



GEOTECHNICAL BORING LOG

Prepared By SPX Date 5-30-08Checked By RM Date 6-2-08

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		GROUND WATER (ft)							
BORING NO.: B-714		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR. NA							
GROUND ELEV.: -1.0 ft (NAVD88)		NORTHING: 397,259 US ft (NAD83/90)		EASTING: 876,021 US ft (NAD83/90)		24 HR. NA							
TOTAL DEPTH: 125.6 ft		BORING DIAMETER: 4" to 27.7", 3" to 125.6'		CASING DEPTH: 4" to 27.7", 3" to 115.0'		HAMMER (ID): 140 lb. Auto (M06)							
DATE STARTED: 4/16/08		COMPLETED: 4/17/08		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	WOH	WOH	WOH									
-3.7	2.7												
-6.2	5.2	20	16	11									
-8.7	7.7	11	21	3									
-10.9	9.9	4	8	7									
-13.4	12.4	14	20	14									
-16.1	15.1	9	18	31									
-22.8	21.8	8	6	6									
-27.9	26.9												
-28.7	27.7	44	50/0.3										
-32.0	31.0												
-37.0	36.0												
-42.0	41.0												
-47.0	46.0												
-52.0	51.0												
-57.0	56.0												
-62.0	61.0												
-67.0	66.0												
-72.0	71.0												
-73.5	72.5	6	5	7									

SEE LEGEND FOR ROCK HARDNESS CRITERIA BASED ON SPT DATA

94/0.8

714-1

714-2A&B

714-3

714-4

714-5

714-6

714-7

714-8

714-9

RUN-1

RUN-2

RUN-3

RUN-4

RUN-5

RUN-6

RUN-7

RUN-8

RUN-9

714-10

RUN-10

MUCK, olive brown (2.5Y4/3), very soft, wet, strong HCl reaction, mostly organic

LIMESTONE boundstone, light gray (2.5Y7/2), very soft, wet, some fine grained sand, strong HCl reaction, oolitic (Miami Formation)

5.2ft: white (2.5Y8/1), soft

7.7ft: trace sand

9.9ft: very soft

12.4ft: medium hard

15.1ft: moderately hard

21.8ft: very soft

LIMESTONE, boundstone, white (2.5Y8/1), hard, wet, strong HCl reaction (Upper Fort Thompson Formation)

27.7ft: Switch sampling method to coring

27.7ft: moderately hard, moderately indurated

31.0ft: moderately hard to hard, moderately indurated to indurated, trace vugs, coralline, recrystallized calcite

36.0ft: little vugs

41.0ft: medium hard to moderately hard, friable to moderately indurated, few vugs

46.0ft: white (2.5Y8/1) to 46.5ft then light gray (10YR7/1) to 47.7ft

LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, trace vugs, fossiliferous, trace recrystallized calcite, strong HCl reaction (Lower Fort Thompson Formation)

51.0ft: moderately hard to hard

56.0ft: medium hard to moderately hard, friable to moderately indurated

61.0ft: medium hard to hard, friable to indurated, trace sand

66.0ft: soft to medium hard, friable to moderately indurated, little fine grained sand

71.0ft: Switch sampling method to SPT

71.0 to 71.5ft: POORLY GRADED SAND (SP), white (2.5Y8/1), medium dense, fine grained,

TURKEY POINT COL BORE 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: J. Liles				
SITE DESCRIPTION: Turkey Point COL			DRILL MACHINE: CME-550 (Miller)			DRILLER: R. White/ J. Dugger			GROUND WATER (ft)				
BORING NO.: B-714			DRILL METHOD: Mud Rotary/ Core			SAMPLE METHODS: SPT/Core			0 HR. NA				
GROUND ELEV.: -1.0 ft (NAVD88)			NORTHING: 397,259 US ft (NAD83/90)			EASTING: 876,021 US ft (NAD83/90)			24 HR. NA				
TOTAL DEPTH: 125.6 ft			BORING DIAMETER: 4" to 27.7", 3" to 125.6"			CASING DEPTH: 4" to 27.7", 3" to 115.0'			HAMMER (ID): 140 lb. Auto (M06)				
DATE STARTED: 4/16/08			COMPLETED: 4/17/08			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	MOI		
-75.8					Continued from previous page								
-77.0	76.0												strong HCl reaction
													71.5ft: transition to limestone
													72.5ft: Switch sampling method to coring
-82.0	81.0												72.5ft: moderately hard, moderately indurated, trace fine sand
													LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, trace vugs, fossiliferous, trace recrystallized calcite, strong HCl reaction (Lower Fort Thompson Formation) (continued)
-87.0	86.0												76.0ft: few sand
													81.0ft: medium hard to moderately hard, friable to moderately indurated
-92.0	91.0												86.0ft: moderately hard to hard, moderately indurated to indurated, little vugs, few shell molds
													91.0ft: medium hard to moderately hard, friable to moderately indurated, sandy
-97.0	96.0												
													96.0ft: moderately hard, moderately indurated, little vugs
-102.0	101.0												
													101.0ft: mostly vugs, little to some shell molds and casts
-107.0	106.0												
													106.0ft: medium hard to moderately hard, friable to moderately indurated, mostly vugs, little shell molds and casts
-112.0	111.0												
													111.0ft: moderately hard, moderately indurated, trace vugs
-117.1	116.1												112.0 to 113.0ft: rod drop
		1	2	2									POORLY GRADED SAND (SP), light gray (2.5Y7/2), very loose, wet, fine grained sand, strong HCl reaction, trace limestone fragments (Tamiami Formation)
-125.1	124.1												
		1	4	4									124.1ft: loose
													Boring Terminated at Elevation -126.6 ft

TURKEY POINT COL BORE TURKEY POINT GPJ TURKEY POINT COL GDT 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				GROUND WATER (ft)	
BORING NO.: B-714				DRILL METHOD: Mud Rotary/ Core				SAMPLE METHODS: SPT/Core				0 HR. NA	
GROUND ELEV.: -1.0 ft (NAVD88)				NORTHING: 397,259 US ft (NAD83/90)				EASTING: 876,021		US ft (NAD83/90)		24 HR. NA	
TOTAL DEPTH: 125.6 ft				CASING DEPTH: 4" to 27.7', 3" to 115.0'						HAMMER (ID): 140 lb. Auto (M06)			
DATE STARTED: 4/16/08		COMPLETED: 4/17/08		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 @ 27.7 ft	
-28.7	27.7	3.3	1:40 1:31 1:39	(3.3) 100%	(2.7) 82%	RUN-1	(19.5) 98%	(11.2) 56%				LIMESTONE, boundstone, white (2.5Y8/1), hard, wet, strong HCl reaction (Upper Fort Thompson Formation) (continued)	
-32.0	31.0											27.7ft: moderately hard, moderately indurated	
		5.0	1:23 1:03 1:22 1:32 1:10	(4.9) 98%	(3.6) 72%	RUN-2						31.0ft: moderately hard to hard, moderately indurated to indurated, trace vugs, coralline, recrystallized calcite	
-37.0	36.0												
		5.0	1:15 1:12 0:57 1:01 1:12	(5.0) 100%	(0.9) 18%	RUN-3						36.0ft: little vugs	
-42.0	41.0												
		5.0	1:20 1:12 1:31 1:00 0:40	(4.6) 92%	(2.6) 52%	RUN-4						41.0ft: medium hard to moderately hard, friable to moderately indurated, few vugs	
-47.0	46.0												
		5.0	1:10 1:44 1:49 2:16 2:13	(4.4) 88%	(3.7) 74%	RUN-5						46.0ft: white (2.5Y8/1) to 46.5ft then light gray (10YR7/1) to 47.7ft	
-52.0	51.0						(43.6) 67%	(17.9) 28%				LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, trace vugs, fossiliferous, trace recrystallized calcite, strong HCl reaction (Lower Fort Thompson Formation)	
		5.0	2:04 1:47 1:52 1:28 0:59	(4.9) 98%	(4.0) 80%	RUN-6						51.0ft: moderately hard to hard	
-57.0	56.0												
		5.0	0:58 0:49 1:05 0:52 1:15	(4.2) 84%	(1.7) 34%	RUN-7						56.0ft: medium hard to moderately hard, friable to moderately indurated	
-62.0	61.0												
		5.0	1:41 1:27 1:41 0:45 0:31	(3.8) 76%	(2.9) 58%	RUN-8						61.0ft: medium hard to hard, friable to indurated, trace sand	
-67.0	66.0												
		5.0	0:28 0:11 0:30 0:38 0:28	(1.2) 24%	(0.0) 0%	RUN-9						66.0ft: soft to medium hard, friable to moderately indurated, little fine grained sand	
-72.0	71.0												
			N=12			714-10						71.0ft: Switch sampling method to SPT	
-73.5	72.5	3.5	0:14/0.5 0:14 0:23 0:25	(1.3) 37%	(0.0) 0%	RUN-10						71.0 to 71.5ft: POORLY GRADED SAND (SP), white (2.5Y8/1), medium dense, fine grained, strong HCl reaction	
-77.0	76.0											71.5ft: transition to limestone	
		5.0	0:22 0:35 3:29 2:09 0:42	(2.4) 48%	(0.5) 10%	RUN-11						72.5ft: Switch sampling method to coring	
-82.0	81.0											72.5ft: moderately hard, moderately indurated, trace fine sand	
		5.0	0:19 0:36 8:25 1:33 1:02	(2.7) 54%	(0.3) 6%	RUN-12						76.0ft: few sand	
-87.0	86.0												
		5.0	2:11 2:05 1:52 2:19 1:06	(4.6) 92%	(2.1) 42%	RUN-13						81.0ft: medium hard to moderately hard, friable to moderately indurated	
-92.0	91.0												
		5.0	1:01 1:11 0:55 0:58 1:26	(2.8) 56%	(0.0) 0%	RUN-14						86.0ft: moderately hard to hard, moderately indurated to indurated, little vugs, few shell molds	
-97.0	96.0												
		5.0	0:43 0:55 0:44 0:48 0:55	(3.1) 62%	(1.0) 20%	RUN-15						91.0ft: medium hard to moderately hard, friable to moderately indurated, sandy	
-102.0	101.0												
		5.0	0:28	(4.0)	(0.4)	RUN-16						96.0ft: moderately hard, moderately indurated, little vugs	
												101.0ft: mostly vugs, little to some shell molds and casts	

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

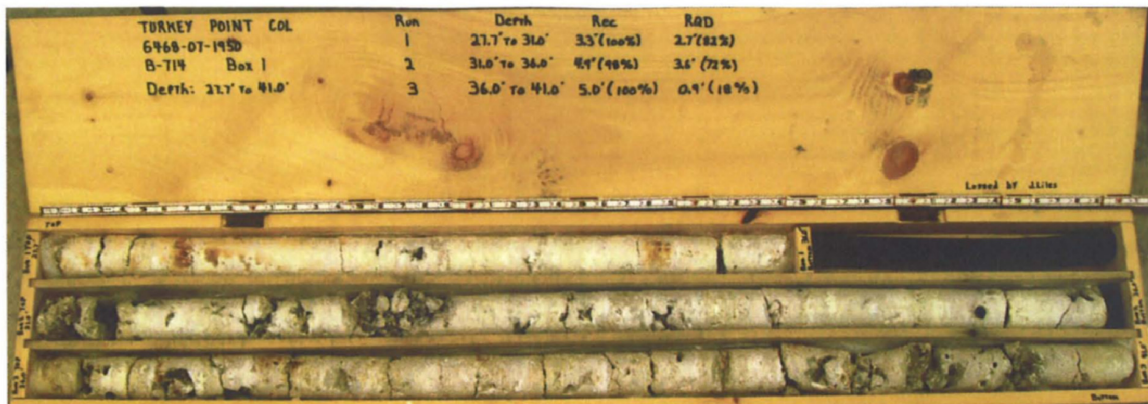


SHEET 2 OF 2

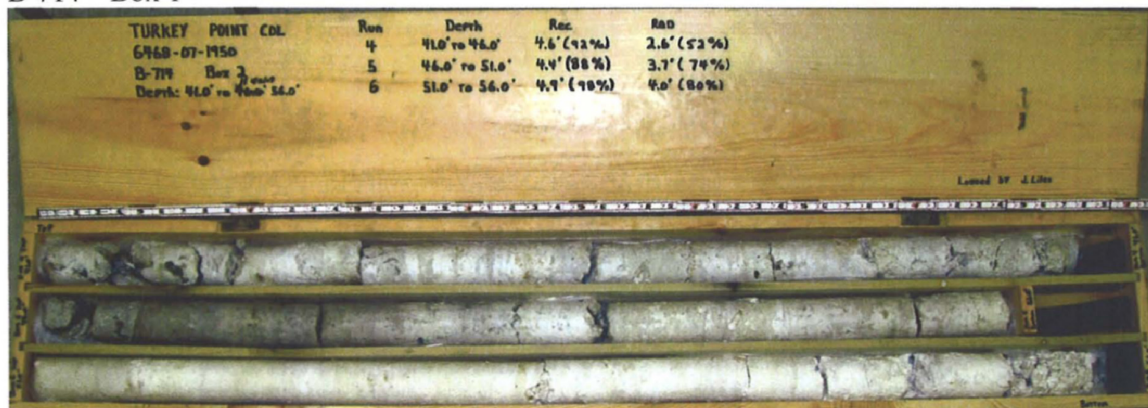
BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: J. Liles
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 (Miller)	DRILLER: R. White/ J. Dugger	GROUND WATER (ft)
BORING NO.: B-714	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.0 ft (NAVD88)	NORTHING: 397,259 US ft (NAD83/90)	EASTING: 876,021 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 125.6 ft	CASING DEPTH: 4" to 27.7', 3" to 115.0'	HAMMER (ID): 140 lb. Auto (M06)	
DATE STARTED: 4/16/08	COMPLETED: 4/17/08	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
-107.0	106.0		0.31 0.35 0.46 0.59	80%	8%					LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, trace vugs, fossiliferous, trace recrystallized calcite, strong HCl reaction (Lower Fort Thompson Formation) (continued)
		5.0	1.41 1.09 0.43 0.55 0.56	(4.3) 86%	(2.2) 44%	RUN-17				106.0ft: medium hard to moderately hard, friable to moderately indurated, mostly vugs, little shell molds and casts
-112.0	111.0									
		5.0	1.45 0.01 0.58 0.37 0.38	(1.6) 32%	(0.5) 10%	RUN-18				111.0ft: moderately hard, moderately indurated, trace vugs 112.0 to 113.0ft: rod drop
-117.0	116.0						(0.0) 0%	(NA)		POORLY GRADED SAND (SP), light gray (2.5Y7/2), very loose, wet, fine grained sand, strong HCl reaction, trace limestone fragments (Tamiami Formation)
										Coring Terminated at Elevation -117.0

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



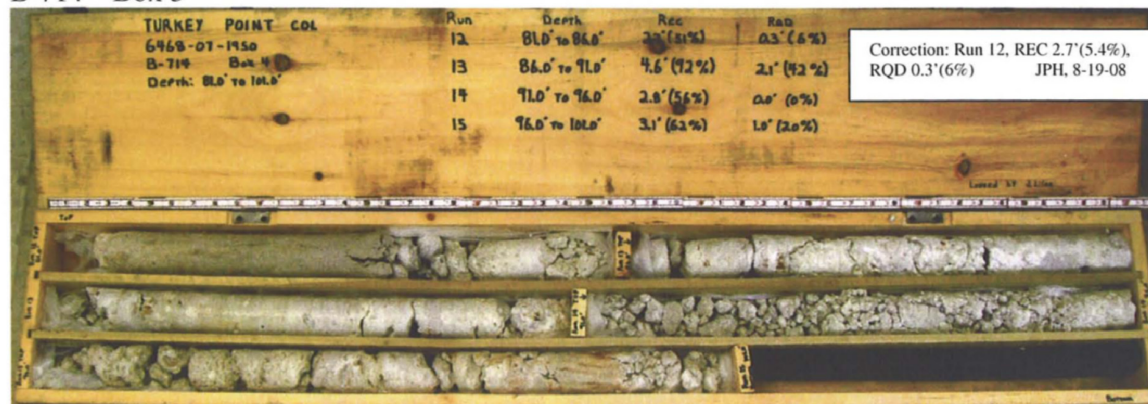
B-714 – Box 1



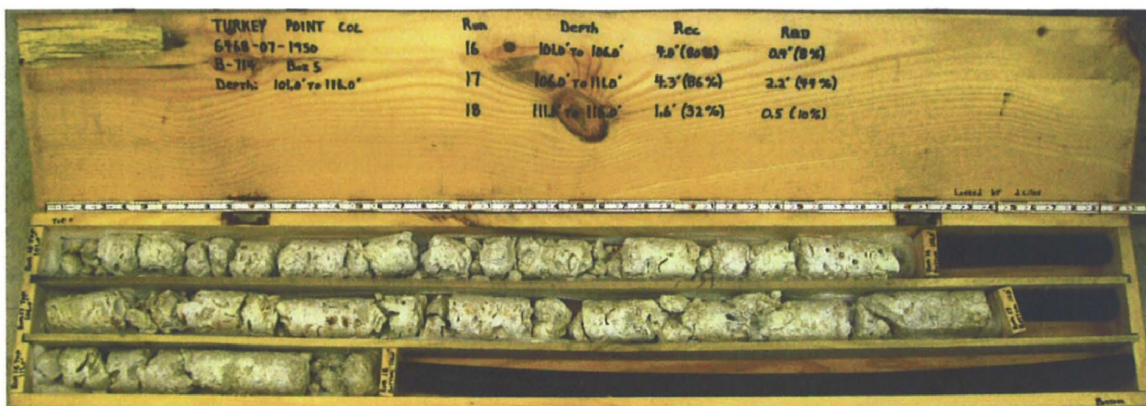
B-714 – Box 2



B-714 – Box 3



B-714 – Box 4



B-714 - Box 5



GEOTECHNICAL BORING LOG

Prepared By 222 Date 5-30-08

Checked By HJM 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					GROUND WATER (ft)		
BORING NO.: B-715					DRILL METHOD: Mud Rotary/ Core					SAMPLE METHODS: SPT/Core					0 HR. NA		
GROUND ELEV.: -0.9 ft (NAVD88)					NORTHING: 397,259 US ft (NAD83/90)					EASTING: 875,909 US ft (NAD83/90)					24 HR. NA		
TOTAL DEPTH: 150.1 ft			BORING DIAMETER: 4" to 28.3', 3" to 150.1'					CASING DEPTH: 4" to 28.3', 3" to 120.0'					HAMMER (ID):140 lb. Auto (M06)				
DATE STARTED: 4/8/08			COMPLETED: 4/10/08			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							
-0.9					Ground Surface												
-0.9	0.0	WOH	WOH	WOH	●0									-0.9 0.0			
-3.5	2.6				WOH												
-5.9	5.0	WOH	2	5	●7												
-8.4	7.5	10	7	7	●14												
-10.9	10.0	18	27	11				●38									
-13.3	12.4	4	4	4	●8												
-15.8	14.9	6	6	10	●16												
		4	6	18	●24												
-22.6	21.7	8	12	14	●26												
-27.7	26.8	13	40	50						●90							
-29.2	28.3																
-31.2	30.3																
-36.2	35.3																
-41.2	40.3																
-46.2	45.3																
-51.2	50.3																
-56.2	55.3																
-61.2	60.3																
-66.2	65.3																
-71.2	70.3																



SHEET 2 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					GROUND WATER (ft)		
BORING NO.: B-715					DRILL METHOD: Mud Rotary/ Core					SAMPLE METHODS: SPT/Core					0 HR. NA		
GROUND ELEV.: -0.9 ft (NAVD88)					NORTHING: 397,259 US ft (NAD83/90)					EASTING: 875,909 US ft (NAD83/90)					24 HR. NA		
TOTAL DEPTH: 150.1 ft			BORING DIAMETER: 4" to 28.3', 3" to 150.1'					CASING DEPTH: 4" to 28.3', 3" to 120.0'					HAMMER (ID):140 lb. Auto (M06)				
DATE STARTED: 4/8/08			COMPLETED: 4/10/08			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	MOI						
-75.7					Continued from previous page												
-76.2	75.3												LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, trace vugs, strong HCl reaction (Lower Fort Thompson Formation) (continued)				
-81.2	80.3												75.3ft: hard, indurated				
-86.2	85.3												80.3ft: moderately hard, moderately indurated				
-91.2	90.3												85.3ft: hard, indurated				
-96.2	95.3												90.3ft: medium hard to hard, friable to indurated, trace vugs, few to little sand				
-101.2	100.3												95.3ft: friable to moderately indurated				
-106.2	105.3												100.3ft: moderately hard, moderately indurated, little shell molds and casts				
-111.2	110.3												105.3ft: moderately hard to hard, moderately indurated to indurated, some vugs				
-113.9	113.0												110.3ft: moderately hard, moderately indurated, little to some fine grained sand				
-119.3	118.4	8	4	3									POORLY GRADED SAND with silt (SP-SM), light gray (5Y7/2), loose, wet, fine grained sand, strong HCl reaction, trace limestone fragments (Tamiami formation)				
-129.0	128.1	3	4	8									118.4ft: Switch sampling method to SPT				
-139.3	138.4	7	9	12									128.1ft: Silty SAND (SM), greenish gray (10Y6/1), medium dense, wet, fine to coarse grained sand, fine to coarse gravel				
-149.5	148.6	5	8	10													

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



SHEET 3 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			GROUND WATER (ft)					
BORING NO.: B-715			DRILL METHOD: Mud Rotary/ Core			SAMPLE METHODS: SPT/Core			0 HR. NA					
GROUND ELEV.: -0.9 ft (NAVD88)			NORTHING: 397,259 US ft (NAD83/90)			EASTING: 875,909 US ft (NAD83/90)			24 HR. NA					
TOTAL DEPTH: 150.1 ft			BORING DIAMETER: 4" to 28.3', 3" to 150.1'			CASING DEPTH: 4" to 28.3', 3" to 120.0'			HAMMER (ID):140 lb. Auto (M06)					
DATE STARTED: 4/8/08			COMPLETED: 4/10/08			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		MOI		
-150.5					Continued from previous page									
														148.6ft: fine grained sand Boring Terminated at Elevation -151.0 ft

TURKEY POINT COL BORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 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				GROUND WATER (ft)		
BORING NO.: B-715				DRILL METHOD: Mud Rotary/ Core				SAMPLE METHODS: SPT/Core				0 HR. NA		
GROUND ELEV.: -0.9 ft (NAVD88)				NORTHING: 397,259 US ft (NAD83/90)				EASTING: 875,909 US ft (NAD83/90)		24 HR. NA		NA		
TOTAL DEPTH: 150.1 ft				CASING DEPTH: 4" to 28.3', 3" to 120.0'						HAMMER (ID): 140 lb. Auto (M06)				
DATE STARTED: 4/8/08		COMPLETED: 4/10/08		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 @ 28.3 ft				
-29.2	28.3	2.0	1:13	(2.0)	(1.9)	RUN-1	(19.0)	(17.7)		LIMESTONE, boundstone, white (2.5Y8/1), hard, wet, strong HCl reaction, trace fine grained sand (Upper Fort Thompson Formation) (continued)				
-31.2	30.3	5.0	1:01	100%	95%	RUN-2	96%	90%		28.3ft: moderately hard, moderately indurated, trace vugs, coralline				
			0:34	(4.9)	(4.3)	715-CS-01				30.3ft: moderately hard to hard, moderately indurated to indurated, trace recrystallized calcite				
			0:36	98%	86%									
			0:30											
			0:32											
-36.2	35.3	5.0	1:04	(4.6)	(4.3)	RUN-3				35.3ft: hard, indurated, little vugs				
			0:38	92%	86%									
			0:59											
			0:44											
-41.2	40.3	5.0	0:32											
			0:41	(5.0)	(4.7)	RUN-4				40.3ft: trace vugs				
			1:26	100%	94%	715-CS-03								
			1:15											
			1:13											
			1:13											
-46.2	45.3	5.0	1:23	(4.8)	(4.8)	RUN-5				45.3ft: white (2.5Y8/1) to 46.0ft then light gray (10YR7/1) to 48.0ft				
			1:27	96%	96%									
			1:32											
			1:27											
-51.2	50.3	5.0	1:11	(4.9)	(3.5)	RUN-6	(49.8)	(24.1)	-48.9	LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, trace vugs, strong HCl reaction (Lower Fort Thompson Formation)				
			1:15	98%	70%		77%	37%		50.3ft: moderately hard to hard, moderately indurated to indurated				
			1:16											
			1:47											
			1:48											
-56.2	55.3	5.0	2:15	(4.9)	(4.0)	RUN-7				55.3ft: moderately hard, moderately indurated				
			1:28	98%	80%	715-CS-05								
			0:39											
			1:07											
			0:59											
-61.2	60.3	5.0	1:02	(4.5)	(2.6)	RUN-8				60.3ft: medium hard to hard, friable to indurated, trace sand, trace shell molds and casts				
			1:15	90%	52%									
			0:59											
			0:53											
			0:26											
-66.2	65.3	5.0	1:10	(2.6)	(0.4)	RUN-9				65.3ft: interbedded sand, little vugs				
			0:25	52%	8%									
			0:26											
			0:22											
			0:14											
-71.2	70.3	5.0	0:49	(4.5)	(1.9)	RUN-10				70.3ft: few vugs				
			0:44	90%	38%									
			1:14											
			1:58											
			1:58											
-76.2	75.3	5.0	0:25	(3.0)	(1.3)	RUN-11				75.3ft: hard, indurated				
			1:18	60%	26%									
			1:50											
			2:13											
			0:50											
-81.2	80.3	5.0	1:50	(1.8)	(0.0)	RUN-12				80.3ft: moderately hard, moderately indurated				
			0:35	36%	0%									
			0:19											
			0:54											
			0:46											
-86.2	85.3	5.0	0:15	(4.7)	(2.4)	RUN-13				85.3ft: hard, indurated				
			0:55	94%	48%									
			1:24											
			2:58											
			1:44			715-CS-07								
			0:55											
			0:40	(2.6)	(1.2)		RUN-14				90.3ft: medium hard to hard, friable to indurated, trace vugs, few to little sand			
			0:58	52%	24%									
			0:44											
			0:43											
-96.2	95.3	5.0	1:37	(2.9)	(1.2)	RUN-15				95.3ft: friable to moderately indurated				
			1:12	58%	24%									
			0:50											
			0:36											
			0:53											
-101.2	100.3	5.0	1:07	(5.0)	(2.3)	RUN-16				100.3ft: moderately hard, moderately indurated, little shell molds and casts				
			1:18	100%	46%									
			0:46											
			0:55											

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

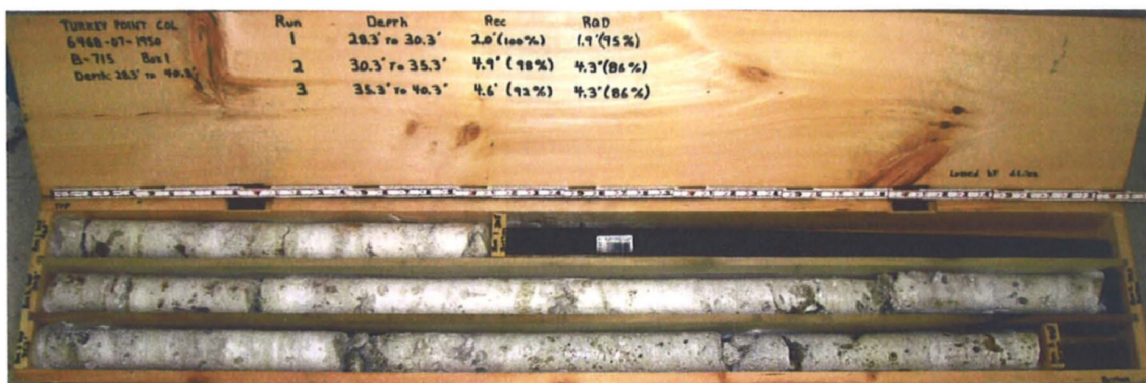


SHEET 2 OF 2

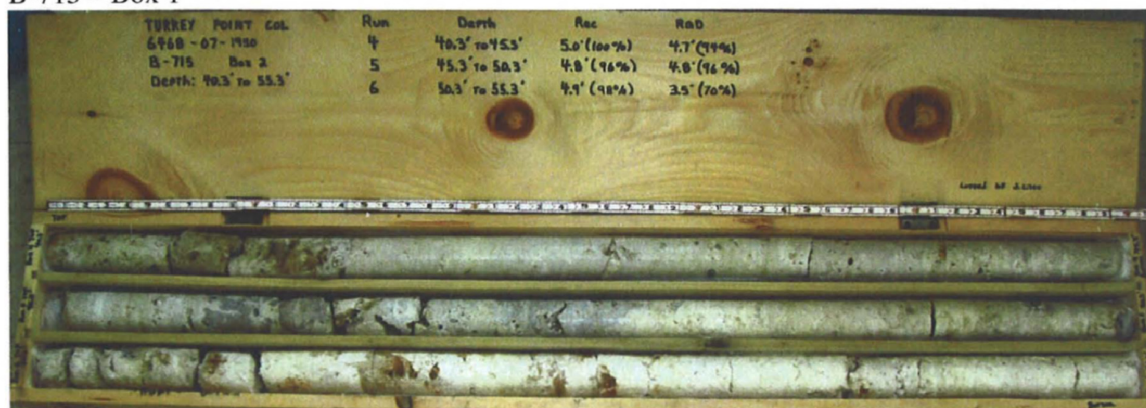
BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: J. Liles
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 (Miller)	DRILLER: R. White/ J. Dugger	GROUND WATER (ft)
BORING NO.: B-715	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -0.9 ft (NAVD88)	NORTHING: 397,259 US ft (NAD83/90)	EASTING: 875,909 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 150.1 ft	CASING DEPTH: 4" to 28.3', 3" to 120.0'	HAMMER (ID): 140 lb. Auto (M06)	
DATE STARTED: 4/8/08	COMPLETED: 4/10/08	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
-106.2	105.3	5.0	0.30 0.34 0.42 0.34 0.43 0.56 0.40	(3.9) 78%	(0.4) 8%	RUN-17				LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, trace vugs. strong HCl reaction (Lower Fort Thompson Formation) (continued) 105.3ft: moderately hard to hard, moderately indurated to indurated, some vugs
-111.2	110.3	5.0	0.41 1.23 0.50 0.34 0.23	(2.2) 44%	(0.6) 12%	RUN-18				110.3ft: moderately hard, moderately indurated, little to some fine grained sand
-116.2	115.3						(0.0) 0%	(NA)		POORLY GRADED SAND with silt (SP-SM), light gray (5Y7/2), loose, wet, fine grained sand, strong HCl reaction, trace limestone fragments (Tamiami formation) Coring Terminated at Elevation -116.2

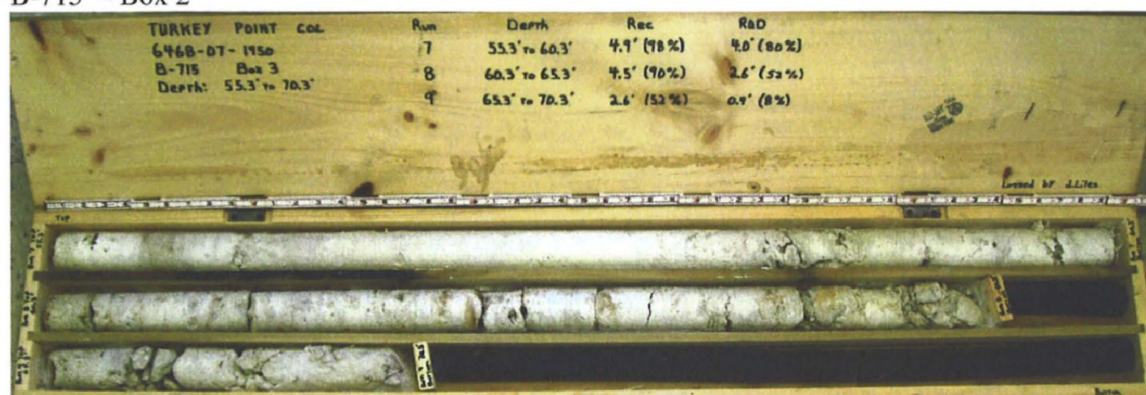
TURKEY POINT COL CORE TURKEY POINT GP TURKEY POINT COL GDI 5.30/08



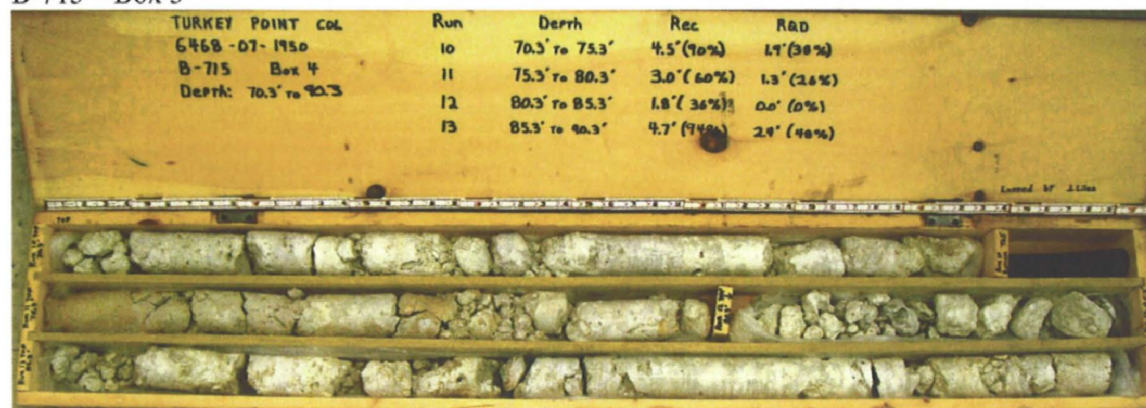
B-715 - Box 1



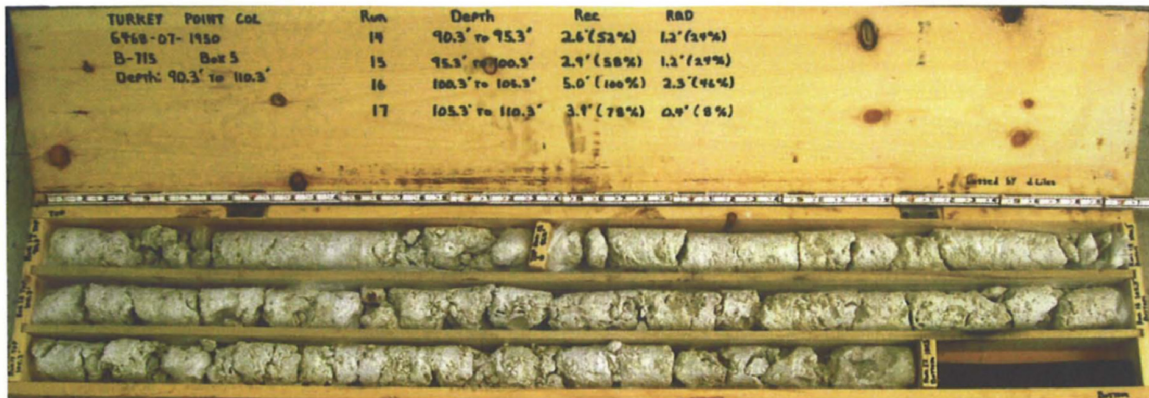
B-715 - Box 2



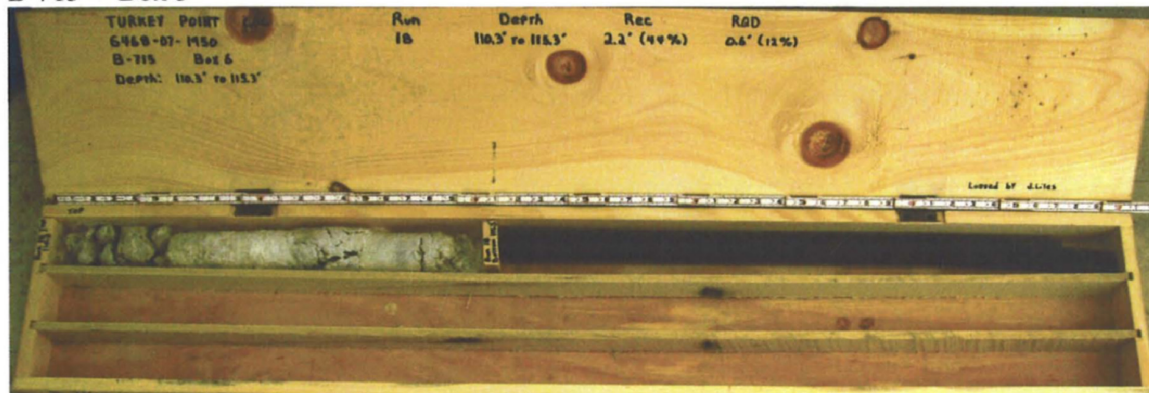
B-715 - Box 3



B-715 - Box 4



B-715 – Box 5



B-715 – Box 6



GEOTECHNICAL BORING LOG

Prepared By MM Date 7-10-08

Checked By MM Date 7-10-08

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-55 LC (RAL)			DRILLER: R. Banks/ J. Rosser			GROUND WATER (ft)		
BORING NO.: B-716			DRILL METHOD: Mud Rotary/ Core			SAMPLE METHODS: SPT/Core			0 HR. NA		
GROUND ELEV.: -1.1 ft (NAVD88)			NORTHING: 397,214 US ft (NAD83/90)			EASTING: 875,873 US ft (NAD83/90)			24 HR. NA		
TOTAL DEPTH: 126.6 ft			BORING DIAMETER: 4" to 23.6", 3" to 126.6"			CASING DEPTH: 4" to 23.6", 3" to 115.2'			HAMMER (ID): 140 lb. Auto (MEC-02)		
DATE STARTED: 4/8/08			COMPLETED: 4/16/08			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				
-1.1	0.0	WOH	WOH	WOH	0			Ground Surface
-3.7	2.6	3	7	9	16	716-1		MUCK, light brownish gray (10YR6/3), very soft, wet, mostly organic, trace shell fragments, strong HCl reaction
-6.1	5.0	2	4	4	8	716-2		Field notes do not indicate that sample 716-2 was split into separate jars
-8.6	7.5	28	3	8	11	716-3		LIMESTONE, boundstone, white (10YR8/1), very soft, wet, strong HCl reaction, oolitic (Miami Formation)
-11.1	10.0	3	5	6	11	716-4		5.0ft: trace shell fragments
-13.6	12.5	50/0.3			50/0.3	716-5		
-16.1	15.0	7	15	32	47	716-6		12.5ft: hard
-19.6	18.5	14	5	5	10	716-7		15.0ft: moderately hard
-24.6	23.5	10	50/0.4		60/0.9	716-8		18.5ft: very soft
-26.3	25.2					716-9		23.5ft: hard
-31.3	30.2					RUN-1		25.2ft: Switch sampling method to coring
-36.3	35.2					RUN-2		LIMESTONE, boundstone, white (10YR8/1), hard, indurated, few vugs, fossiliferous, coralline, strong HCl reaction, trace fine grained sand (Upper Fort Thompson Formation)
-41.3	40.2					RUN-3		30.2ft: white (10YR8/1), to light gray (10YR7/1), poor recovery may be due to open spaces and/or interconnected vugs
-46.3	45.2					RUN-4		35.2ft: trace vugs, recrystallized calcite
-51.3	50.2					RUN-5		40.2ft: white (10YR8/1)
-56.3	55.2					RUN-6		45.2ft: few vugs, horizontal bedding plane at 47.3ft
-61.3	60.2					RUN-7		LIMESTONE, boundstone, white (10YR8/1), hard, indurated, few vugs, fossiliferous, trace to few shell molds and casts, strong HCl reaction (Lower Fort Thompson Formation)
-66.3	65.2					RUN-8		55.2ft: few vugs
-71.3	70.2					RUN-9		60.2ft: trace vugs, few to some shell molds and casts
						RUN-10		65.2ft: few shell molds

TURKEY POINT COL BORE TURKEY POINT GPT TURKEY POINT COL GDT 7/10/08



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-55 LC (RAL)				DRILLER: R. Banks/ J. Rosser				GROUND WATER (ft)		
BORING NO.: B-716				DRILL METHOD: Mud Rotary/ Core				SAMPLE METHODS: SPT/Core				0 HR. NA		
GROUND ELEV.: -1.1 ft (NAVD88)				NORTHING: 397,214 US ft (NAD83/90)				EASTING: 875,873 US ft (NAD83/90)				24 HR. NA		
TOTAL DEPTH: 126.6 ft		BORING DIAMETER: 4" to 23.6', 3" to 126.6'				CASING DEPTH: 4" to 23.6', 3" to 115.2'				HAMMER (ID): 140 lb. Auto (MEC-02)				
DATE STARTED: 4/8/08		COMPLETED: 4/16/08				CORE SIZE: HQ3				BITS USED: 2 7/8" Tricone				
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				
-75.9					Continued from previous page									
-76.3	75.2													LIMESTONE, boundstone, white (10YR8/1), hard, indurated, few vugs, fossiliferous, trace to few shell molds and casts, strong HCl reaction (Lower Fort Thompson Formation) (continued) 75.2ft: no vugs 80.2ft: trace to few shell molds and casts
-80.4	79.3													
-81.3	80.2													
-86.3	85.2													85.2ft: little vugs
-91.3	90.2													
-96.3	95.2													95.2ft: medium hard to moderately hard, moderately indurated, no vugs, some shell molds and casts
-101.3	100.2													
-106.3	105.2													105.2ft: medium hard, moderately indurated, little vugs, mostly shell molds and casts
-111.3	110.2													110.2ft: soft to medium hard, friable to moderately indurated
-116.3	115.2	11	16	25										115.2ft: Switch sampling method to SPT
-126.2	125.1	22	14	8										125.1ft: olive gray (5Y5/2), medium dense, trace shell fragments Boring Terminated at Elevation -127.7 ft

TURKEY POINT COL BORE, TURKEY POINT GPJ, TURKEY POINT COL GDI 7/10/08



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-55 LC (RAL)	DRILLER: R. Banks/ J. Rosser	GROUND WATER (ft)
BORING NO.: B-716	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.1 ft (NAVD88)	NORTHING: 397,214 US ft (NAD83/90)	EASTING: 875,873 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 126.6 ft	CASING DEPTH: 4" to 23.6', 3" to 115.2'	HAMMER (ID): 140 lb. Auto (MEC-02)	
DATE STARTED: 4/8/08	COMPLETED: 4/16/08	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
										Begin Coring @ 25.2 ft
-26.3	25.2	5.0	1:15 0:51 1:03 2:23 1:13	(3.1) 62%	(1.7) 34%	RUN-1	(16.5) 75%	(11.7) 53%		LIMESTONE, boundstone, white (10YR8/1), hard, indurated, few vugs, fossiliferous, coralline, strong HCl reaction, trace fine grained sand (Upper Fort Thompson Formation) (continued)
-31.3	30.2	5.0	0:26 0:21 0:18 0:12 0:21	(1.6) 32%	(0.0) 0%	RUN-2				30.2ft: white (10YR8/1), to light gray (10YR7/1), poor recovery may be due to open spaces and/or interconnected vugs
-36.3	35.2	5.0	0:29 0:27 0:26 0:32 0:51	(4.7) 94%	(3.3) 66%	RUN-3				35.2ft: trace vugs, recrystallized calcite
-41.3	40.2	5.0	0:40 0:33 0:32 0:37 0:46	(5.0) 100%	(5.0) 100%	RUN-4				40.2ft: white (10YR8/1)
-46.3	45.2	5.0	0:42 0:52 0:42 0:39 0:34	(5.0) 100%	(4.4) 88%	RUN-5				45.2ft: few vugs, horizontal bedding plane at 47.3ft
-51.3	50.2	5.0	0:47 0:40 0:38 0:39 0:40	(5.0) 100%	(4.0) 80%	RUN-6	(39.3) 60%	(20.6) 31%		LIMESTONE, boundstone, white (10YR8/1), hard, indurated, few vugs, fossiliferous, trace to few shell molds and casts, strong HCl reaction (Lower Fort Thompson Formation)
-56.3	55.2	5.0	0:49 0:26 0:36 0:35 0:38	(4.6) 92%	(3.0) 60%	RUN-7				55.2ft: few vugs
-61.3	60.2	5.0	0:31 0:30 0:28 0:28 0:28 0:38	(4.9) 98%	(4.8) 96%	RUN-8				60.2ft: trace vugs, few to some shell molds and casts
-66.3	65.2	5.0	0:31 0:34 0:32 0:25 0:16	(2.5) 50%	(2.2) 44%	RUN-9				65.2ft: few shell molds
-71.3	70.2	5.0	0:26 0:29 0:28 0:16 0:19	(1.6) 32%	(0.4) 8%	RUN-10				
-76.3	75.2	4.1	0:33 0:37 0:28 0:54	(2.0) 49%	(0.7) 17%	RUN-11				75.2ft: no vugs
-80.4	79.3	0.9	1:38/0.1	(0.8)	(0.8)	RUN-12				
-81.3	80.2	5.0	0:55/0.9	89%	89%	RUN-13				80.2ft: trace to few shell molds and casts
-86.3	85.2	5.0	0:35 0:32 0:22 0:18 0:21	(2.7) 54%	(0.4) 8%					
-91.3	90.2	5.0	0:24 0:36 0:38 0:26 0:23	(3.2) 64%	(0.5) 10%	RUN-14				85.2ft: little vugs
-96.3	95.2	5.0	0:30 0:21 0:18 0:16 0:21	(2.6) 52%	(1.1) 22%	RUN-15				
-101.3	100.2	5.0	0:28 0:31 0:25 0:16 0:20	(2.1) 42%	(0.0) 0%	RUN-16				95.2ft: medium hard to moderately hard, moderately indurated, no vugs, some shell molds and casts

TURKEY POINT COL CORE, TURKEY POINT COL GDT 7:10:08

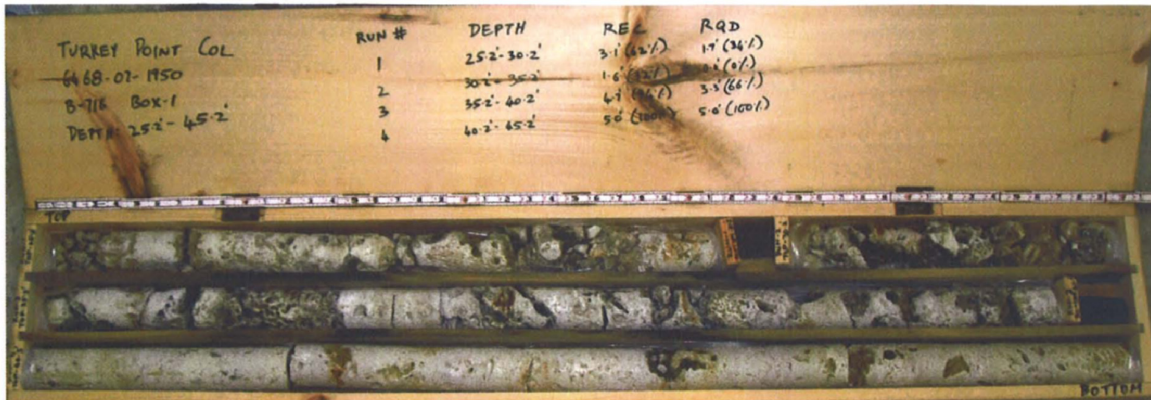


SHEET 2 OF 2

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: G. Pillappa
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-55 LC (RAL)	DRILLER: R. Banks/ J. Rosser	GROUND WATER (ft)
BORING NO.: B-716	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.1 ft (NAVD88)	NORTHING: 397,214 US ft (NAD83/90)	EASTING: 875,873 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 126.6 ft	CASING DEPTH: 4" to 23.6', 3" to 115.2'	HAMMER (ID): 140 lb. Auto (MEC-02)	
DATE STARTED: 4/8/08	COMPLETED: 4/16/08	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
-106.3	105.2	5.0	0.23 0.24 0.21 0.20 0.21	(0.5) 10%	(0.0) 0%	RUN-17				LIMESTONE, boundstone, white (10YR8/1), hard, indurated, few vugs, fossiliferous, trace to few shell molds and casts, strong HCl reaction (Lower Fort Thompson Formation) (continued)
-111.3	110.2	5.0	0.28 0.27 0.13 0.18 0.16	(2.0) 40%	(0.0) 0%	RUN-18				105.2ft: medium hard, moderately indurated, little vugs, mostly shell molds and casts
-116.3	115.2	5.0	0.18 0.24 0.21 0.18	(1.9) 38%	(0.0) 0%	RUN-19				110.2ft: soft to medium hard, friable to moderately indurated
							(0.0) 0%	(NA)	-114.1 -116.3	113.0 115.2 Silty SAND (SM), white (10YR8/1), dense, moist, weak HCl reaction, fine grained sand, little fines (Tamiami Formation) Coring Terminated at Elevation -116.3

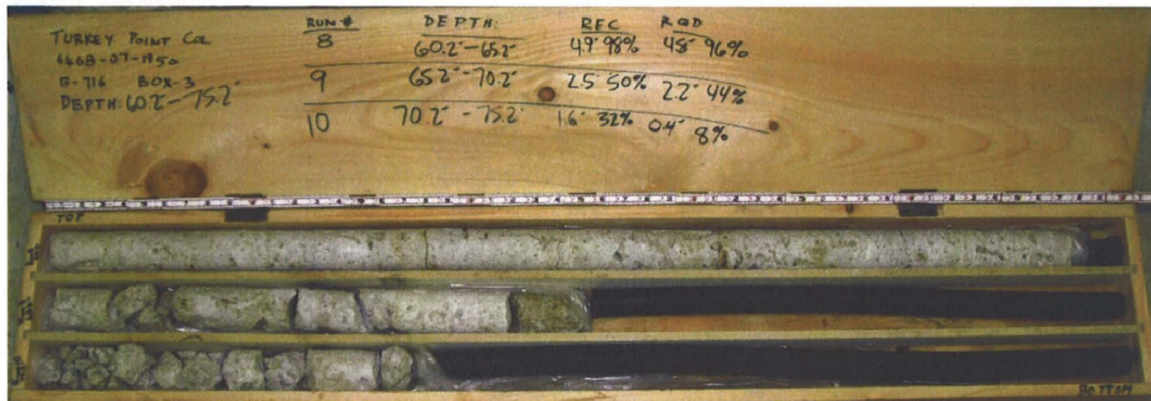
TURKEY POINT COL CORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 7-10-08



B-716 - Box 1



B-716 - Box 2



B-716 - Box 3



B-716 - Box 4