MACTEC

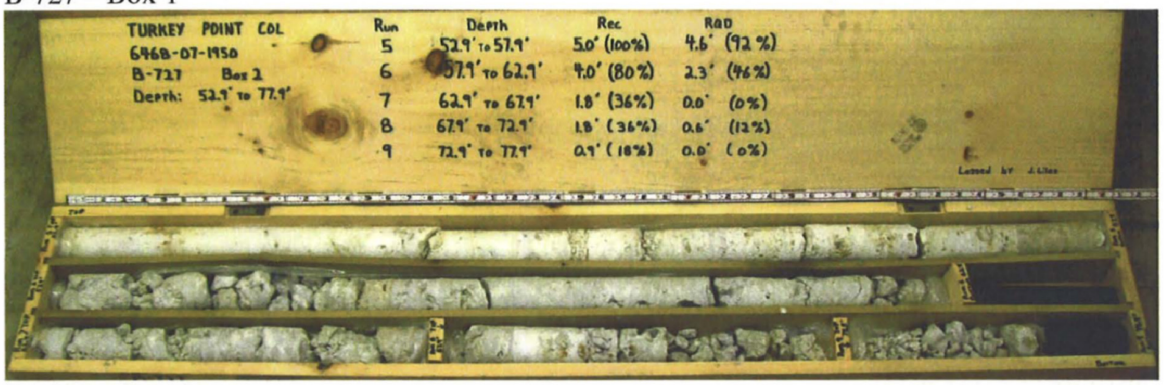
SHEET 1 OF 1

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: J. Liles
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 (Miller)	DRILLER: R. White/ J. Dugger/ C. White	GROUND WATER (ft)
BORING NO.: B-727	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.3 ft (NAVD88)	NORTHING: 397,118 US ft (NAD83/90)	EASTING: 875,666 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 100.9 ft	CASING DEPTH: 4" to 35.0'		HAMMER (ID): 140 lb. Auto (M06)
DATE STARTED: 4/3/08	COMPLETED: 4/4/08	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) %	RUN RQD (ft) %	SAMP. NO.	STRATA REC (ft) %	STRATA RQD (ft) %	LOG	DESCRIPTION AND REMARKS
										Begin Coring @ 36.9 ft
-38.2	36.9	1.0	0:55	(0.0) 0%	(0.0) 0%	RUN-1	(7.6) 63%	(5.5) 46%		LIMESTONE, boundstone, white (2.5Y8/1), hard, strong HCl reaction (Upper Fort Thompson Formation) *(continued)*
-39.2	37.9	5.0	0:54 0:48 0:56 0:49 0:55	(3.7) 74%	(3.0) 60%	RUN-2				37.9ft: moderately hard, moderately indurated, little vugs, recrystallized calcite, coralline
-44.2	42.9	5.0	0:47 0:17 0:49 0:53 0:57	(2.9) 58%	(1.7) 34%	RUN-3				42.9ft: white (2.5Y8/1) grading to gray (2.5Y6/1), few vugs
-49.2	47.9	5.0	1:04 0:59 0:56 0:58 1:01	(5.0) 100%	(4.8) 96%	RUN-4	(33.1) 64%	(18.3) 35%		-50.2 47.9ft: gray (2.5Y6/1) to 48.9ft 48.9 LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, trace vugs, strong HCl reaction, fossiliferous, trace shell molds and casts (Lower Fort Thompson Formation)
-54.2	52.9	5.0	1:18 0:56 0:57 0:47 1:02	(5.0) 100%	(4.6) 92%	RUN-5				52.9ft: moderately hard to hard, moderately indurated to indurated, few vugs
-59.2	57.9	5.0	0:48 0:43 0:54 0:43 0:31	(4.0) 80%	(2.3) 46%	RUN-6				57.9ft: moderately hard, moderately indurated, trace sand
-64.2	62.9	5.0	0:24 0:29 0:24 0:20 0:30	(1.8) 36%	(0.0) 0%	RUN-7				62.9ft: medium hard to moderately hard, friable to moderately indurated, few to little sand
-69.2	67.9	5.0	1:01 0:32 0:36 0:54 0:47	(1.8) 36%	(0.6) 12%	RUN-8				67.9ft: moderately hard, moderately indurated
-74.2	72.9	5.0	0:35 0:12 0:07 0:05 0:23	(0.9) 18%	(0.0) 0%	RUN-9				72.9ft: soft to moderately hard, friable to moderately indurated, possible interbedded sand layers based on recovery and drill rates
-79.2	77.9	5.0	0:41 0:45 0:40 0:54 0:56	(2.7) 54%	(0.0) 0%	RUN-10				77.9ft: medium hard to moderately hard, friable to moderately indurated, few to little fine grained sand
-84.2	82.9	5.0	1:51 0:37 0:10 0:23 0:45	(3.3) 66%	(2.5) 50%	RUN-11				
-89.2	87.9	5.0	1:04 0:52 0:54 0:37 0:37	(3.7) 74%	(1.9) 38%	RUN-12				87.9ft: moderately hard to hard, moderately indurated to indurated, trace vugs, trace to few sand
-94.2	92.9	5.0	0:39 0:22 0:31 0:38 0:23	(3.8) 76%	(2.4) 48%	RUN-13				92.9ft: moderately hard, moderately indurated
-99.2	97.9	3.0	0:07 0:11 0:40	(2.1) 70%	(0.0) 0%	RUN-14				97.9ft: medium hard to moderately hard, friable to moderately indurated
-102.2	100.9									-102.2 100.9 Coring Terminated at Elevation -102.2

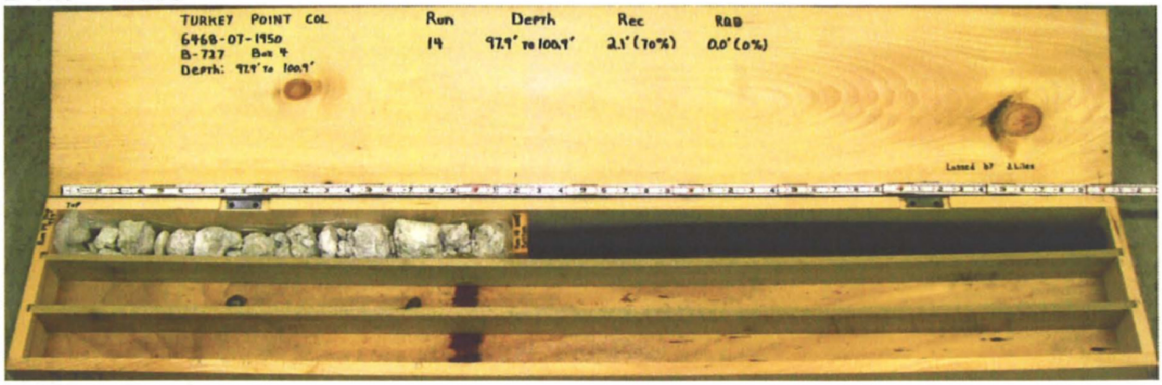
TURKEY POINT COL CORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 5/30/08

B-727 – Box 1



B-727 – Box 2

B-727 – Box 3



B-727 – Box 4

MACTEC

GEOTECHNICAL BORING LOG

Prepared By [illegible] Date 5-30-08
Checked By [illegible] Date [illegible]

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-728	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.4 ft (NAVD88)	NORTHING: 397,071 US ft (NAD83/90)	EASTING: 875,620 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 126.6 ft	BORING DIAMETER: 4" to 25.0', 3" to 126.6'	CASING DEPTH: 4" to 25.0', 3" to 113.5'	HAMMER (ID):140 lb. Auto (M06)
DATE STARTED: 4/5/08	COMPLETED: 4/1/08	CORE SIZE: HQ3	BITS USED: 2 7/8" Roller Cone

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT (0 20 40 60 80 100)	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-1.4					Ground Surface				-1.4 / 0.0
-1.4 / -3.8	0.0 / 2.4	WOH	WOH	WOH	WOH, 0	728-1			MUCK, black (2.5Y2.5/1), very soft, wet, strong HCl reaction
-6.4	5.0	WOH	1	4	5	728-2A&B			-4.5 / 3.1 LIMESTONE, boundstone, white (2.5Y8/1), very soft, wet, strong HCl reaction, little fine grained sand, oolitic (Miami Formation)
-8.9	7.5	4	7	6	13	728-3			
-11.3	9.9	6	6	6	12	728-4			
-13.5	12.1	4	5	11	16	728-5			9.9ft: trace sand
-16.2	14.8	9	15	12	27	728-6			12.1ft: soft
-22.8	21.4	4	5	17	22	728-7			
-27.9	26.5	6	8	5	13	728-8			21.4ft: very soft 23.7ft: Switch sampling method to coring -26.4 / 25.0
-28.7 / -30.7	27.3 / 29.3	12	50/0.3		62/0.8	728-9 RUN-1			LIMESTONE, boundstone, white (2.5Y8/1), hard, wet, strong HCl reaction (Upper Fort Thompson Formation) 23.7ft: moderately hard, moderately indurated, trace fine sand 29.3ft: hard, indurated, few vugs, coralline
-35.7	34.3					RUN-2			
-40.7	39.3					RUN-3			34.3ft: recrystallized calcite
-45.7	44.3					RUN-4			39.3ft: trace vugs
-50.7	49.3					RUN-5			44.3ft: fossiliferous
-55.7	54.3					RUN-6			49.3ft: white (2.5Y8/1) to 49.9ft, then gray (10YR5/1) to 51.0ft -52.4 / 51.0 LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, few vugs, strong HCl reaction, fossiliferous, trace recrystallized calcite, few shell molds and casts (Lower Fort Thompson Formation) 54.3ft: moderately hard to hard, moderately indurated to indurated, trace vugs
-60.7	59.3					RUN-7			
-65.7	64.3					RUN-8			59.3ft: medium hard to moderately hard, friable to moderately indurated, few vugs, trace sand
-70.7	69.3					RUN-9			64.3ft: trace vugs, little fine grained sand
-72.2	70.8					RUN-10			69.3ft: hard, indurated
						RUN-11			70.8ft: moderately hard, moderately indurated, trace sand

SEE LEGEND FOR ROCK HARDNESS CRITERIA BASED ON SPT DATA

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