



SHEET 1 OF 2

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: H. Lyatuu
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 Marsh Buggy	DRILLER: D. White/ R. Hall	GROUND WATER (ft)
BORING NO.: B-802	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.5 ft (NAVD88)	NORTHING: 398,817 US ft (NAD83/90)	EASTING: 876,266 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 128.5 ft	CASING DEPTH: 6" to 35.0'	HAMMER (ID): 140 lb. Auto (893)	
DATE STARTED: 4/23/08	COMPLETED: 5/2/08	CORE SIZE: PQ3	CORE BARREL TYPE: Triple Tube Wireline (Split inner liners)

ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	REC. (ft) %	ROD (ft) %	SAMP. NO.	STRATA REC. (ft) %	ROD (ft) %	L O G	DESCRIPTION AND REMARKS
										Begin Coring @ 37.0 ft
-38.5	37.0	5.0	1.13 1.32 1.02 0.31 1.53	(0.0) 0%	(0.0) 0%	RUN-1	(36.6) 47%	(14.6) 19%		LIMESTONE, boundstone, white (10YR8/1), soft, wet, fossiliferous, strong HCl reaction (Fort Thompson Formation) (continued) 37.0ft: Alternate sampling method between coring and SPT
-43.5	42.0		N=49			802-12				42.0ft: moderately hard
-45.0	43.5	3.5	1.11 1.00 0.43	(0.4) 11%	(0.0) 0%	RUN-2				43.5ft: medium hard, moderately indurated, few vugs, fossiliferous, recrystallized calcite, little sand
-48.5	47.0		0:54/0.5 N=32			802-13				47.0ft: friable
-50.0	48.5	3.5	2.27 1.24 0.52	(0.0) 0%	(0.0) 0%	RUN-3				
-53.5	52.0		1:00/0.5 N=64			802-14				52.0ft: hard
-55.0	53.5	3.5	1.40 0:59 0.58	(0.0) 0%	(0.0) 0%	RUN-4				
-58.5	57.0		0:20/0.5 N=18			802-15				57.0ft: very soft
-60.0	58.5	3.5	1.20 1.21 1.22	(3.5) 100%	(2.2) 63%	RUN-5				58.5ft: moderately hard to medium hard, moderately indurated, little vugs, trace fine grained sand
-63.5	62.0		0:35/0.5							
-68.5	67.0	5.0	1.15 1.24 0.53 0.22 0.11	(3.1) 62%	(1.4) 28%	RUN-6				62.0ft: medium hard, few vugs
-73.5	72.0	5.0	0.25 1.00 1.45 1.00 1.45	(4.5) 90%	(1.2) 24%	RUN-7				67.0ft: little vugs, coralline
-78.5	77.0	5.0	2.10 1:30 1.40 1.00 1.20	(0.4) 8%	(0.0) 0%	RUN-8				72.0ft: trace vugs
-80.0	78.5	3.5	N=91			802-16				77.0ft: hard
-83.5	82.0		1.06 1.26 0.56 0:46/0.5	(0.8) 23%	(0.0) 0%	RUN-9				78.5ft: medium hard
-84.0	82.5	4.5	N=50/0.5			802-17				
-88.5	87.0		1.05 1.00 0.30 1.02	(4.5) 100%	(2.0) 44%	RUN-10				82.0ft: hard 82.5 to 83.0ft: silty sand, then LIMESTONE, medium hard, few vugs
-93.5	92.0	5.0	0:40/0.5 1.21 1.52 3.13 0.44 4:17	(5.0) 100%	(1.3) 26%	RUN-11				87.0 to 89.0ft: silty sand, greenish gray (5BG6/1), dense wet calcareous, trace shell fragments, strong HCl reaction 89.0ft: LIMESTONE, boundstone, white (10YR8/1), medium hard, interbedded soft friable limestone, moderately indurated, trace vugs, fossiliferous, strong HCl reaction
-98.5	97.0	5.0	1:10 0:17 0:33 0:51 0:46	(0.0) 0%	(0.0) 0%	RUN-12				
-100.0	98.5	3.5	N=70			802-18A&B				97.0ft: hard, little fine grained sand
-103.5	102.0		3.48 6:18 6:28 1:38/0.5	(3.0) 86%	(0.6) 17%	RUN-13				98.5ft: soft to moderately hard, friable to moderately indurated, trace vugs, little shell casts, trace fine grained sand
-108.5	107.0	5.0	4:10 3:10 2:00 1:50 6:40	(5.0) 100%	(3.5) 70%	RUN-14				102.0ft: soft to medium hard, few vugs, most shell casts
-113.5	112.0	5.0	1:49 1:08 1:47 3:06 1:55	(4.9) 98%	(2.4) 48%	RUN-15				107.0ft: little vugs

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

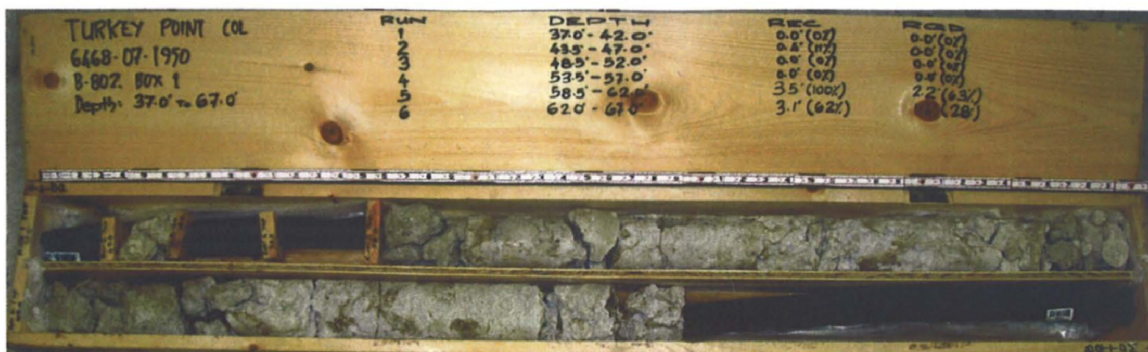


SHEET 2 OF 2

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: H. Lyatuu
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 Marsh Buggy	DRILLER: D. White/ R. Hall	GROUND WATER (ft)
BORING NO.: B-802	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.5 ft (NAVD88)	NORTHING: 398,817 US ft (NAD83/90)	EASTING: 876,266 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 128.5 ft	CASING DEPTH: 6" to 35.0'	HAMMER (ID): 140 lb. Auto (893)	
DATE STARTED: 4/23/08	COMPLETED: 5/2/08	CORE SIZE: PQ3	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
		5.0	1:50 2:10 2:00 1:00 1:30	(1.5) 30%	(0.0) 0%	RUN-16				LIMESTONE, boundstone, white (10YR8/1), soft, wet, fossiliferous, strong HCl reaction (Fort Thompson Formation) (continued) (continued)
							(0.0) 0%	(NA)		112.0ft: gray (10YR7/2), medium hard to soft, moderately indurated to friable, trace vugs, little fine grained sand
-118.5	117.0									115.0
										Silty SAND (SM), light gray (5Y7/2), medium dense, wet, fine grained sand, trace cemented sand, weak HCl reaction (Tamiami Formation)
										117.0
										Coring Terminated at Elevation -TBD

TURKEY POINT COL CORE: TURKEY POINT.GPJ TURKEY POINT COL.GDT 8:14:08



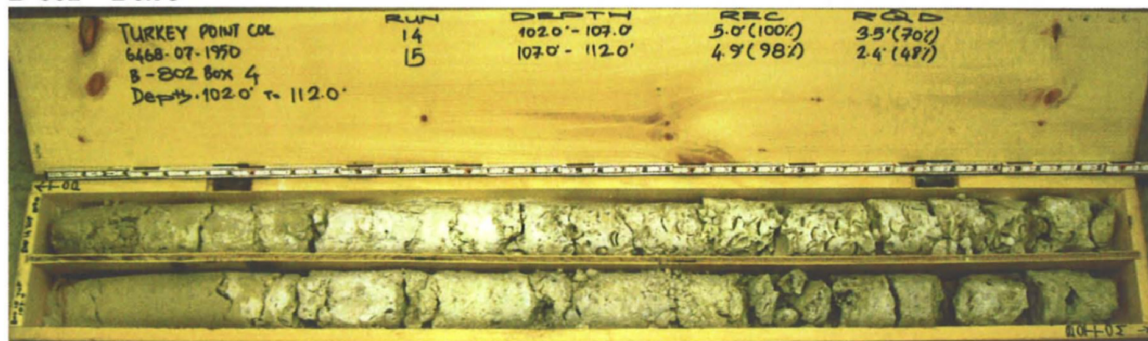
B-802- Box 1



B-802 - Box 2



B-802 - Box 3



B-802 - Box 4



B-802 - Box 5



GEOTECHNICAL BORING LOG

Prepared By 7-10-08 Date 7-10-08

Checked By MM Date 7-16-08

SHEET 1 OF 2

BECHTEL PROJECT NO.: 25409					MACTEC PROJECT NO.: 6468-07-1950					COUNTY: Miami-Dade		GEOLOGIST: S. Lehman		
SITE DESCRIPTION: Turkey Point COL					DRILL MACHINE: CME-55 Marsh Buggy					DRILLER: P. Pitts/ B. Carrasco			GROUND WATER (ft) 0 HR. NA 24 HR. NA	
BORING NO.: B-805					DRILL METHOD: Mud Rotary/ Core					SAMPLE METHODS: SPT/Core				
GROUND ELEV.: -1.6 ft (NAVD88)					NORTHING: 396,883 US ft (NAD83/90)					EASTING: 877,240 US ft (NAD83/90)				
TOTAL DEPTH: 125.3 ft			BORING DIAMETER: 6" to 35.0', 4" to 125.3'					CASING DEPTH: 6" to 35.0'				HAMMER (ID):140 lb. Auto (MEC-425)		
DATE STARTED: 5/17/08			COMPLETED: 5/22/08			CORE SIZE: PQ3			BITS USED: 5 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	MOI			
-1.6					Ground Surface									
-1.6	0.0	WOR	WOR	WOR	0						805-1		MUCK, dark grayish brown (2.5Y4/2), very soft, wet, strong HCl reaction, organics	
-5.1	3.5	7	11	15	26						805-2		LIMESTONE, boundstone, white (2.5Y8/1), soft, wet, friable, strong HCl reaction, oolitic (Miami Formation)	
-7.6	6.0	16	19	36	55						805-3		6.0ft: moderately hard, friable to moderately indurated	
-10.1	8.5	5	9	6	15						805-4		8.5ft: very soft	
-12.6	11.0	13	14	15	29						805-5		11.0ft: soft	
-15.1	13.5	4	4	10	14						805-6		13.5ft: very soft	
-20.1	18.5	3	3	4	7						805-7			
-25.1	23.5	1	WOR	WOR	0						805-8		23.5ft: friable to moderately indurated	
-30.1	28.5	1	1	WOR	1						805-9		27.0 to 30.0ft: rod drop	
-35.1	33.5	1	17	36	53						805-10		LIMESTONE, boundstone, white (2.5Y8/1), moderately hard, indurated, fossiliferous (Upper Fort Thompson Formation)	
-36.6	35.0										RUN-1		35.0ft: Switch sampling method to coring	
-37.7	36.1										RUN-2		35.0ft: hard, little vugs	
													36.1ft: white (10YR8/1), to very pale brown (10YR8/3), recrystallized calcite	
-42.7	41.1										RUN-3		41.1ft: few vugs	
-47.7	46.1										RUN-4		46.1ft: gray (10YR6/1) to 48.7ft	
-52.7	51.1										RUN-5		LIMESTONE, boundstone, white (10YR8/1), hard, indurated, recrystallized calcite, trace vugs, fossiliferous, strong HCl reaction (Lower Fort Thompson Formation)	
-57.7	56.1										RUN-6		56.1ft: trace sand	
-62.7	61.1										RUN-7		61.1ft: moderately hard, moderately indurated	
													63.0 to 65.0ft: possible sand lenses	
-67.7	66.1										RUN-8		67.0ft to 69.0ft: possible sand lenses	
-72.7	71.1										RUN-9		71.1ft: white (7.5YR8/1), medium hard	
													73.0 to 76.0ft: possible sand lenses	

TURKEY POINT COL BORE TURKEY POINT COL GDI 7-10-08



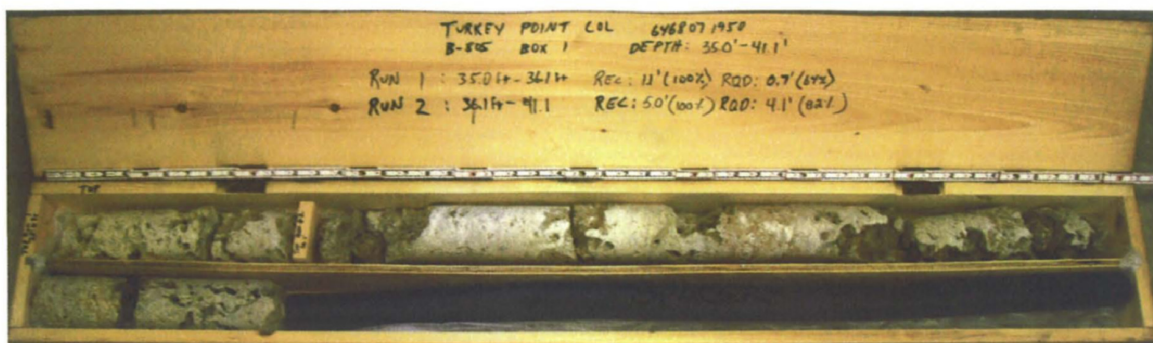
SHEET 2 OF 2

BECHTEL PROJECT NO.: 25409					MACTEC PROJECT NO.: 6468-07-1950					COUNTY: Miami-Dade			GEOLOGIST: S. Lehman			
SITE DESCRIPTION: Turkey Point COL					DRILL MACHINE: CME-55 Marsh Buggy					DRILLER: P. Pitts/ B. Carrasco				GROUND WATER (ft) 0 HR. NA 24 HR. NA		
BORING NO.: B-805					DRILL METHOD: Mud Rotary/ Core					SAMPLE METHODS: SPT/Core						
GROUND ELEV.: -1.6 ft (NAVD88)					NORTHING: 396,883 US ft (NAD83/90)					EASTING: 877,240 US ft (NAD83/90)						
TOTAL DEPTH: 125.3 ft					BORING DIAMETER: 6" to 35.0', 4" to 125.3'					CASING DEPTH: 6" to 35.0'				HAMMER (ID): 140 lb. Auto (MEC-425)		
DATE STARTED: 5/17/08					COMPLETED: 5/22/08					CORE SIZE: PQ3				BITS USED: 5 7/8" Roller Cone		
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT						SAMP. NO.	▼ MOI	L O G	SOIL AND ROCK DESCRIPTION		
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100						
-76.4					Continued from previous page											
-77.7	76.1										RUN-10			LIMESTONE, boundstone, white (10YR8/1), hard, indurated, recrystallized calcite, trace vugs, fossiliferous, strong HCl reaction (Lower Fort Thompson Formation) (continued) 76.1ft: moderately hard		
-82.7	81.1										RUN-11					
-87.7	86.1										RUN-12			81.1ft: white (10YR8/1) 84.0 to 85.0ft: possible sand lenses		
-92.7	91.1										RUN-13			86.1ft: hard		
-97.7	96.1										RUN-14			96.1ft: medium hard, friable to moderately indurated, few vugs		
-102.7	101.1	10	6	29							805-11			-101.6	100.0	Silty SAND (SM), light gray (7.5YR7/1), dense, wet, fine grained sand, strong HCl reaction, trace limestone fragments (Tamiami Formation) 101.1ft: Switch sampling method to SPT
-109.9	108.3	5	19	10							805-12					108.3ft: medium dense
-120.1	118.5	15	17	18							805-13					118.5ft: light gray (2.5Y7/1), to light greenish gray (10G7/1), dense
-125.4	123.8	5	4	6							805-14			-126.9	125.3	123.8ft: light gray (2.5Y7/2), loose Boring Terminated at Elevation -126.9 ft

TURKEY POINT COL BORE TURKEY POINT GPI TURKEY POINT COL GDT 7-10 08

TURKEY POINT COL CORE TURKEY POINT GPJ TURKEY POINT COL GDT 7/10/08

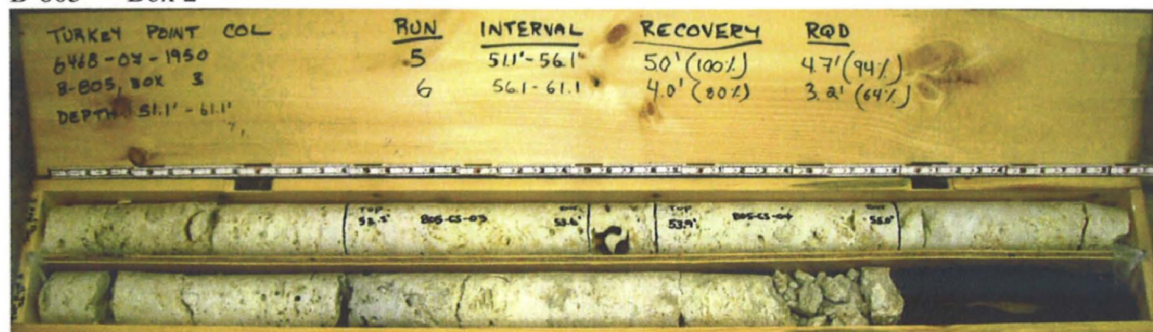
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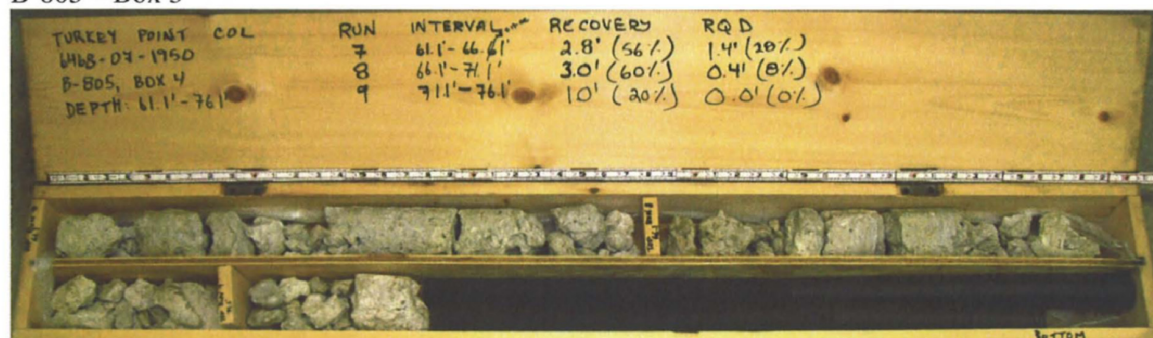
B-805- Box 1



B-805 - Box 2



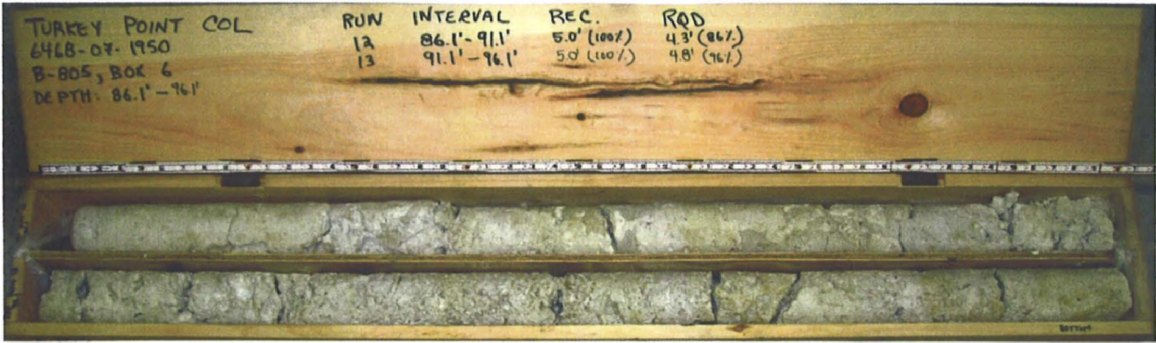
B-805 - Box 3



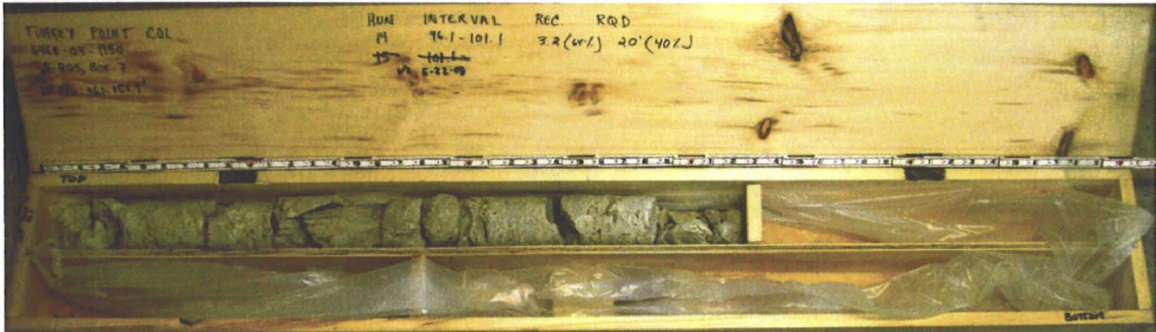
B-805 - Box 4



B-805 - Box 5



B-805 - Box 6



B-805 - Box 7



BECHTEL PROJECT NO.: 25409					MACTEC PROJECT NO.: 6468-07-1950					COUNTY: Miami-Dade					GEOLOGIST: H. Lyatuu/B. Taylor				
SITE DESCRIPTION: Turkey Point COL					DRILL MACHINE: CME-550 Marsh Buggy					DRILLER: D. White/ R. Hall					GROUND WATER (ft)				
BORING NO.: B-806					DRILL METHOD: Mud Rotary/ Core					SAMPLE METHODS: SPT/Core					0 HR. NA				
GROUND ELEV.: -0.4 ft (NAVD88)					NORTHING: 395,289 US ft (NAD83/90)					EASTING: 877,237 US ft (NAD83/90)					24 HR. NA				
TOTAL DEPTH: 127.4 ft					BORING DIAMETER: 4" to 40.0', 3" to 126.4'					CASING DEPTH: 4" to 40.0', 3" to 120.0'					HAMMER (ID): 140 lb. Auto (893)				
DATE STARTED: 3/23/08					COMPLETED: 3/25/08					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									
-75.2					Continued from previous page														
-77.7	77.3															LIMESTONE, boundstone, white (10YR8/1), hard, indurated, few vugs, fossiliferous, trace fine grained sand, strong HCl reaction (Lower Fort Thompson Formation) (continued)			
-82.7	82.3										806-11					82.3ft: Switch sampling method to SPT 82.3ft: hard 83.6ft: Switch sampling method to coring 83.6ft: moderately hard, moderately indurated			
-84.0	83.6	12	24	50/0.3							806-11								
-87.7	87.3										806-11								
-87.7	87.3										806-11								
-92.7	92.3																		
-97.7	97.3																		
-102.7	102.3																102.3ft: mostly shell molds and casts		
-107.7	107.3																107.3ft: hard to moderately hard, indurated to moderately indurated		
-112.7	112.3																		
-117.7	117.3	9	9	14							806-12					Silty SAND (SM), light gray (10YR7/1), to very pale brown (10YR7/4), medium dense, wet, fine grained sand, strong HCl reaction (Tamiami Formation) 117.3ft: Switch sampling method to SPT			
-126.3	125.9	5	6	6							806-13					125.9ft: greenish gray (10Y6/1)			
																Boring Terminated at Elevation -127.8 ft			



SHEET 1 OF 2

BECHTEL PROJECT NO.: 25409				MACTEC PROJECT NO.: 6468-07-1950				COUNTY: Miami-Dade		GEOLOGIST: H. Lyatuu/B. Taylor			
SITE DESCRIPTION: Turkey Point COL				DRILL MACHINE: CME-550 Marsh Buggy				DRILLER: D. White/ R. Hall				GROUND WATER (ft)	
BORING NO.: B-806				DRILL METHOD: Mud Rotary/ Core				SAMPLE METHODS: SPT/Core				0 HR. NA	
GROUND ELEV.: -0.4 ft (NAVD88)				NORTHING: 395,289 US ft (NAD83/90)				EASTING: 877,237 US ft (NAD83/90)		24 HR. NA			
TOTAL DEPTH: 127.4 ft				CASING DEPTH: 4" to 40.0', 3" to 120.0'						HAMMER (ID): 140 lb. Auto (893)			
DATE STARTED: 3/23/08		COMPLETED: 3/25/08		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) %		SAMP. NO.	STRATA REC (ft) %		RQD (ft) %	L O G	DESCRIPTION AND REMARKS		
											Begin Coring @ 29.8 ft		
-30.2	29.8	2.5	1:19	(1.6)	(0.0)	RUN-1	(8.9)	(2.7)			LIMESTONE, boundstone, white (10YR8/1), hard, wet, fossiliferous, trace fine grained sand, strong HCl reaction (Upper Fort Thompson Formation) (continued) 29.8ft: white, (10YR8/1), to light greenish gray (5GY8/1), hard to moderately hard, indurated to moderately indurated, strong HCl reaction, strong HCl reaction, fossiliferous, few vugs 32.3ft: white (10YR8/1), hard, indurated, trace fine grained sand		
-32.7	32.3		1:40	64%	0%		51%	15%					
		5.0	0.32/0.5	(1.2)	(0.0)	RUN-2							
			0.40	24%	0%								
			0.34										
-37.7	37.3		0.39								42.3ft: coralline		
		5.0	0.21										
			0.54										
			0.35	(2.4)	(1.0)	RUN-3							
			0.49	48%	20%								
-42.7	42.3		1:07								46.0ft: light gray (10YR7/1)		
		3.7	2:11/1.7	(2.4)	(0.4)	RUN-4							
			2:32	65%	11%								
			2:27										
-46.4	46.0		2:27										
-47.7	47.3	1.3	2:00	(1.3)	(1.3)	RUN-5					LIMESTONE, boundstone, white (10YR8/1), hard, indurated, few vugs, fossiliferous, trace fine grained sand, strong HCl reaction (Lower Fort Thompson Formation)		
		5.0	0.19/0.3	(4.1)	(3.0)	RUN-6	(32.9)	(23.2)					
			1:26	100%	100%		39%	28%					
			0.36	82%	60%								
			2:11										
-52.7	52.3		1:48								52.3ft: white (2.5Y8/1)		
		5.0	2:06	(4.8)	(4.1)	RUN-7							
			1:14	96%	82%								
			1:46										
			1:34										
-57.7	57.3		1:06								57.3ft: white (10YR8/1), sandy		
		5.0	0:59	(2.7)	(2.2)	RUN-8							
			1:23	54%	44%								
			0:21										
			0:23										
-62.7	62.3		0:29								62.3ft: hard to moderately hard, moderately indurated to indurated		
		5.0	0:54	(0.7)	(0.4)	RUN-9							
			0:46	14%	8%								
			0:42										
			1:35										
-67.7	67.3		0:17								67.3ft: hard, indurated		
		5.0	1:29	(2.3)	(1.7)	RUN-10							
			1:30	46%	34%								
			2:21										
			1:15										
-72.7	72.3		1:15										
		5.0	1:47	(0.0)	(0.0)	RUN-11							
			1:21	0%	0%								
			0:30										
			0:28										
-77.7	77.3		0:47										
		5.0	1:40	(0.0)	(0.0)	RUN-12							
			1:15	0%	0%								
			0:37										
			0:35										
-82.7	82.3		1:36								82.3ft: Switch sampling method to SPT 82.3ft: hard 83.6ft: Switch sampling method to coring 83.6ft: moderately hard, moderately indurated		
			N=74/0.8			806-11							
-84.0	83.6	3.7	1:10	(2.2)	(1.0)	RUN-13							
			0:31	59%	27%								
			1:34										
-87.7	87.3		1.07/0.7										
		5.0	0.38	(1.6)	(0.5)	RUN-14							
			1:34	32%	10%								
			0.44										
			0:50										
-92.7	92.3		1:24										
		5.0	0:40	(3.2)	(2.6)	RUN-15							
			0:55	64%	52%								
			1:02										
			0:27										
-97.7	97.3		0:33										
		5.0	0:29	(4.7)	(3.8)	RUN-16							
			0:43	94%	76%								
			0:42										
			0:34										
-102.7	102.3		0:24										
		5.0	0:44	(1.5)	(1.0)	RUN-17							
			0:57	30%	20%								

TURKEY POINT COL CORE TURKEY POINT GPJ TURKEY POINT COL GDF 5/30/08

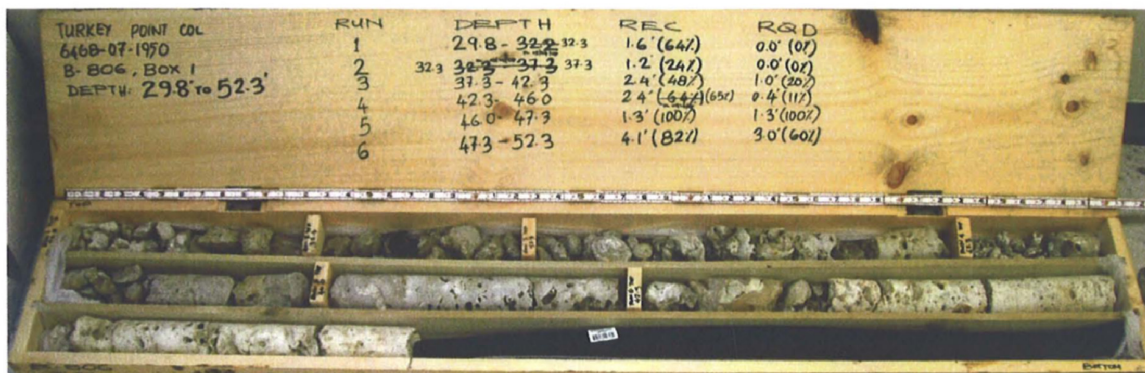


SHEET 2 OF 2

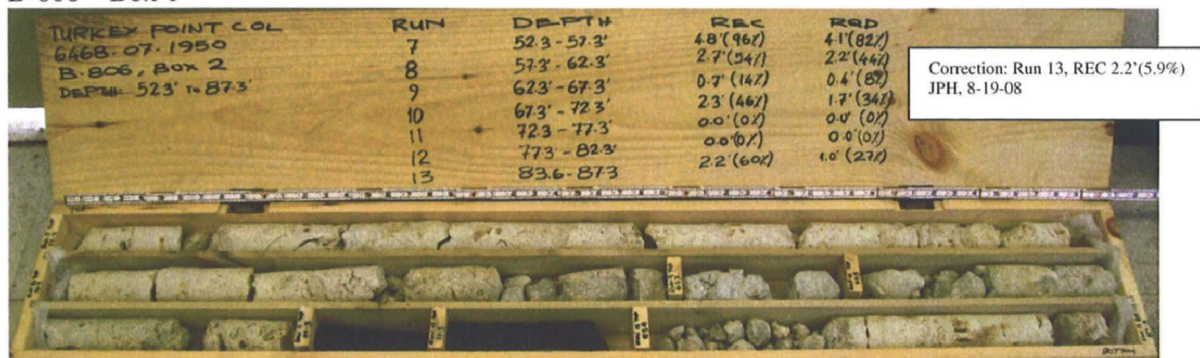
BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: H. Lyatuu/B. Taylor
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 Marsh Buggy	DRILLER: D. White/ R. Hall	GROUND WATER (ft)
BORING NO.: B-806	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -0.4 ft (NAVD88)	NORTHING: 395,289 US ft (NAD83/90)	EASTING: 877,237 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 127.4 ft	CASING DEPTH: 4" to 40.0', 3" to 120.0'	HAMMER (ID): 140 lb. Auto (893)	
DATE STARTED: 3/23/08	COMPLETED: 3/25/08	CORE SIZE: HQ3	CORE BARREL TYPE: Triple Tube Wireline (Split inner liners)

ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	REC (ft) %	RQD (ft) %	SAMP. NO.	REC (ft) %	RQD (ft) %	LOG	DESCRIPTION AND REMARKS
										Continued from previous page
-107.7	107.3	5.0	1:07 0:27 0:24	(3.9) 78%	(2.5) 50%	RUN-18				LIMESTONE, boundstone, white (10YR8/1), hard, indurated, few vugs, fossiliferous, trace fine grained sand, strong HCl reaction (Lower Fort Thompson Formation) (continued) 107.3ft: hard to moderately hard, indurated to moderately indurated
-112.7	112.3	5.0	1:04 0:54 1:34 1:24	(1.2) 24%	(0.4) 8%	RUN-19				
-117.7	117.3		0:54 0:31 0:15 0:38 0:26				(0.0) 0%	(NA)		Silty SAND (SM), light gray (10YR7/1), to very pale brown (10YR7/4), medium dense, wet, fine grained sand, strong HCl reaction (Tamiami Formation) Coring Terminated at Elevation -117.7

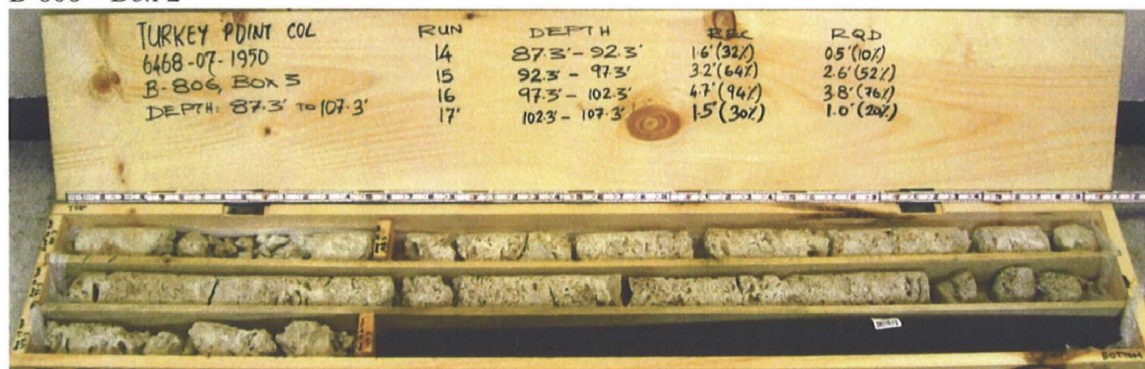
TURKEY POINT COL CORE TURKEY POINT GPJ TURKEY POINT COL.GDI 5:30 08



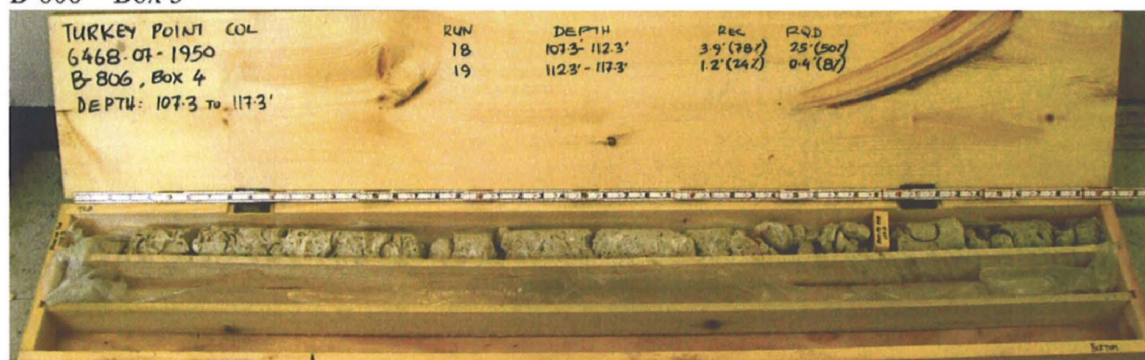
B-806 - Box 1



B-806 - Box 2



B-806 - Box 3



B-806 - Box 4



GEOTECHNICAL BORING LOG

Prepared By 2022 Date 5-30-08Checked By 1711 Date 5-30-08

SHEET 1 OF 2

BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade		GEOLOGIST: H. Lyatuu							
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 Marsh Buggy		DRILLER: D. White/ R. Hall		GROUND WATER (ft)							
BORING NO.: B-807		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR. NA							
GROUND ELEV.: -0.7 ft (NAVD88)		NORTHING: 395,278 US ft (NAD83/90)		EASTING: 875,988 US ft (NAD83/90)		24 HR. NA							
TOTAL DEPTH: 128.5 ft		BORING DIAMETER: 4" to 20.0', 3" to 128.5'		CASING DEPTH: 4" to 20.0', 3" to 127.0'		HAMMER (ID): 140 lb. Auto (893)							
DATE STARTED: 3/25/08		COMPLETED: 4/2/08		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			
-0.7					Ground Surface								
-0.7	0.0	WOH	WOH	WOH	0						807-1		0.0
-3.2	2.5										807-2		
-5.7	5.0	WOH	WOH	3							807-3		
-8.2	7.5	7	7	5							807-4		
-10.7	10.0	5	4	3							807-5		
-13.2	12.5	4	4	3							807-6		
-15.7	15.0	19	5	14							807-7		
-19.8	19.1	8	16	10							807-8		
-20.7	20.0	42	50/0.4								RUN-1		
-22.7	22.0										RUN-2		
-26.2	25.5										RUN-3		
-27.7	27.0										RUN-4		
-31.2	30.5										RUN-5		
-32.7	32.0										RUN-6		
-37.7	37.0										RUN-7		
-42.7	42.0										RUN-8		
-47.7	47.0										RUN-9		
-52.7	52.0										RUN-10		
-56.4	55.7										RUN-11		
-57.7	57.0										RUN-12		
-62.7	62.0										RUN-13		
-67.7	67.0										RUN-14		
-72.7	72.0										RUN-15		

SEE LEGEND FOR ROCK HARDNESS CRITERIA BASED ON SPT DATA

92/0.9

27.0

47.0

TURKEY POINT COL BORE TURKEY POINT COL GDT 530.08



SHEET 2 OF 2

BECHTEL PROJECT NO.: 25409					MACTEC PROJECT NO.: 6468-07-1950					COUNTY: Miami-Dade		GEOLOGIST: H. Lyatuu			
SITE DESCRIPTION: Turkey Point COL					DRILL MACHINE: CME-550 Marsh Buggy					DRILLER: D. White/ R. Hall				GROUND WATER (ft)	
BORING NO.: B-807					DRILL METHOD: Mud Rotary/ Core					SAMPLE METHODS: SPT/Core				0 HR. NA	
GROUND ELEV.: -0.7 ft (NAVD88)					NORTHING: 395,278 US ft (NAD83/90)					EASTING: 875,988 US ft (NAD83/90)				24 HR. NA	
TOTAL DEPTH: 128.5 ft			BORING DIAMETER: 4" to 20.0', 3" to 128.5'					CASING DEPTH: 4" to 20.0', 3" to 127.0'				HAMMER (ID): 140 lb. Auto (893)			
DATE STARTED: 3/25/08			COMPLETED: 4/2/08			CORE SIZE: HQ3			BITS USED: 2 15/16" Tricone						
ELEV.	DEPTH	BLOW COUNT			BLOWS PER FOOT					SAMP.	MOI	LOG	SOIL AND ROCK DESCRIPTION		
(ft)	(ft)	0.5ft	0.5ft	0.5ft	0	20	40	60	80	100				NO	
-75.5					Continued from previous page										
-77.7	77.0										RUN-16		LIMESTONE, boundstone, white (10YR8/1), moderately hard to hard, moderately indurated to indurated, few to little vugs, fossiliferous, strong HCl reaction (Lower Fort Thompson Formation) (continued) 77.0 to 108.0ft: possible interbedded sand layers		
-82.7	82.0										RUN-17				
-87.7	87.0												87.0ft: Alternate sampling method between coring and SPT 87.0ft: white (7.5YR8/1), hard 88.5ft: soft to moderately hard, friable to moderately indurated 92.0ft: white (10YR8/1), moderately hard, moderately indurated		
-89.2	88.5	10	14	50/0.5							807-9				
-92.7	92.0										RUN-18				
													97.0ft: very soft		
-97.7	97.0										RUN-19				
-99.2	98.5	15	1	15							807-10				
											RUN-20		102.2 to 103.5ft: silty sand, light greenish gray (10GY7/1), loose, wet, fine grained sand, strong HCl reaction		
-102.7	102.0														
-104.2	103.5	8	5	2							807-11A&B				
											RUN-21		107.0ft: LIMESTONE, boundstone, white (10YR8/1), very soft, wet, fossiliferous, trace fine grained sand, strong HCl reaction 108.5ft: hard, indurated, few vugs		
-107.7	107.0														
-109.2	108.5	1	1	8							807-12				
											RUN-22		112.0ft: moderately hard, moderately indurated		
-112.7	112.0														
											RUN-23		117.0ft: little vugs		
-117.7	117.0														
											RUN-24		122.0ft: trace vugs		
-122.7	122.0														
											RUN-25		POORLY SORTED SAND (SP), light gray (N7/1), medium dense, wet, fine grained sand, weak HCl reaction, with interbedded limestone (Tamiami Formation)		
-127.7	127.0														
		30	10	8							807-13A&B		Boring Terminated at Elevation -129.2 ft		



SHEET 1 OF 2

BECHTEL PROJECT NO.: 25409				MACTEC PROJECT NO.: 6468-07-1950				COUNTY: Miami-Dade		GEOLOGIST: H. Lyatuu			
SITE DESCRIPTION: Turkey Point COL				DRILL MACHINE: CME-550 Marsh Buggy				DRILLER: D. White/ R. Hall				GROUND WATER (ft)	
BORING NO.: B-807				DRILL METHOD: Mud Rotary/ Core				SAMPLE METHODS: SPT/Core				0 HR. NA	
GROUND ELEV.: -0.7 ft (NAVD88)				NORTHING: 395,278 US ft (NAD83/90)				EASTING: 875,988 US ft (NAD83/90)		24 HR. NA			
TOTAL DEPTH: 128.5 ft				CASING DEPTH: 4" to 20.0', 3" to 127.0'						HAMMER (ID): 140 lb. Auto (893)			
DATE STARTED: 3/25/08		COMPLETED: 4/2/08		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 @ 20.0 ft	
-20.7	20.0	2.0	2.01 1:13	(0.6) 30%	(0.0) 0%		RUN-1	(1.9) 27%	(0.6) 9%				LIMESTONE, boundstone, white (10YR8/1), very soft, wet, fossiliferous, strong HCl reaction (Miami Formation) (continued)
-22.7	22.0	3.5	0.20 0:15 0:17	(0.3) 9%	(0.0) 0%		RUN-2						20.0ft: moderately hard, friable to moderately indurated, few vugs, trace fine grained sand
-26.2	25.5		3:59/0.5										25.5ft: cemented sand zone, greenish gray (5GY6/1), moderately hard, moderately indurated, trace shells, strong HCl reaction
-27.7	27.0	1.5	1:57	(1.0) 67%	(0.6) 40%		RUN-3						
		3.5	0:57/0.5	(3.5) 100%	(3.5) 100%		RUN-4	(19.7) 99%	(17.7) 89%				LIMESTONE, boundstone, white (10YR8/1), moderately hard to medium hard, indurated to moderately indurated, few sand-filled vugs, fossiliferous, strong HCl reaction (Upper Fort Thompson Formation)
-31.2	30.5		1:32 1:10 1:15										
-32.7	32.0	1.5	0:52/0.5	(1.5) 100%	(1.5) 100%		RUN-5						30.5ft: hard, indurated, coralline
		5.0	2:27 1:17/0.5	(4.7) 94%	(4.3) 86%		RUN-6						32.0ft: recrystallized calcite
			1:59 1:22 1:16 1:16										
-37.7	37.0	5.0	1:05	(5.0) 100%	(3.9) 78%		RUN-7						37.0ft: little vugs
			2:18 1:18 2:58 1:48										
-42.7	42.0	5.0	1:28	(5.0) 100%	(4.5) 90%		RUN-8						42.0ft: light gray (10YR7/1), trace shell molds
			1:08 1:13 1:20 1:37 0:56										
-47.7	47.0	5.0	0:26 1:33 1:40 1:40 0:26	(3.4) 68%	(1.9) 38%		RUN-9	(31.6) 41%	(11.6) 15%				LIMESTONE, boundstone, white (10YR8/1), moderately hard to hard, moderately indurated to indurated, few to little vugs, fossiliferous, strong HCl reaction (Lower Fort Thompson Formation)
-52.7	52.0	3.7	1:42 1:21 2:47	(1.7) 46%	(0.0) 0%		RUN-10						52.0ft: hard, indurated, few shell molds
-56.4	55.7		1:59/0.7										
-57.7	57.0	1.3	0:33	(1.2) 92%	(1.2) 92%		RUN-11						55.7ft: trace shell molds and casts
		5.0	0:24/0.3	(4.7) 94%	(4.0) 80%		RUN-12						57.0ft: white (10YR8/1), to light gray (10YR7/1), moderately hard to hard, moderately indurated to indurated, trace fine grained sand
			0:44 0:33 1:00 1:18 1:11										
-62.7	62.0	5.0	0:25 0:25 0:19 0:25 0:29	(1.5) 30%	(0.0) 0%		RUN-13						62.0ft: moderately hard, moderately indurated, possible interbedded sand layers
-67.7	67.0		1:30 1:04 1:03 0:26 0:12	(2.6) 52%	(1.3) 26%		RUN-14						
		5.0	1:07 1:35 2:05 2:32 0:41	(3.6) 72%	(1.0) 20%		RUN-15						
-72.7	72.0		1:21 0:30 0:10 0:45 0:35	(0.0) 0%	(0.0) 0%		RUN-16						77.0 to 108.0ft: possible interbedded sand layers
		5.0	0:50 0:36 1:09 2:35 0:40	(0.0) 0%	(0.0) 0%		RUN-17						
-82.7	82.0		N=64/1.0				807-9						87.0ft: Alternate sampling method between coring and SPT
-87.7	87.0		0:39 1:16 2:17 0:38/0.5	(1.0) 29%	(0.0) 0%		RUN-18						87.0ft: white (7.5YR8/1), hard
-89.2	88.5	3.5	1:03 0:23	(0.2) 4%	(0.0) 0%		RUN-19						88.5ft: soft to moderately hard, friable to moderately indurated
-92.7	92.0	5.0											92.0ft: white (10YR8/1), moderately hard, moderately indurated

TURKEY POINT COL CORE TURKEY POINT GPJ TURKEY POINT COL GDI 5/30/08



SHEET 2 OF 2

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: H. Lyatuu
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 Marsh Buggy	DRILLER: D. White/ R. Hall	GROUND WATER (ft)
BORING NO.: B-807	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -0.7 ft (NAVD88)	NORTHING: 395,278 US ft (NAD83/90)	EASTING: 875,988 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 128.5 ft	CASING DEPTH: 4" to 20.0', 3" to 127.0'	HAMMER (ID): 140 lb. Auto (893)	
DATE STARTED: 3/25/08	COMPLETED: 4/2/08	CORE SIZE: HQ3	CORE BARREL TYPE: Triple Tube Wireline (Split inner liners)

ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	REC (ft) %	ROD (ft) %	SAMP. NO.	REC (ft) %	ROD (ft) %	L O G	DESCRIPTION AND REMARKS
										Continued from previous page
-97.7	97.0		0.11 0.42 0.35			807-10				LIMESTONE, boundstone, white (10YR8/1), moderately hard to hard, moderately indurated to indurated, few to little vugs, fossiliferous, strong HCl reaction (Lower Fort Thompson Formation) (continued) 97.0ft: very soft
-99.2	98.5	3.5	0.44 0.35 0.40	(0.0) 0%	(0.0) 0%	RUN-20				
-102.7	102.0		0.20/0.5			807-11A&B				102.2 to 103.5ft: silty sand, light greenish gray (10GY7/1), loose, wet, fine grained sand, strong HCl reaction
-104.2	103.5	3.5	0.10 0.08 0.15	(0.0) 0%	(0.0) 0%	RUN-21				
-107.7	107.0		0.06/0.5			807-12				107.0ft: LIMESTONE, boundstone, white (10YR8/1), very soft, wet, fossiliferous, trace fine grained sand, strong HCl reaction 108.5ft: hard, indurated, few vugs
-109.2	108.5	3.5	1.16 3.03 2.24	(2.9) 83%	(1.4) 40%	RUN-22				
-112.7	112.0	5.0	1.29/0.5	(4.6) 92%	(0.8) 16%	RUN-23				112.0ft: moderately hard, moderately indurated
-117.7	117.0	5.0	2.00 1.30 1.30 1.03 2.20	(2.7) 54%	(0.0) 0%	RUN-24				117.0ft: little vugs
-122.7	122.0	5.0	1.37 2.01 1.14 1.54 1.42	(1.5) 30%	(0.0) 0%	RUN-25				122.0ft: trace vugs
-127.7	127.0						(0.0) 0%	(NA)		-124.7 POORLY SORTED SAND (SP), light gray (N7/1), medium dense, wet, fine grained sand, weak HCl reaction, with interbedded limestone (Tamiami Formation) -127.7 Coring Terminated at Elevation -127.7

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