



GEOTECHNICAL BORING LOG

Prepared By Date Checked By Date 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)		
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							
-1.0					Ground Surface												
-1.0	0.0	WOH	WOH	WOH	0						722-1			-1.0	0.0		
-3.5	2.5	18	15	16							722-2			-3.5	2.5		
-6.0	5.0	10	10	8							722-3						
-8.5	7.5	16	10	15							722-4						
-11.0	10.0	8	10	7							722-5						
-13.5	12.5	10	14	10							722-6						
-16.0	15.0	8	14	34							722-7						
-20.7	19.7	4	5	5							722-8						
-25.7	24.7	50/0.5									722-9			-25.5	24.5		
-26.2	25.2											50/0.5	RUN-1				
-29.2	28.2										RUN-2						
-34.2	33.2										RUN-3						
-39.2	38.2										RUN-4						
-44.2	43.2										RUN-5						
-49.2	48.2										RUN-6			-49.4	48.4		
-54.2	53.2										RUN-7						
-58.7	57.7										RUN-8						
-59.2	58.2										RUN-9						
-64.2	63.2										RUN-10						
-69.2	68.2										RUN-11						
-74.2	73.2										RUN-12						

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

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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.	
-75.8					Continued from previous page									
-79.2	78.2									RUN-13		(10YR7/4), hard to moderately hard, indurated to moderately indurated LESTONE, 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.GPJ TURKEY POINT COL.GDT 8-19-08



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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 REC. (ft) %		SAMP. NO.	STRATA REC. (ft) %		RQD (ft) %	L O G	DESCRIPTION AND REMARKS		
											Begin Coring @ 25.2 ft		
-26.2	25.2	3.0	5:16	(2.4)	(1.0)	RUN-1	(21.1)	(14.9)			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		2:12 0:54	80%	33%		91%	64%					
		5.0	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	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)	(0.0)	RUN-8					57.7ft: hard, indurated, no vugs		
-59.2	58.2		0:35/0.5	80%	0%	RUN-9					58.2ft: white (10YR8/1), to very pale brown (10YR7/4), hard to moderately hard, indurated to moderately indurated, trace vugs		
		5.0	1:34 0:43 2:56 2:04 2:32	(4.1) 82%	(2.9) 58%								
-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