



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-812		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR. NA							
GROUND ELEV.: -1.4 ft (NAVD88)		NORTHING: 398,913 US ft (NAD83/90)		EASTING: 875,043 US ft (NAD83/90)		24 HR. NA							
TOTAL DEPTH: 128.7 ft		BORING DIAMETER: 4" to 128.7"		CASING DEPTH: 4" to 35.0'		HAMMER (ID):140 lb. Auto (893)							
DATE STARTED: 4/19/08		COMPLETED: 4/22/08		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				
-76.2					Continued from previous page								
-78.6	77.2												73.7ft: medium hard LIMESTONE, boundstone, white (10YR8/1), moderately hard, moderately indurated, few vugs, fossiliferous, strong HCl reaction (Lower Fort Thompson Formation) (continued)
-83.6	82.2												82.2ft: hard
-83.8	82.4	50/2								50/2			82.4ft: medium hard
-88.6	87.2												87.2ft: soft to moderately hard, friable to moderately indurated, sandy
-93.6	92.2												
-98.6	97.2												97.2ft: medium hard, moderately indurated
-103.6	102.2												102.2ft: soft to moderately hard, friable to moderately indurated
-108.6	107.2												107.2ft: medium hard, moderately indurated
-113.6	112.2												
-118.6	117.2	5	7	12									Silty SAND (SM), light gray (7.5YR7/1), medium dense, wet, fine grained sand, weak HCl reaction (Tamiami Formation)
-128.6	127.2	4	4	3									127.2ft: very pale brown (10YR7/3), loose
													Boring Terminated at Elevation -130.1 ft

TURKEY POINT BORE TURKEY POINT COL.GDT 5:30P8



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) 0 HR. NA 24 HR. NA
BORING NO.: B-812	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	
GROUND ELEV.: -1.4 ft (NAVD88)	NORTHING: 398,913 US ft (NAD83/90)	EASTING: 875,043 US ft (NAD83/90)	
TOTAL DEPTH: 128.7 ft	CASING DEPTH: 4" to 35.0'	HAMMER (ID): 140 lb. Auto (893)	

DATE STARTED: 4/19/08	COMPLETED: 4/22/08	CORE SIZE: HQ3	CORE BARREL TYPE: Triple Tube Wireline (Split inner liners)
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ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	RUN		SAMP. NO.	STRATA		LOG	DESCRIPTION AND REMARKS
				REC (%)	RQD (%)		REC (%)	RQD (%)		
										Begin Coring @ 34.2 ft
-35.6	34.2	3.0	1:52 1:16	(1.9) 63%	(0.9) 30%	RUN-1	(12.5) 82%	(6.8) 38%		LIMESTONE, boundstone, white (10YR8/1), hard, wet, trace shell fragments, trace coralline, strong HCl reaction (Upper Fort Thompson Formation)
-38.6	37.2	5.0	1:10 0:31	(3.5) 70%	(1.4) 28%	RUN-2				34.2ft: indurated, few vugs, fossiliferous
-43.6	42.2	5.0	1:12 0:53 0:34			RUN-3				37.2ft: white (10YR8/1), to pale olive (5Y6/3), hard to medium hard, indurated to moderately indurated
-48.6	47.2	5.0	1:28 0:57 1:06 1:45 1:44	(4.9) 98%	(3.1) 62%	RUN-4				42.2ft: gray (5YR6/1), to white (10YR8/1), hard, indurated, coralline
-53.6	52.2	5.0	1:30 3:50 2:20 1:30 0:50	(3.5) 70%	(1.2) 24%	RUN-5	(20.9) 33%	(6.2) 10%		47.2ft: white (10YR8/1) and gray (5Y6/1) to 49.4ft
-58.6	57.2	5.0	0:35 0:15 0:27 0:31 0:54	(1.7) 34%	(0.4) 8%	RUN-6				LIMESTONE, boundstone, white (10YR8/1), moderately hard, moderately indurated, few vugs, fossiliferous, strong HCl reaction (Lower Fort Thompson Formation)
-63.6	62.2	5.0	1:10 0:45 0:30 0:15 0:54	(0.3) 6%	(0.0) 0%	RUN-7				52.2ft: medium hard
-65.1	63.7	3.5	0:20 0:25 0:26	(0.6) 17%	(0.0) 0%	RUN-8				52.2 to 87.2ft: possible interbedded sand layers: based on recovery and drilling rates
-68.6	67.2	5.0	0:20/0.5 0:17 0:27 0:32 0:55 0:23	(0.6) 12%	(0.0) 0%	RUN-9				57.2ft: moderately hard, trace vugs
-73.6	72.2	5.0	N=7			812-12				62.2ft: Alternate sampling method between coring and SPT
-75.1	73.7	3.5	0:20 1:40 1:37	(0.6) 26%	(0.0) 0%	RUN-10				62.2ft: very soft
-78.6	77.2	5.0	0:50/0.5 0:44 0:44 0:49 1:09 0:48	(1.0) 20%	(0.0) 0%	RUN-11				63.7ft: medium hard, moderately indurated
-83.6	82.2	4.8	N=50/2 0:51 0:33 0:06 0:30	(2.4) 50%	(0.9) 19%	812-14 RUN-11				72.2ft: very soft
-83.8	82.4	5.0	1:03/0.8 1:20 1:08 1:05 0:30 0:41	(3.3) 66%	(2.8) 56%	RUN-12				73.7ft: medium hard
-88.6	87.2	5.0	0:40 0:23 0:12 0:10 0:15	(1.9) 38%	(0.8) 16%	RUN-13				82.2ft: hard
-93.6	92.2	5.0	0:12 0:30 0:25 0:38 0:40	(1.4) 28%	(0.0) 0%	RUN-14				82.4ft: medium hard
-98.6	97.2	5.0	0:38 0:32 0:17 0:45 0:38	(3.0) 60%	(0.5) 10%	RUN-15			87.2ft: soft to moderately hard, friable to moderately indurated, sandy	
-103.6	102.2	5.0	0:30 0:25	(1.8) 60%	(0.0) 0%	RUN-16			97.2ft: medium hard, moderately indurated	
-108.6	107.2	5.0	0:30 0:25	(1.8) 60%	(0.0) 0%	RUN-16			102.2ft: soft to moderately hard, friable to moderately indurated	
		5.0	0:30 0:25	(1.8) 60%	(0.0) 0%	RUN-16			107.2ft: medium hard, moderately indurated	

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



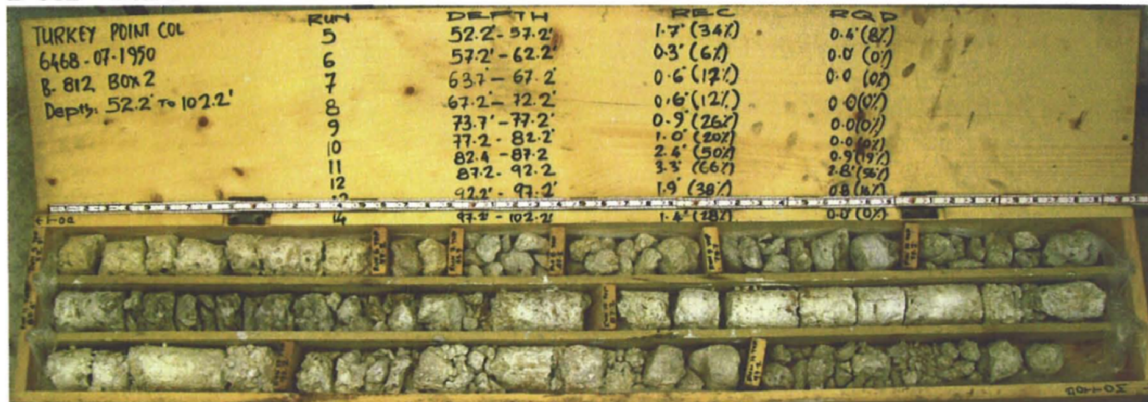
BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade		GEOLOGIST: H. Lyatuu	
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 Marsh Buggy		DRILLER: D. White/ R. Hall		GROUND WATER (ft)	
BORING NO.: B-812		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR. NA	
GROUND ELEV.: -1.4 ft (NAVD88)		NORTHING: 398,913 US ft (NAD83/90)		EASTING: 875,043 US ft (NAD83/90)		24 HR. NA	
TOTAL DEPTH: 128.7 ft		CASING DEPTH: 4" to 35.0'		HAMMER (ID): 140 lb. Auto (893)			
DATE STARTED: 4/19/08		COMPLETED: 4/22/08		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) %		
			0.20 0.30 0.25	36%	0%					Continued from previous page
-113.6	112.2	5.0	0.40 0.30 0.30 0.20 0.20	(0.7) 14%	(0.0) 0%	RUN-17	(0.0) 0%	(NA)		LIMESTONE, boundstone, white (10YR8/1), moderately hard, moderately indurated, few vugs, fossiliferous, strong HCl reaction (Lower Fort Thompson Formation) (continued)
-118.6	117.2									Silty SAND (SM), light gray (7.5YR7/1), medium dense, wet, fine grained sand, weak HCl reaction (Tamiami Formation)
										Coring Terminated at Elevation -118.6

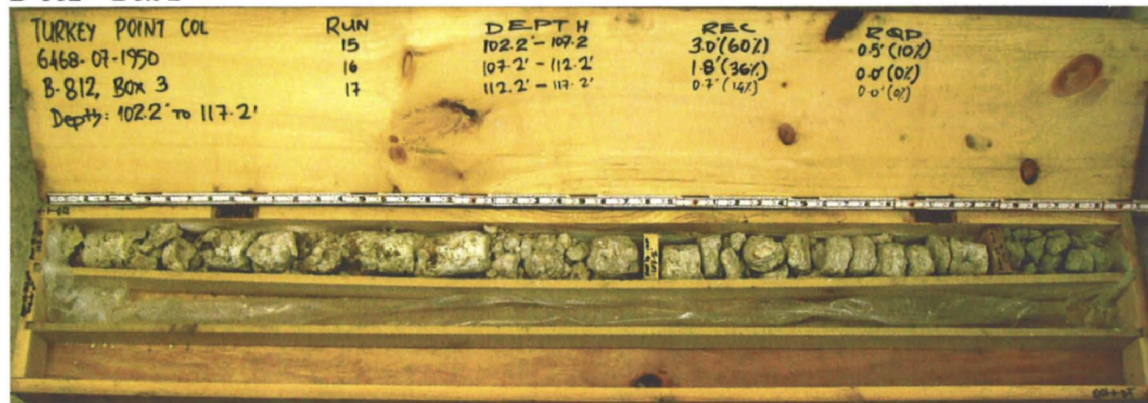
TURKEY POINT COL CORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 5:30 08



B-812 - Box 1



B-812 - Box 2



B-812 - Box 3



GEOTECHNICAL BORING LOG

Prepared By JPT Date 5-30-08

Checked By JPT 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-813		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR. NA								
GROUND ELEV.: -1.3 ft (NAVD88)		NORTHING: 399,048 US ft (NAD83/90)		EASTING: 876,097 US ft (NAD83/90)		24 HR. NA								
TOTAL DEPTH: 126.5 ft		BORING DIAMETER: 6" to 126.5"		CASING DEPTH: 6" to 15.0'		HAMMER (ID): 140 lb. Auto (893)								
DATE STARTED: 5/13/08		COMPLETED: 5/15/08		CORE SIZE: PQ3		BITS USED: 5 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	
-1.3					Ground Surface								0.0	
-1.3	0.0	WOH	WOH	WOH							813-1	Sandy FAT CLAY (CH), dark gray (10YR5/1), to gray (10YR6/1), very soft, wet, some sand, trace shell fragments, fine grained sand, trace shells, strong HCl reaction	-1.3	2.0
-3.8	2.5	WOH	WOH	10							813-2		-3.3	3.5
-6.3	5.0	9	14	9							813-3	MUCK, very dark gray (10YR3/1), very soft, wet, trace shell fragments, mostly organic, weak HCl reaction		
-8.8	7.5	6	8	17							813-4			
-11.3	10.0	3	7	5							813-5	LIMESTONE, boundstone, white (10YR8/1), very soft, wet, sandy, strong HCl reaction, fossiliferous, oolitic (Miami Formation)		
-13.8	12.5	12	9	9							813-6		5.0ft: soft	
-16.3	15.0	10	11	12							813-7	10.0ft: very soft		
-21.3	20.0	4	3	3							813-8	15.0ft: white (7.5YR8/1), soft, recrystallized calcite, trace fine grained sand		
-26.3	25.0	16	6	26							813-9	20.0ft: white (2.5Y8/1), very soft		
-31.3	30.0										813-10	25.0ft: medium hard, trace cemented sand	-29.3	28.0
-32.8	31.5	26	28	50/0.1							RUN-1	LIMESTONE, boundstone, white (2.5Y8/1), hard, wet, fossiliferous, strong HCl reaction (Upper Fort Thompson Formation)		
-34.3	33.0										RUN-2	31.5ft: Switch sampling method to coring		
											RUN-3	31.5ft: moderately hard to hard, moderately indurated to indurated, few vugs, coralline		
-39.3	38.0										RUN-4	33.0ft: white (10YR8/1), hard, indurated, little vugs		
-44.3	43.0										RUN-5	38.0ft: few vugs		
-49.3	48.0										RUN-6	43.0ft: little vugs		
-54.3	53.0										RUN-7	48.0ft: white (10YR8/1), to gray (10YR6/1) from 52.5 to 53.0ft, medium hard to hard, moderately indurated to indurated, few vugs	-54.3	53.0
-59.3	58.0										RUN-8	LIMESTONE, boundstone, white (10YR8/1), medium hard, moderately indurated, few vugs, fossiliferous, trace cemented sand, strong HCl reaction (Lower Fort Thompson Formation)		
-64.3	63.0										RUN-9	58.0ft: medium hard to moderately hard, moderately indurated to indurated		
-69.3	68.0										RUN-10	63.0ft: moderately hard, moderately indurated, trace fine grained sand		
-74.3	73.0											68.0ft: medium hard		

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: H. Lyatuu						
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 Marsh Buggy		DRILLER: D. White/ R. Hall		GROUND WATER (ft)						
BORING NO.: B-813		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR.	NA					
GROUND ELEV.: -1.3 ft (NAVD88)		NORTHING: 399,048 US ft (NAD83/90)		EASTING: 876,097 US ft (NAD83/90)		24 HR.	NA					
TOTAL DEPTH: 126.5 ft		BORING DIAMETER: 6" to 126.5'		CASING DEPTH: 6" to 15.0'		HAMMER (ID): 140 lb. Auto (893)						
DATE STARTED: 5/13/08		COMPLETED: 5/15/08		CORE SIZE: PQ3		BITS USED: 5 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			
-76.1					Continued from previous page							
-79.3	78.0											LIMESTONE, boundstone, white (10YR8/1), medium hard, moderately indurated, few vugs, fossiliferous, trace cemented sand, strong HCl reaction (Lower Fort Thompson Formation) (continued) 78.0ft: hard, indurated
-84.3	83.0											83.0ft: moderately hard, moderately indurated, few shell molds and casts
-89.3	88.0											88.0ft: medium hard
-94.3	93.0											
-99.3	98.0											
-104.3	103.0											103.0ft: moderately hard, mostly shell molds and casts
-109.3	108.0											108.0ft: moderately hard to medium hard
-114.3	113.0											113.0ft: medium hard, few shell molds and casts
-117.3	116.0											
-119.3	118.0											116.0ft: trace vugs
												Silty SAND (SM), greenish gray (10Y6/1), medium dense, wet, fine grained sand, strong HCl reaction (Tamiami Formation)
-126.3	125.0	7	7	11								125.0ft: Switch sampling method to SPT
												Boring Terminated at Elevation -127.8 ft

TURKEY POINT BORE TURKEY POINT.GPJ TURKEY POINT.COL.GDT 5:30 US



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-813		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR. NA	
GROUND ELEV.: -1.3 ft (NAVD88)		NORTHING: 399,048 US ft (NAD83/90)		EASTING: 876,097 US ft (NAD83/90)		24 HR. NA	
TOTAL DEPTH: 126.5 ft		CASING DEPTH: 6" to 15.0'				HAMMER (ID): 140 lb. Auto (893)	
DATE STARTED: 5/13/08		COMPLETED: 5/15/08		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		LOG	DESCRIPTION AND REMARKS
				REC (ft) %	RQD (ft) %		REC (ft) %	RQD (ft) %		
										Begin Coring @ 31.5 ft
-32.8	31.5	1.5	1:35	(1.5)	(1.0)	RUN-1	(21.5)	(19.0)		LIMESTONE, boundstone, white (2.5Y8/1), hard, wet, fossiliferous, strong HCl reaction (Upper Fort Thompson Formation) (continued) 31.5ft: moderately hard to hard, moderately indurated to indurated, few vugs, coralline 33.0ft: white (10YR8/1), hard, indurated, little vugs
-34.3	33.0	5.0	0:42/0.5	100%	67%	RUN-2	100%	88%		
			1:46	(5.0)	(3.9)					
			1:34	100%	78%					
			2:02							
			3:20							
-39.3	38.0	5.0	2:58							38.0ft: few vugs
			1:33	(5.0)	(5.0)	RUN-3				
			1:58	100%	100%					
			1:59							
			2:15							
-44.3	43.0	5.0	2:47							43.0ft: little vugs
			1:48	(5.0)	(4.9)	RUN-4				
			1:44	100%	98%					
			2:09							
			2:05							
-49.3	48.0	5.0	2:00							48.0ft: white (10YR8/1), to gray (10YR6/1) from 52.5 to 53.0ft, medium hard to hard, moderately indurated to indurated, few vugs
			1:34	(5.0)	(4.2)	RUN-5				
			0:30	100%	84%					
			0:57							
			0:50							
-54.3	53.0	5.0	1:18							53.0
			1:04	(4.7)	(2.9)	RUN-6	(52.4)	(26.5)		LIMESTONE, boundstone, white (10YR8/1), medium hard, moderately indurated, few vugs, fossiliferous, trace cemented sand, strong HCl reaction (Lower Fort Thompson Formation)
			0:48	94%	58%		82%	41%		
			0:52							
			0:28							
-59.3	58.0	5.0	1:04							58.0ft: medium hard to moderately hard, moderately indurated to indurated
			0:30	(4.2)	(2.7)	RUN-7				
			1:02	84%	54%					
			1:50							
			3:00							
-64.3	63.0	5.0	2:18							63.0ft: moderately hard, moderately indurated, trace fine grained sand
			1:03	(1.7)	(0.7)	RUN-8				
			0:10	34%	14%					
			0:11							
			0:15							
-69.3	68.0	5.0	0:41							68.0ft: medium hard
			0:53	(3.4)	(1.4)	RUN-9				
			0:42	68%	28%					
			0:50							
			1:23							
-74.3	73.0	5.0	1:50							
			1:58	(3.1)	(1.3)	RUN-10				
			3:00	62%	26%					
			4:15							
			1:58							
-79.3	78.0	5.0	3:03							78.0ft: hard, indurated
			1:30	(5.0)	(5.0)	RUN-11				
			1:07	100%	100%					
			2:00							
			1:51							
-84.3	83.0	5.0	1:26							83.0ft: moderately hard, moderately indurated, few shell molds and casts
			1:55	(4.7)	(1.8)	RUN-12				
			0:24	94%	36%					
			0:43							
			1:22							
-89.3	88.0	5.0	2:01							88.0ft: medium hard
			1:35	(5.0)	(1.5)	RUN-13				
			1:03	100%	30%					
			1:09							
			0:45							
-94.3	93.0	5.0	1:02							
			0:37	(4.3)	(2.0)	RUN-14				
			0:27	86%	40%					
			1:07							
			0:57							
-99.3	98.0	5.0	0:27							
			0:15	(4.1)	(1.3)	RUN-15				
			0:45	82%	26%					
			0:40							
			0:55							
-104.3	103.0	5.0	0:43							103.0ft: moderately hard, mostly shell molds and casts
			0:45	(4.5)	(3.0)	RUN-16				
			0:30	90%	60%					
			0:35							

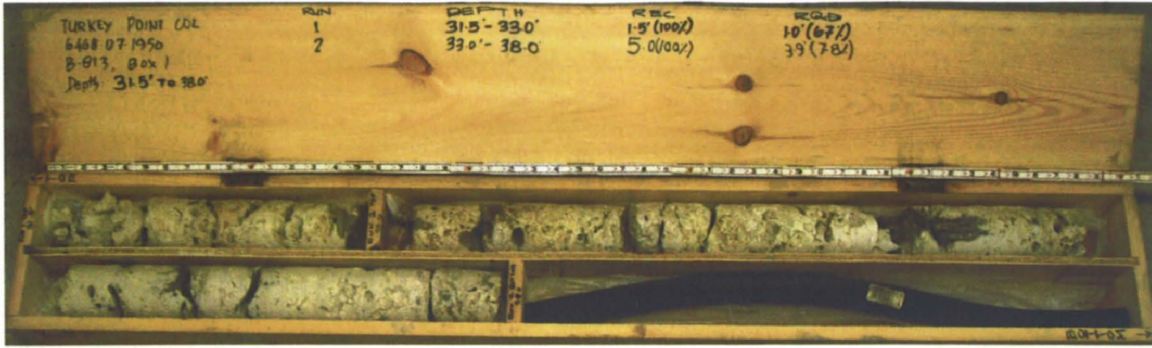
TURKEY POINT COL CORE TURKEY POINT GPJ TURKEY POINT COL GDT 5-30-08



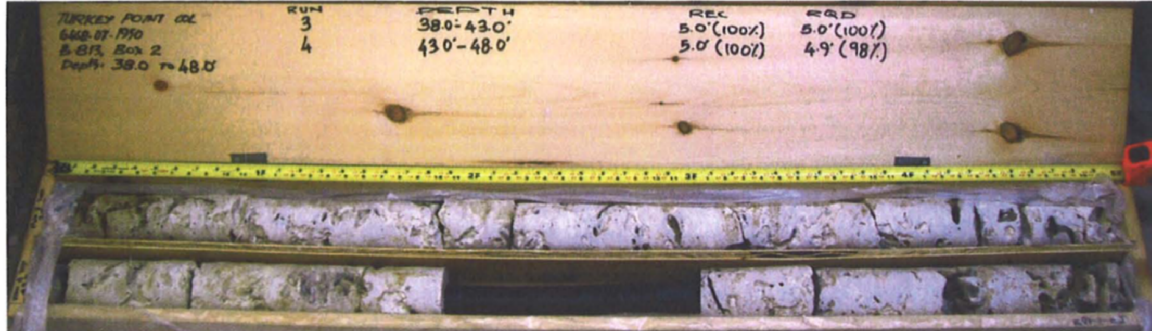
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SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 Marsh Buggy		DRILLER: D. White/ R. Hall		GROUND WATER (ft)	
BORING NO.: B-813		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR. NA	
GROUND ELEV.: -1.3 ft (NAVD88)		NORTHING: 399,048 US ft (NAD83/90)		EASTING: 876,097 US ft (NAD83/90)		24 HR. NA	
TOTAL DEPTH: 126.5 ft		CASING DEPTH: 6" to 15.0'				HAMMER (ID): 140 lb. Auto (893)	
DATE STARTED: 5/13/08		COMPLETED: 5/15/08		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		LOG	DESCRIPTION AND REMARKS
				REC (ft) %	RQD (ft) %		REC (ft) %	RQD (ft) %		
										Continued from previous page
-109.3	108.0	5.0	0:47 0:37	(4.5) 90%	(2.5) 50%	RUN-17				LIMESTONE, boundstone, white (10YR8/1), medium hard, moderately indurated, few vugs, fossiliferous, trace cemented sand, strong HCl reaction (Lower Fort Thompson Formation) (continued) 108.0ft: moderately hard to medium hard
-114.3	113.0	3.0	0:30 0:50 0:30 0:40 1:00	(2.7) 90%	(0.4) 13%	RUN-18				113.0ft: medium hard, few shell molds and casts
-117.3	116.0	2.0	0:33 0:21 0:50	(0.5) 25%	(0.0) 0%	RUN-19				116.0ft: trace vugs
-119.3	118.0	5.0	1:08 0:48	(0.0) 0%	(0.0) 0%	RUN-20	(0.0) 0%	(NA)		Silty SAND (SM), greenish gray (10Y6/1), medium dense, wet, fine grained sand, strong HCl reaction (Tamiami Formation)
-124.3	123.0		0:29 0:23 0:29 0:16 0:31							Coring Terminated at Elevation -124.3

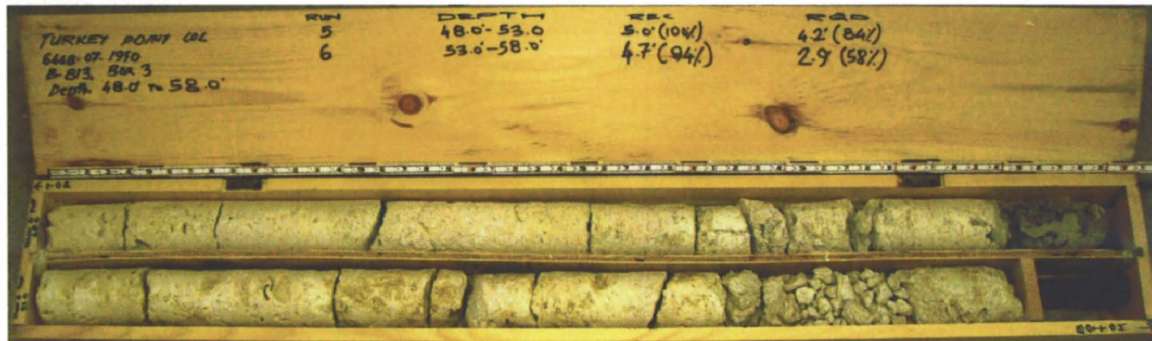
TURKEY POINT COL CORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 5:30:08



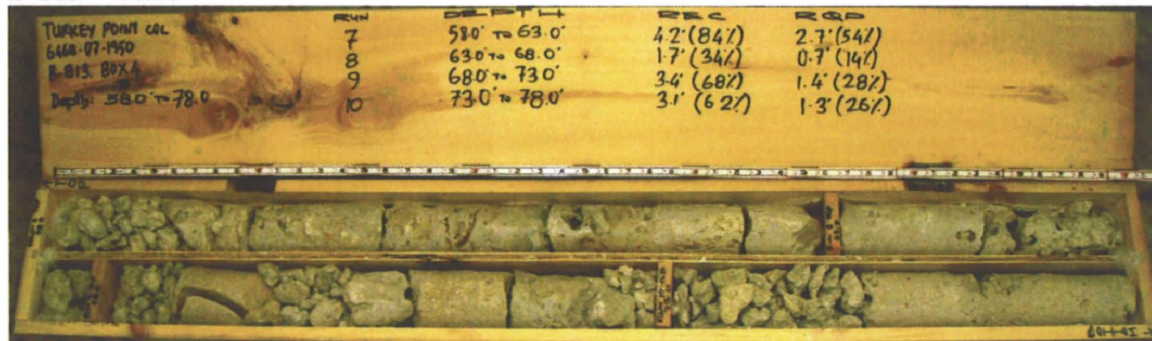
B-813 - Box 1



B-813 - Box 2



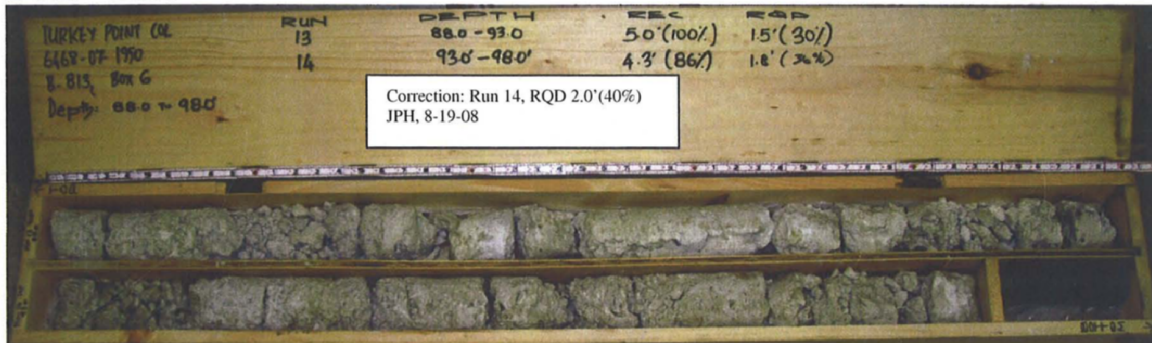
B-813 - Box 3



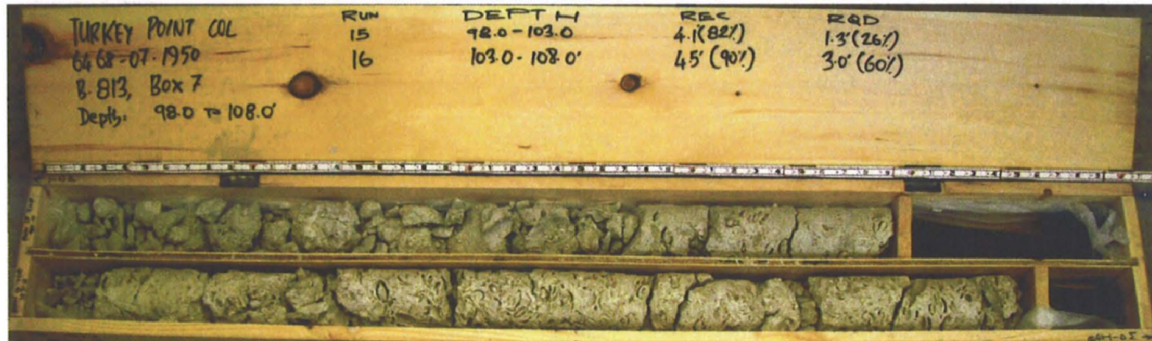
B-813 - Box 4



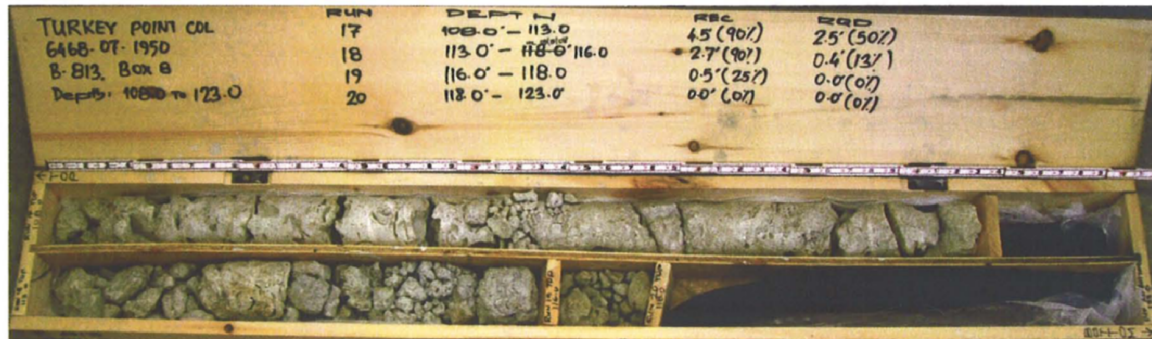
B-813 - Box 5



B-813 - Box 6



B-813 - Box 7



B-813 - Box 8



GEOTECHNICAL BORING LOG

Prepared By JPL Date 5-30-08

Checked By JML Date 5-30-08

SHEET 1 OF 3

BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade		GEOLOGIST: J. Liles							
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 (Miller)		DRILLER: R. White/ J. Dugger/ C. White		GROUND WATER (ft)							
BORING NO.: B-814		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR. NA							
GROUND ELEV.: 9.0 ft (NAVD88)		NORTHING: 399,139 US ft (NAD83/90)		EASTING: 877,405 US ft (NAD83/90)		24 HR. NA							
TOTAL DEPTH: 153.2 ft		BORING DIAMETER: 4" to 98.0', 3" to 153.2'		CASING DEPTH: 4" to 98.0'		HAMMER (ID): 140 lb. Auto (M06)							
DATE STARTED: 5/15/08		COMPLETED: 5/18/08		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
9.0					Ground Surface							9.0	0.0
6.3	2.7	7	5	2						814-1		POORLY GRADED SAND with gravel (SP), pale yellow (2.5Y8/2), dry, loose, some calcareous nodules, fine to medium grained sand, strong HCl reaction, limestone gravel (Spoil Material)	4.5
4.3	4.7	1	2	2						814-2		2.7ft: light gray (2.5Y7/2), very loose, medium grained sand	
2.1	6.9	3	2	1						814-3		POORLY GRADED GRAVEL (GP), pale yellow (2.5Y8/2), very loose, wet, trace fine grained sand, strong HCl reaction, limestone fragments (Spoil Material)	
-0.7	9.7	4	4	4						814-4		6.9ft: loose	
-3.2	12.2	6	1	1						814-5		9.7ft: very loose	
-6.1	15.1	1	WOR	WOR						814-6		MUCK, black (2.5Y2.5/1), very soft, wet, strong HCl reaction, mostly organic	15.1
		3	6	16						814-7		POORLY GRADED SAND with gravel (SP), pale yellow (2.5Y8/2), medium dense, wet, fine grained sand, strong HCl reaction, limestone fragments (Miami Formation)	18.0
-13.1	22.1	8	18	12						814-8		LIMESTONE, boundstone, light gray (2.5Y7/2), soft, wet, little sand, strong HCl reaction, oolitic	
-18.8	27.8	9	1	9						814-9		27.8ft: white (2.5Y8/1), very soft	
-23.4	32.4	3	2	1						814-10		POORLY GRADED SAND (SP), white (2.5Y8/1), very loose, wet, oolitic, coarse grained sand, some fine gravel-sized limestone fragments, strong HCl reaction	31.0
-28.7	37.7	3	7	8						814-11		37.7ft: medium dense, fine to coarse grained sand	40.0
-33.7	42.7	50/0.4								814-12		LIMESTONE, boundstone, pale yellow (2.5Y8/2), hard, wet, some coarse grained sand, strong HCl (Upper Fort Thompson Formation)	
-34.1	43.1	50/0.4								RUN-1		43.1ft: Switch sampling method to coring	
-37.1	46.1	50/0.4								RUN-2		43.1ft: medium hard to moderately hard, friable to moderately indurated, trace vugs	
-42.1	51.1	50/0.4								RUN-3		51.5ft: moderately hard to hard, moderately indurated to indurated	
-47.1	56.1	50/0.4								RUN-4		56.1ft: few vugs, recrystallized calcite	
-52.1	61.1	50/0.4								RUN-5		LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, trace vugs, recrystallized calcite, strong HCl reaction (Lower Fort Thompson Formation)	61.1
-57.1	66.1	50/0.4								RUN-6			
-62.1	71.1	50/0.4								RUN-7		71.1ft: few fine grained sand, few vugs	

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: 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-814		DRILL METHOD: Mud Rotary/ Core			SAMPLE METHODS: SPT/Core			0 HR.	NA			
GROUND ELEV.: 9.0 ft (NAVD88)		NORTHING: 399,139 US ft (NAD83/90)			EASTING: 877,405 US ft (NAD83/90)			24 HR.	NA			
TOTAL DEPTH: 153.2 ft		BORING DIAMETER: 4" to 98.0', 3" to 153.2'			CASING DEPTH: 4" to 98.0'			HAMMER (ID): 140 lb. Auto (M06)				
DATE STARTED: 5/15/08		COMPLETED: 5/18/08			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			
-65.8					Continued from previous page							
-67.1	76.1										RUN-8	LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, trace vugs, recrystallized calcite, strong HCl reaction (Lower Fort Thompson Formation) (continued) 76.1ft: moderately hard to hard, moderately indurated to indurated, trace vugs
-72.1	81.1										RUN-9	
-77.1	86.1										814-13	77.0 to 99.0ft: interbedded sand layers 81.0ft: hard, indurated, some sand 86.1ft: Switch sampling method to SPT 86.1ft: interbedded sand, very loose, fine grained sand, wet, strong HCl reaction 87.6ft: Switch sampling method to coring 87.6 to 88.1ft: rod drop 88.1ft: moderately hard, moderately indurated
-78.6	87.6	WOH	WOH	WOH							RUN-10	
-82.1	91.1										RUN-11	
-87.1	96.1										814-14	96.1ft: Switch sampling method SPT 96.1 to 99.0ft: POORLY GRADED SAND (SP), fine to coarse grained
-92.9	101.9	49	24	46							814-15	
-102.7	111.7	50/0.5									814-16	101.9ft: LIMESTONE, hard, some sand
-112.7	121.7	7	21	9							814-17	111.7ft: soft
-122.7	131.7	23	20	13							814-18	121.7ft: moderately hard
-132.7	141.7	11	7	10							814-19	117.0 to 126.0: POORLY GRADED SAND (SP), pale yellow (5Y7/4), medium dense, wet, fine grained sand, trace limestone fragments, strong HCl reaction (Tamiami Formation)
		7	7	9								141.1ft: greenish gray (10Y5/1)

TURKEY POINT COL BORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 5:30'08