION AND REMARKS	
												Begin Coring @ 27.6 ft	
-28.6	27.6	3.0	1:28 0:48 0:58	(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	0:43 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							
-46.6	45.6	5.0	1:28 1:47 1:59 1:56 1:23	(4.9) 98%	(4.5) 90%	RUN-5						45.6ft: gray (2.5Y6/1)	
-51.6	50.6	5.0	1:52 1:44 1:52 1:50 1:15	(4.8) 96%	(4.0) 80%	RUN-6	(36.1) 69%	(14.4) 28%				LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, trace vugs, strong HCl reaction (Lower Fort Thompson Formation)	
-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							
-71.6	70.6	5.0	1:26 1:11 0:31 2:08 1:24	(3.9) 78%	(1.9) 38%	RUN-10						70.6ft: trace vugs, trace to few sand	
-76.6	75.6	5.0	1:51 1:56 0:59 1:01 1:29	(4.7) 94%	(2.2) 44%	RUN-11						75.6ft: moderately indurated to indurated, trace 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						80.6ft: medium hard to hard, friable to indurated, few vugs, some fine grained sand, few shell molds and casts	
-86.6	85.6	5.0	1:00 2:00 1:49 1:05 0:31	(4.3) 86%	(1.1) 22%	RUN-13						85.6ft: little fine grained sand, trace vugs	
-91.6	90.6	5.0	1:09 0:41 0:52 1:34 1:14	(1.3) 26%	(0.0) 0%	RUN-14						90.6ft: hard, indurated	
-96.6	95.6	5.0	2:02 0:55 0:44 0:28 0:46	(0.6) 12%	(0.0) 0%	RUN-15						95.6ft: moderately hard to hard, moderately indurated to indurated, possible interbedded sand layers; based on drilling rates and recovery	
-101.6	100.6											Coring Terminated at Elevation -101.6	

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