



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/ C. White			GROUND WATER (ft)				
BORING NO.: B-631			DRILL METHOD: Mud Rotary/ Core			SAMPLE METHODS: SPT/Core			0 HR. NA				
GROUND ELEV.: -1.2 ft (NAVD88)			NORTHING: 396,655 US ft (NAD83/90)			EASTING: 876,514 US ft (NAD83/90)			24 HR. NA				
TOTAL DEPTH: 100.8 ft			BORING DIAMETER: 4" to 33.5', 3" to 100.8'			CASING DEPTH: 4" to 33.5'			HAMMER (ID): 140 lb. Auto (M06)				
DATE STARTED: 4/30/08			COMPLETED: 5/2/08			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			
-76.0					Continued from previous page								
-77.0	75.8										RUN-9		LIMESTONE, boundstone, white (2.5Y8/1), moderately hard to hard, moderately indurated to indurated, little vugs, fossiliferous, trace shell molds and casts, strong HCl reaction (Lower Fort Thompson Formation) (continued)
-82.0	80.8										RUN-10		
-87.0	85.8										631-12		-85.0 POORLY GRADED SAND (SP), white (2.5Y8/1), wet, fine grained sand, strong HCl reaction 83.8
-88.3	87.1	2	34	50/0.3	84/0.8						RUN-11		-87.5 86.3
-92.0	90.8										RUN-12		LIMESTONE, boundstone, white (2.5Y8/1), moderately hard to hard, moderately indurated to indurated, strong HCl reaction, trace fine sand, few vugs 90.8ft: hard, indurated
-97.0	95.8										RUN-13		95.8ft: moderately hard to hard, friable to indurated, trace shell molds and casts
													-102.0 100.8 Boring Terminated at Elevation -102.0 ft

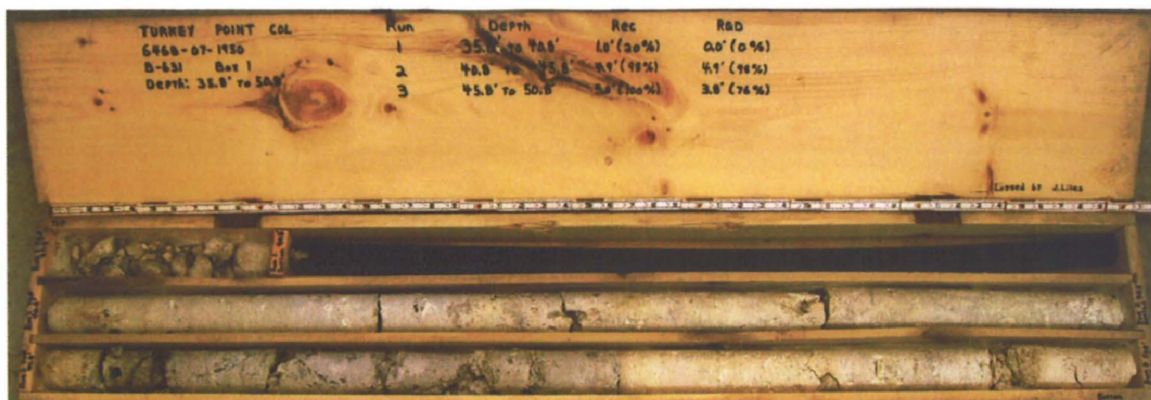
TURKEY POINT COL BORE TURKEY POINT GPJ TURKEY POINT COL GDT 5/30/08



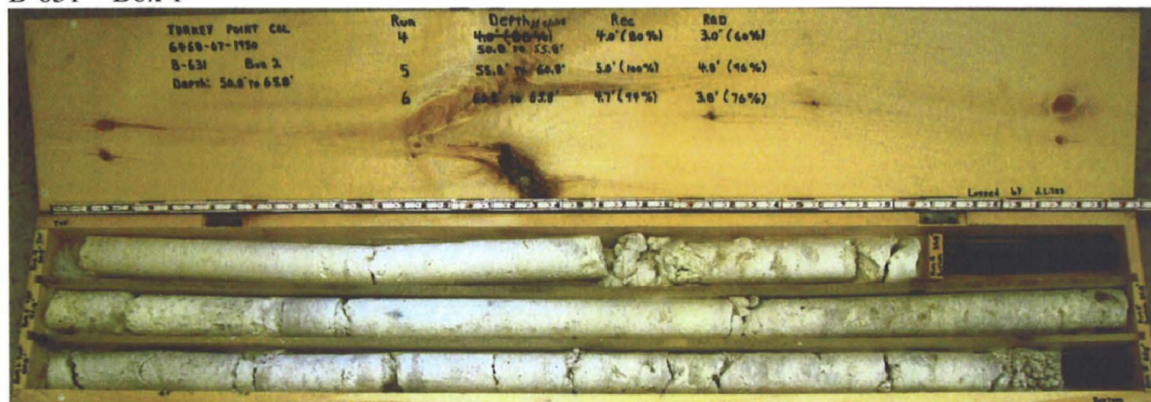
SHEET 1 OF 1

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) 0 HR. NA 24 HR. NA		
BORING NO.: B-631				DRILL METHOD: Mud Rotary/ Core				SAMPLE METHODS: SPT/Core					
GROUND ELEV.: -1.2 ft (NAVD88)				NORTHING: 396,655 US ft (NAD83/90)				EASTING: 876,514 US ft (NAD83/90)					
TOTAL DEPTH: 100.8 ft				CASING DEPTH: 4" to 33.5'						HAMMER (ID): 140 lb. Auto (M06)			
DATE STARTED: 4/30/08		COMPLETED: 5/2/08		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) %		SAMP. NO.	STRATA REC (ft) %		RQD (ft) %	L O G	DESCRIPTION AND REMARKS		
											Begin Coring @ 35.8 ft		
-37.0	35.8	5.0	1:39 1:35 2:37 2:58 2:46	(1.0) 20%	(0.0) 0%	RUN-1	(8.5) 67%	(6.3) 50%			LIMESTONE, boundstone, white (2.5Y8/1), hard, wet, trace fine grained sand, strong HCl reaction (Upper Fort Thompson Formation) (continued) 35.8ft: (2.5Y8/1), hard, indurated, strong HCl reaction, fossiliferous		
-42.0	40.8	5.0	2:09 1:36 1:33 1:49 2:01	(4.9) 98%	(4.9) 98%	RUN-2					40.8ft: recrystallized calcite, coralline		
-47.0	45.8	5.0	1:36 2:28 1:54 2:06 1:27	(5.0) 100%	(3.8) 76%	RUN-3					45.8ft: light gray (10YR7/1) to 48.4ft, moderately hard to hard, moderately indurated to indurated		
-52.0	50.8	5.0	2:11 1:39 0:31 0:47 1:14	(4.0) 80%	(3.0) 60%	RUN-4	(28.3) 80%	(17.6) 50%			LIMESTONE, boundstone, white (2.5Y8/1), moderately hard to hard, moderately indurated to indurated, little vugs, fossiliferous, trace shell molds and casts, strong HCl reaction (Lower Fort Thompson Formation) 50.8ft: medium hard to moderately hard, friable to moderately indurated, few vugs		
-57.0	55.8	5.0	1:32 2:03 1:49 2:01 1:45	(5.0) 100%	(4.8) 96%	RUN-5					55.8ft: moderately hard to hard, moderately indurated to indurated		
-62.0	60.8	5.0	1:50 1:18 1:23 1:06 0:27	(4.7) 94%	(3.8) 76%	RUN-6					60.8ft: medium hard to hard, friable to moderately indurated 65.3ft: 0.3ft-thick sand lense		
-67.0	65.8	5.0	1:50 1:09 0:32 0:31 1:07	(4.6) 92%	(1.6) 32%	RUN-7					65.8ft: medium hard to moderately hard, little to some fine grained sand		
-72.0	70.8	5.0	4:23 1:37 1:52 1:17 1:45	(3.8) 76%	(2.0) 40%	RUN-8							
-77.0	75.8	5.0	0:35 0:50 1:13 0:13 0:09	(1.7) 34%	(0.0) 0%	RUN-9							
-82.0	80.8	5.0	0:40 1:22 0:59 0:08 0:08	(2.1) 42%	(0.0) 0%	RUN-10							
-87.0	85.8		N=84/0.8			631-12	(0.0) 0%	(NA)			POORLY GRADED SAND (SP), white (2.5Y8/1), wet, fine grained sand, strong HCl reaction		
-88.3	87.1	3.7	1:57/0.7 1:23 1:16 1:00	(2.8) 76%	(0.4) 11%	RUN-11	(9.7) 67%	(3.0) 21%			LIMESTONE, boundstone, white (2.5Y8/1), moderately hard to hard, moderately indurated to indurated, strong HCl reaction, trace fine sand, few vugs		
-92.0	90.8	5.0	1:33 1:29 1:01 1:11 1:31	(2.0) 40%	(0.4) 8%	RUN-12					90.8ft: hard, indurated		
-97.0	95.8	5.0	0:39 1:25 1:37 1:36 1:05	(4.9) 98%	(2.2) 44%	RUN-13					95.8ft: moderately hard to hard, friable to indurated, trace shell molds and casts		
-102.0	100.8										Coring Terminated at Elevation -102.0		

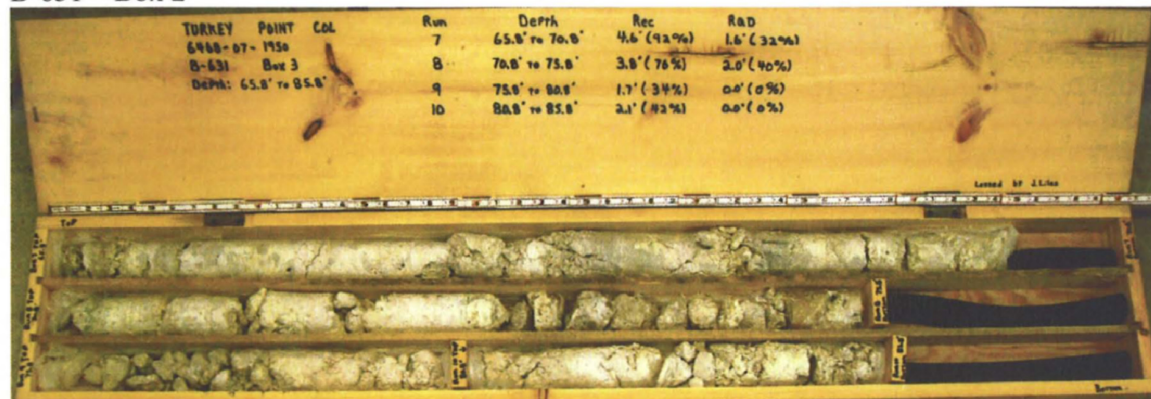
TURKEY POINT COL CORE TURKEY POINT GPJ TURKEY POINT COL GDT 5/3/08



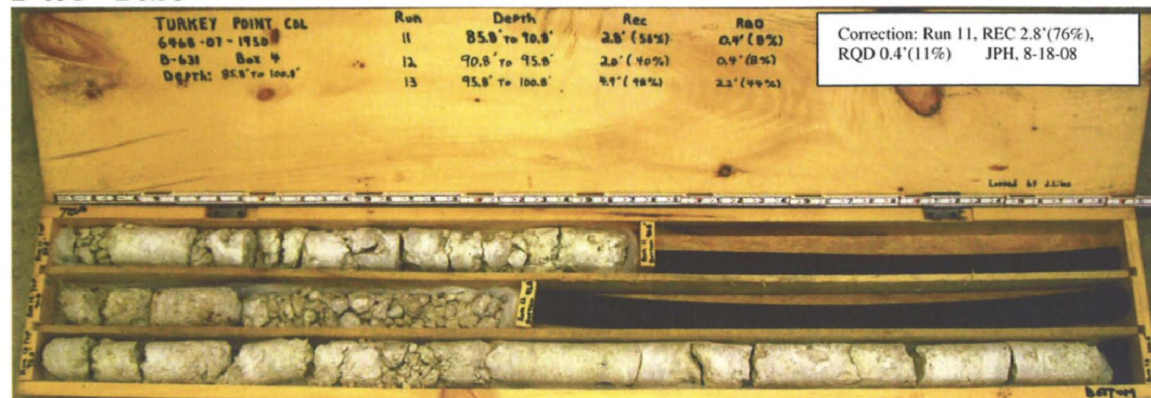
B-631 - Box 1



B-631 - Box 2



B-631 - Box 3



B-631 - Box 4



GEOTECHNICAL BORING LOG

Prepared By SPZ Date 5-20-08Checked By JM Date 5-26-08

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/ B. Green					GROUND WATER (ft) 0 HR. NA 24 HR. NA		
BORING NO.: B-632					DRILL METHOD: Mud Rotary/ Core					SAMPLE METHODS: SPT/Core							
GROUND ELEV.: -1.6 ft (NAVD88)					NORTHING: 396,432 US ft (NAD83/90)					EASTING: 876,737 US ft (NAD83/90)							
TOTAL DEPTH: 100.3 ft			BORING DIAMETER: 4" to 33.6', 3" to 100.3'					CASING DEPTH: 4" to 33.6'					HAMMER (ID): 140 lb. Auto (M06)				
DATE STARTED: 5/4/08			COMPLETED: 5/5/08			CORE SIZE: HQ3			BITS USED: 2 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							
-1.6					Ground Surface												
-1.6	0.0	WOH	WOH	WOH	0						632-1			-1.6	0.0	MUCK, very dark grayish brown (2.5Y3/2), very soft, wet, strong HCl reaction	
-4.1	2.5				7						632-2A&B			-5.1	3.5		
-6.7	5.1	WOH	1	6							632-3					LIMESTONE, boundstone, pale yellow (2.5Y8/2), very soft, wet, strong HCl reaction, trace fine grained sand, oolitic (Miami Formation) 5.1ft: little sand 7.4ft: hard	
-9.0	7.4	6	7	5							632-4						
		20	50/0.1								632-5					12.1ft: soft, trace sand	
-11.6	10.0	6	5	6							632-6						
-14.0	12.4	5	13	12							632-7					15.0ft: medium hard	
-16.6	15.0	17	19	16													
-23.7	22.1	3	3	1							632-8					22.1ft: very soft	
-28.5	26.9	7	25	48							632-9					LIMESTONE, boundstone, white (2.5Y8/1), hard, wet, strong HCl reaction, trace fine grained sand (Upper Fort Thompson Formation) 32.1ft: soft	
																	-27.6
-33.7	32.1	3	22	5							632-10						35.3ft: moderately hard, little fine to medium grained sand 36.8ft: Switch sampling method to coring 36.8ft: hard, indurated, some vugs, recrystallized calcite, coralline
-36.9	35.3																
-38.4	36.8	9	21	30							632-11						41.3ft: trace vugs
											RUN-1						
-42.9	41.3																46.3 to 48.1ft: gray (2.5Y6/1)
											RUN-2						
-47.9	46.3																LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, few vugs, strong HCl reaction, recrystallized calcite (Lower Fort Thompson Formation) 51.3ft: medium hard to moderately hard, friable to moderately indurated, trace vugs, fossiliferous
											RUN-3						
-52.9	51.3																56.3ft: trace to few fine grained sand
											RUN-4						
-57.9	56.3																61.3ft: medium hard to hard, friable to indurated
											RUN-5						
-62.9	61.3																66.3ft: trace shell molds
											RUN-6						
-67.9	66.3																71.3ft: moderately hard to hard, moderately indurated to indurated 73.0 to 76.0ft: soft zone, possible sand interbed
											RUN-7						
-72.9	71.3																
											RUN-8						

TURKEY POINT COL BORE 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/ B. Green			GROUND WATER (ft)							
BORING NO.: B-632			DRILL METHOD: Mud Rotary/ Core			SAMPLE METHODS: SPT/Core			0 HR. NA							
GROUND ELEV.: -1.6 ft (NAVD88)			NORTHING: 396,432 US ft (NAD83/90)			EASTING: 876,737 US ft (NAD83/90)			24 HR. NA							
TOTAL DEPTH: 100.3 ft			BORING DIAMETER: 4" to 33.6", 3" to 100.3'			CASING DEPTH: 4" to 33.6'			HAMMER (ID): 140 lb. Auto (M06)							
DATE STARTED: 5/4/08			COMPLETED: 5/5/08			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				
-76.4					Continued from previous page											
-77.9	76.3										RUN-9			LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, few vugs, strong HCl reaction, recrystallized calcite (Lower Fort Thompson Formation) (continued)		
-82.9	81.3										RUN-10			76.3ft: some vugs, trace shell molds and casts		
-87.9	86.3										RUN-11			81.3ft: few vugs 83.0 to 84.0ft: soft zone, possible sand interbed		
-92.9	91.3										RUN-12			86.3ft: medium hard to hard, friable to indurated, few shell molds and casts		
-97.9	96.3										RUN-13			91.3ft: some vugs, few to little shell molds and casts		
														96.3ft: moderately hard to hard, moderately indurated to indurated, little vugs		
														-101.9	100.3	Boring Terminated at Elevation -101.9 ft

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



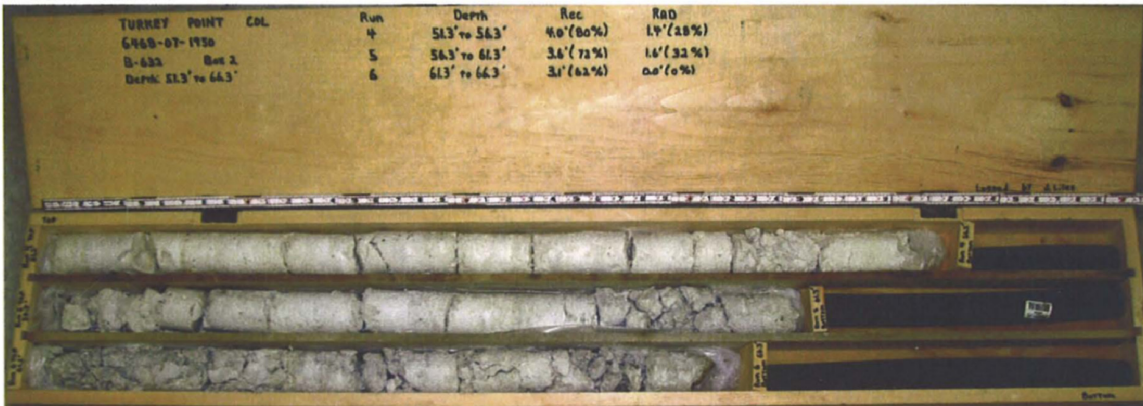
SHEET 1 OF 1

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/ B. Green				GROUND WATER (ft)	
BORING NO.: B-632				DRILL METHOD: Mud Rotary/ Core				SAMPLE METHODS: SPT/Core				0 HR. NA	
GROUND ELEV.: -1.6 ft (NAVD88)				NORTHING: 396,432 US ft (NAD83/90)				EASTING: 876,737 US ft (NAD83/90)				24 HR. NA	
TOTAL DEPTH: 100.3 ft				CASING DEPTH: 4" to 33.6'						HAMMER (ID): 140 lb. Auto (M06)			
DATE STARTED: 5/4/08		COMPLETED: 5/5/08		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 @ 36.8 ft	
-38.4	36.8	4.5	1:39 0:30 3:28 3:13	(3.5) 78%	(1.7) 38%	RUN-1	(10.3) 91%	(6.9) 61%				LIMESTONE, boundstone, white (2.5Y8/1), hard, wet, strong HCl reaction, trace fine grained sand (Upper Fort Thompson Formation) (continued)	
-42.9	41.3		0:49/0.5	(5.0) 100%	(4.0) 80%	RUN-2						36.8ft: hard, indurated, some vugs, recrystallized calcite, coralline	
		5.0	2:18 1:30 1:59 2:01 2:19	(5.0) 100%	(4.0) 80%	RUN-2						41.3ft: trace vugs	
-47.9	46.3	5.0	2:04 3:03 1:55 1:54 1:35	(4.9) 98%	(3.9) 78%	RUN-3						46.3 to 48.1ft: gray (2.5Y6/1)	
-52.9	51.3	5.0	1:55 1:20 0:55 0:23 0:29	(4.0) 80%	(1.4) 28%	RUN-4	(39.9) 76%	(15.3) 29%				LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, few vugs, strong HCl reaction, recrystallized calcite (Lower Fort Thompson Formation)	
-57.9	56.3	5.0	0:51 1:00 0:40 0:30 0:31	(3.6) 72%	(1.6) 32%	RUN-5						51.3ft: medium hard to moderately hard, friable to moderately indurated, trace vugs, fossiliferous	
-62.9	61.3	5.0	0:44 0:55 0:24 0:09 0:37	(3.1) 62%	(0.0) 0%	RUN-6						56.3ft: trace to few fine grained sand	
-67.9	66.3	5.0	0:57 1:38 0:32 1:01 1:00	(3.7) 74%	(1.7) 34%	RUN-7						61.3ft: medium hard to hard, friable to indurated	
-72.9	71.3	5.0	1:52 0:42 0:05 0:03 0:22	(1.7) 34%	(0.4) 8%	RUN-8						66.3ft: trace shell molds	
-77.9	76.3	5.0	1:53 1:37 1:23 1:30 0:37	(4.8) 96%	(3.5) 70%	RUN-9						71.3ft: moderately hard to hard, moderately indurated to indurated	
-82.9	81.3	5.0	0:29 0:44 0:15 0:41 1:06	(3.8) 76%	(0.4) 8%	RUN-10						73.0 to 76.0ft: soft zone, possible sand interbed	
-87.9	86.3	5.0	1:27 1:44 0:38 0:52 1:04	(3.5) 70%	(0.8) 16%	RUN-11						76.3ft: some vugs, trace shell molds and casts	
-92.9	91.3	5.0	1:05 0:40 0:49 0:47 0:42	(4.7) 94%	(1.7) 34%	RUN-12						81.3ft: few vugs	
-97.9	96.3	4.0	0:44 0:43 1:05 0:53	(3.9) 98%	(1.1) 28%	RUN-13						83.0 to 84.0ft: soft zone, possible sand interbed	
-101.9	100.3											86.3ft: medium hard to hard, friable to indurated, few shell molds and casts	
												91.3ft: some vugs, few to little shell molds and casts	
												96.3ft: moderately hard to hard, moderately indurated to indurated, little vugs	
												Coring Terminated at Elevation -101.9	

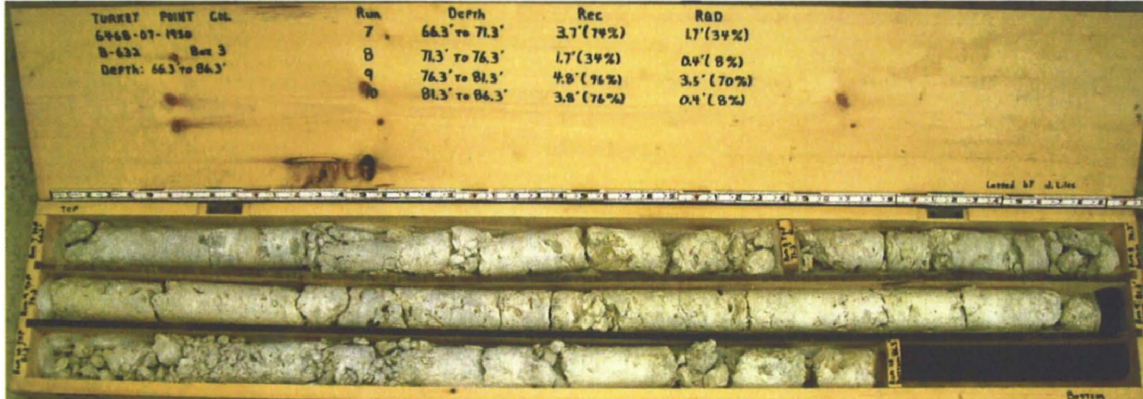
TURKEY POINT COL CORE TURKEY POINT GPJ TURKEY POINT COL GDT 5/30/08



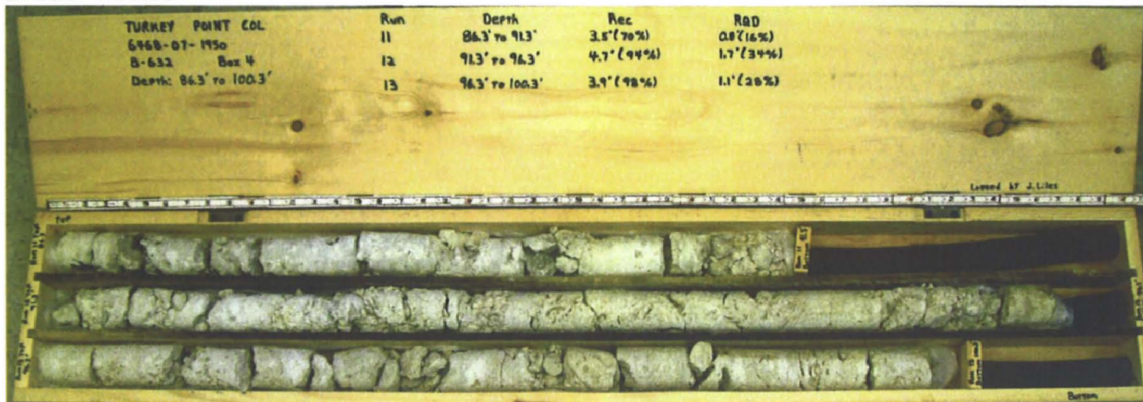
B-632 - Box 1



B-632 - Box 2



B-632 - Box 3



B-632 - Box 4



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-633					DRILL METHOD: Mud Rotary/ Core					SAMPLE METHODS: SPT/Core							
GROUND ELEV.: -1.5 ft (NAVD88)					NORTHING: 396,113 US ft (NAD83/90)					EASTING: 876,994 US ft (NAD83/90)							
TOTAL DEPTH: 100.4 ft			BORING DIAMETER: 4" to 100.4"					CASING DEPTH: 4" to 28.4'					HAMMER (ID): 140 lb. Auto (MEC-425)				
DATE STARTED: 5/13/08			COMPLETED: 5/15/08			CORE SIZE: HQ3					BITS USED: 3 7/8" Roller Cone						
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.			MOI			
-1.5					Ground Surface												
-1.5	0.0	WOR	WOR	WOR	0						633-1		-1.5	0.0	MUCK, very dark grayish brown (2.5Y3/2), very soft, wet, strong HCl reaction, organics, trace shell fragments		
-5.0	3.5	9	5	7	12						633-2		-4.5	3.0	LIMESTONE, boundstone, white (2.5Y8/1), very soft, friable, wet, strong HCl reaction, oolitic (Miami Formation)		
-7.5	6.0	4	15	50/0.4						65/0.9	633-3				6.0ft: hard, friable to indurated		
-10.0	8.5	3	5	3	8						633-4				8.5ft: very soft, friable		
-12.5	11.0	6	50/0.3							56/0.8	633-5				11.0ft: hard		
-15.0	13.5	9	9	17	26						633-6				13.5ft: soft, moderately indurated		
-20.0	18.5	17	8	8	16						633-7				18.5ft: very soft		
-25.0	23.5	11	9	9	18						633-8				23.5ft: friable to moderately indurated		
-30.0	28.5	7	6	19	25						633-9		-27.5	26.0	LIMESTONE, boundstone, white (2.5Y8/1), soft, wet, moderately indurated, strong HCl reaction, fossiliferous, coralline (Upper Fort Thompson Formation)		
-35.0	33.5																
-36.3	34.8	36	23	50/0.3						73/0.8	633-10				33.5ft: hard, indurated		
-37.3	35.8										RUN-1				34.8ft: Switch sampling method to SPT		
											RUN-2				34.8ft: few vugs		
															35.8ft: little vugs, recrystallized calcite		
-42.3	40.8										RUN-3						
-47.3	45.8										RUN-4		-49.3	47.8	45.8ft: light gray (10Y7/1), few vugs, to 47.8ft		
-52.3	50.8										RUN-5				LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, fossiliferous, few vugs, strong HCl reaction (Lower Fort Thompson Formation)		
-57.3	55.8										RUN-6				50.8ft: white (2.5Y8/1), to light gray (2.5Y7/1)		
-62.3	60.8										RUN-7				55.8ft: white (2.5Y8/1), shell molds		
-67.3	65.8										RUN-8				65.8ft: moderately indurated to indurated, little vugs		
-72.3	70.8										RUN-8				70.8ft: indurated, trace vugs		

TURKEY POINT COL BORE TURKEY POINT COL GDI 8/18/08



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)							
BORING NO.: B-633			DRILL METHOD: Mud Rotary/ Core			SAMPLE METHODS: SPT/Core			0 HR. NA							
GROUND ELEV.: -1.5 ft (NAVD88)			NORTHING: 396,113 US ft (NAD83/90)			EASTING: 876,994 US ft (NAD83/90)			24 HR. NA							
TOTAL DEPTH: 100.4 ft			BORING DIAMETER: 4" to 100.4"			CASING DEPTH: 4" to 28.4'			HAMMER (ID): 140 lb. Auto (MEC-425)							
DATE STARTED: 5/13/08			COMPLETED: 5/15/08			CORE SIZE: HQ3			BITS USED: 3 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						
-76.3					Continued from previous page											
-77.3	75.8										RUN-10			LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, fossiliferous, few vugs, strong HCl reaction (Lower Fort Thompson Formation) (continued)		
-82.3	80.8										RUN-11			75.8ft: few vugs 80.8ft: trace vugs		
-87.3	85.8										RUN-12			85.8ft: moderately hard to hard, moderately indurated to indurated, few to little vugs		
-92.3	90.8										RUN-13			90.5ft: hard, indurated, trace vugs		
-97.3	95.8										RUN-14			95.8ft: moderately hard, moderately indurated		
														-101.9	100.4	Boring Terminated at Elevation -101.9 ft

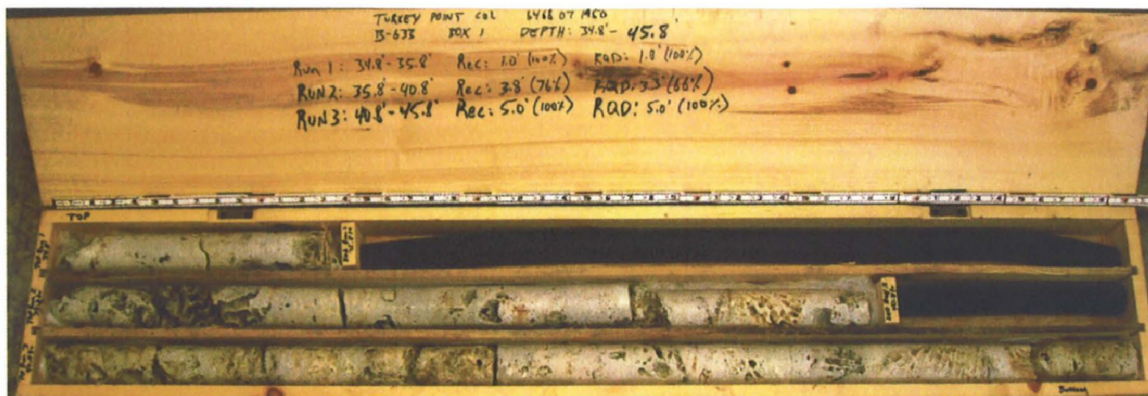
TURKEY POINT COL BORE TURKEY POINT GPJ TURKEY POINT COL.GPJ 8/18/08



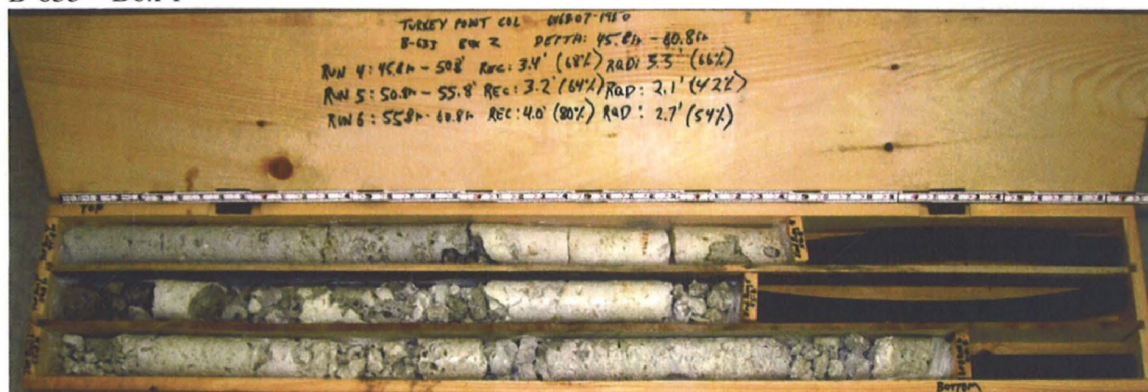
SHEET 1 OF 1

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)	
BORING NO.: B-633				DRILL METHOD: Mud Rotary/ Core				SAMPLE METHODS: SPT/Core				0 HR. NA	
GROUND ELEV.: -1.5 ft (NAVD88)				NORTHING: 396,113 US ft (NAD83/90)				EASTING: 876,994 US ft (NAD83/90)				24 HR. NA	
TOTAL DEPTH: 100.4 ft				CASING DEPTH: 4" to 28.4'						HAMMER (ID): 140 lb. Auto (MEC-425)			
DATE STARTED: 5/13/08		COMPLETED: 5/15/08		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 @ 34.8 ft		
-36.3	34.8	1.0	8:11	(1.0)	(1.0)	RUN-1	(11.8)	(11.2)			LIMESTONE, boundstone, white (2.5Y8/1), soft, wet, moderately indurated, strong HCl reaction, fossiliferous, coralline (Upper Fort Thompson Formation) (continued) 34.8ft: few vugs 35.8ft: little vugs, recrystallized calcite		
-37.3	35.8	5.0	8:00 8:20 11:51 10:02 5:33	100% (3.8) 76%	100% (3.3) 66%	RUN-2	91%	86%					
-42.3	40.8	5.0	24:59 17:44 9:25 6:54 5:58	(5.0) 100%	(5.0) 100%	RUN-3					45.8ft: light gray (10Y7/1), few vugs, to 47.8ft		
-47.3	45.8	5.0	8:16 5:04 3:43 4:03 3:09	(3.4) 68%	(3.3) 66%	RUN-4							
-52.3	50.8	5.0	4:27 1:11 3:30 1:17 1:10	(3.2) 64%	(2.1) 42%	RUN-5	(32.8) 62%	(17.6) 33%			LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, fossiliferous, few vugs, strong HCl reaction (Lower Fort Thompson Formation) 50.8ft: white (2.5Y8/1), to light gray (2.5Y7/1)		
-57.3	55.8	5.0	4:22 2:27 2:46 1:10 3:09	(4.0) 80%	(2.7) 54%	RUN-6							
-62.3	60.8	5.0	3:28 8:10 4:10 0:58 1:04	(2.7) 54%	(2.2) 44%	RUN-7					55.8ft: white (2.5Y8/1), shell molds		
-67.3	65.8	5.0	3:44 5:37 3:56 2:12 3:55	(1.9) 38%	(0.0) 0%	RUN-8							
-72.3	70.8	5.0	3:23 3:21 3:04 3:25 3:58	(1.7) 34%	(0.6) 12%	RUN-9					65.8ft: moderately indurated to indurated, little vugs		
-77.3	75.8	5.0	7:01 9:45 5:59 8:15 3:18	(3.9) 78%	(1.6) 32%	RUN-10							
-82.3	80.8	5.0	6:19 6:50 3:10 5:30 1:47	(2.8) 56%	(1.0) 20%	RUN-11					70.8ft: indurated, trace vugs		
-87.3	85.8	5.0	3:11 6:20 4:14 3:45 3:00	(4.3) 86%	(2.8) 56%	RUN-12							
-92.3	90.8	5.0	3:10 1:50 0:55 2:05 1:41	(3.7) 74%	(1.7) 34%	RUN-13					75.8ft: few vugs		
-97.3	95.8	4.6	1:08 0:28 3:31 3:33 3:40/0.6	(3.2) 70%	(1.5) 33%	RUN-14							
-101.9	100.4										Coring Terminated at Elevation -101.9		

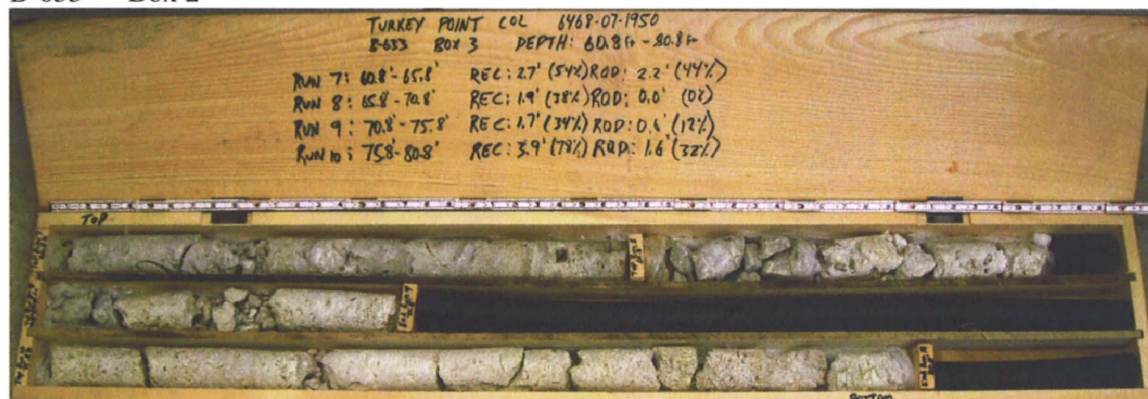
TURKEY POINT COL CORE TURKEY POINT GPJ TURKEY POINT COL GDI 5/18/08



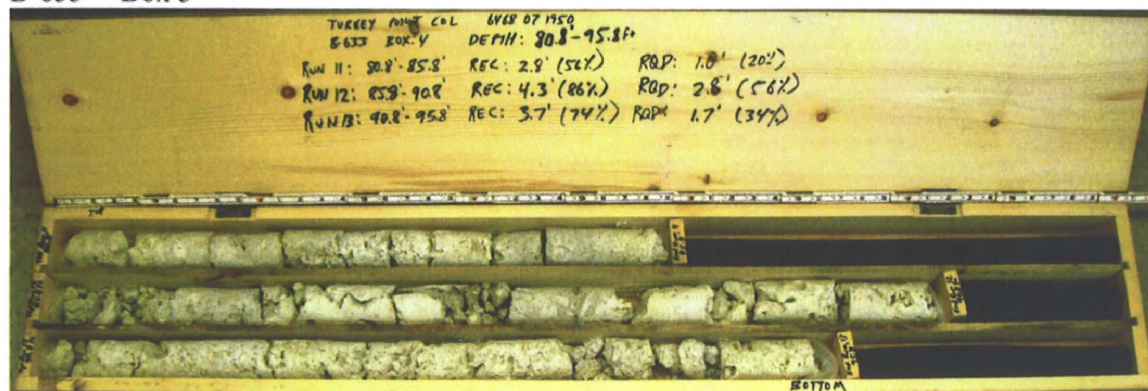
B-633 - Box 1



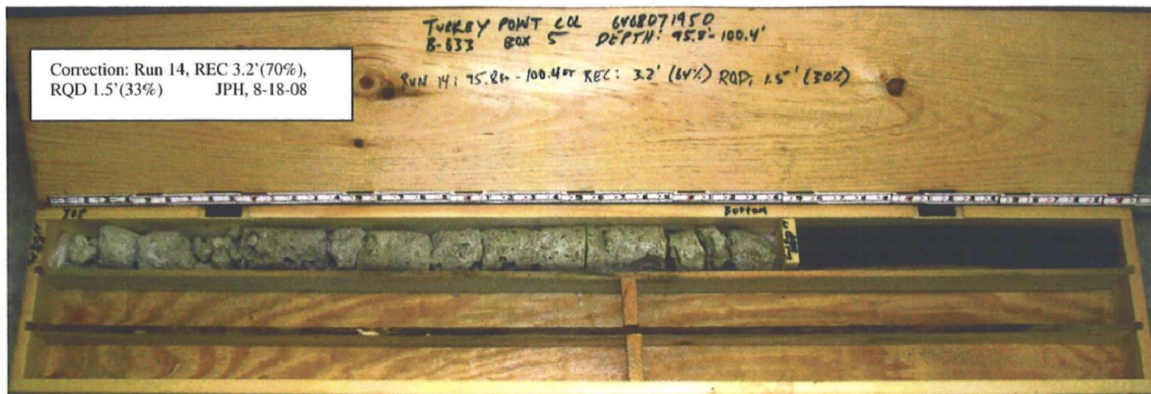
B-633 - Box 2



B-633 - Box 3



B-633 - Box 4



B-633 - Box 5



GEOTECHNICAL BORING LOG

Prepared By JP 2 Date 7-10-08Checked By MM Date 7-10-08

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-634			DRILL METHOD: Mud Rotary/ Core			SAMPLE METHODS: SPT/Core			0 HR. NA				
GROUND ELEV.: -0.7 ft (NAVD88)			NORTHING: 395,758 US ft (NAD83/90)			EASTING: 876,677 US ft (NAD83/90)			24 HR. NA				
TOTAL DEPTH: 127.5 ft			BORING DIAMETER: 4" to 30.0', 3" to 127.5'			CASING DEPTH: 4" to 30.0', 3" to 126.0'			HAMMER (ID): 140 lb. Auto (893)				
DATE STARTED: 4/7/08			COMPLETED: 4/9/08			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						634-1		MUCK, very dark gray (7.5YR3/1), very soft, wet, trace fine grained sand, trace shell fragments, strong HCl reaction
-3.2	2.5	1	1	2	3						634-2		2.5ft: soft, weak HCl reaction
-5.7	5.0	4	3	3	6						634-3		LIMESTONE, boundstone, white (10YR8/1), very soft, wet, trace shell fragments, strong HCl reaction, oolitic (Miami Formation)
-8.2	7.5	17	25	10	35						634-4		7.5ft: white (10YR8/10), to gray (10YR6/1), medium hard
-10.7	10.0	6	6	6	12						634-5		10.0ft: white (10YR8/1), very soft
-13.2	12.5	12	9	7	16						634-6		
-15.7	15.0	6	12	13	25						634-7		15.0ft: soft
-19.5	18.8	44	21	10	31						634-8		18.8ft: white (2.5Y8/1), medium hard
-24.5	23.8	10	3	4	7						634-9		23.8ft: white (10YR8/1), soft
-29.5	28.8	14	38	50/0.4	88/0.9						634-10		LIMESTONE, boundstone, white (10YR8/1), hard, wet, fossiliferous, trace fine grained sand, strong HCl reaction (Upper Fort Thompson Formation)
-30.9	30.2										RUN-1		30.2ft: Switch sampling method to coring
-32.0	31.3										RUN-2		30.2ft: white (10YR8/1), soft to hard, friable to indurated, fossiliferous, strong HCl reaction, few vugs
-37.2	36.5										RUN-3		31.3ft: moderately hard, moderately indurated, cemented sand layers, coralline
-42.2	41.5										RUN-4		36.5ft: hard, indurated, locally interconnected vugs
-47.2	46.5										RUN-5		41.5ft: few vugs
-52.2	51.5										RUN-6		LIMESTONE, boundstone, white (7.5YR8/1), moderately hard, moderately indurated, trace shell molds and casts (Lower Fort Thompson Formation)
-57.2	56.5										RUN-7		56.5ft: white (2.5Y8/1)
-62.2	61.5										RUN-8		61.5ft: white (7.5YR8/1), hard, indurated
-67.2	66.5										RUN-9		66.5ft: white (10YR8/1)
-72.2	71.5										RUN-10		66.5 to 76.5ft: interbedded sand layers
													71.5ft: moderately hard, moderately indurated

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

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-634			DRILL METHOD: Mud Rotary/ Core			SAMPLE METHODS: SPT/Core			0 HR. NA						
GROUND ELEV.: -0.7 ft (NAVD88)			NORTHING: 395,758 US ft (NAD83/90)			EASTING: 876,677 US ft (NAD83/90)			24 HR. NA						
TOTAL DEPTH: 127.5 ft			BORING DIAMETER: 4" to 30.0", 3" to 127.5'			CASING DEPTH: 4" to 30.0', 3" to 126.0'			HAMMER (ID): 140 lb. Auto (893)						
DATE STARTED: 4/7/08			COMPLETED: 4/9/08			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					
-75.5					Continued from previous page										
-77.2	76.5														
-78.7	78.0	3	9	11	●20						634-11A&B				LIMESTONE, boundstone, white (7.5YR8/1), moderately hard, moderately indurated, trace shell molds and casts (Lower Fort Thompson Formation) (continued)
-82.2	81.5										RUN-11				
-87.2	86.5										RUN-12				81.5ft: medium hard
-92.2	91.5										RUN-13				86.5ft: little shell molds and casts
-97.2	96.5										RUN-14				
-102.2	101.5										RUN-15				
-107.2	106.5										RUN-16				101.5ft: mostly shell molds and casts
-112.2	111.5										RUN-17				
-117.2	116.5										RUN-18				111.5ft: trace shell molds and casts
-126.7	126.0	8	9	5	●14						634-12				115.7ft: Silty SAND (SM), light gray (10YR7/2), medium dense, wet, interbedded friable sandy limestone lenses (Tamiami Formation) 116.5ft: Switch sampling method to SPT
		4	4	5	●9						634-13				126.0ft: loose
															127.5ft: Boring Terminated at Elevation -128.2 ft

TURKEY POINT COL.BORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 7/10/08



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-634				DRILL METHOD: Mud Rotary/ Core				SAMPLE METHODS: SPT/Core				0 HR. NA	
GROUND ELEV.: -0.7 ft (NAVD88)				NORTHING: 395,758 US ft (NAD83/90)				EASTING: 876,677		US ft (NAD83/90)		24 HR. NA	
TOTAL DEPTH: 127.5 ft				CASING DEPTH: 4" to 30.0', 3" to 126.0'						HAMMER (ID): 140 lb. Auto (893)			
DATE STARTED: 4/7/08		COMPLETED: 4/9/08		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 @ 30.2 ft	
-30.9	30.2	1.3	1.20	(0.4)	(0.0)	RUN-1	(15.2)	(5.1)				LIMESTONE, boundstone, white (10YR8/1), hard, wet, fossiliferous, trace fine grained sand, strong HCl reaction (Upper Fort Thompson Formation)	
-32.2	31.5	5.0	0.20/0.3	31%	0%	RUN-2	71%	24%				(continued)	
			1.02	(3.0)	(1.3)	RUN-2						30.2ft: white (10YR8/1), soft to hard, friable to indurated, fossiliferous, strong HCl reaction, few vugs	
			1.00	60%	26%							31.3ft: moderately hard, moderately indurated, cemented sand layers, coralline	
			1.08									36.5ft: hard, indurated, locally interconnected vugs	
			1.56										
			2.02										
-37.2	36.5	5.0		(4.8)	(3.0)	RUN-3							
			1.52	96%	60%								
			1.52										
			1.28										
			1.12										
			1.19										
-42.2	41.5	5.0		(3.9)	(0.4)	RUN-4						41.5ft: few vugs	
			1.00	78%	8%								
			1.30										
			0.59										
			1.12										
			1.34										
-47.2	46.5	5.0		(3.1)	(0.4)	RUN-5							
			1.15	62%	8%								
			1.20										
			1.35										
			0.45										
			0.55										
-52.2	51.5	5.0		(3.4)	(0.9)	RUN-6	(30.6)	(4.6)				LIMESTONE, boundstone, white (7.5YR8/1), moderately hard, moderately indurated, trace shell molds and casts (Lower Fort Thompson Formation)	
			1.12	68%	18%		48%	7%					
			1.20										
			0.52										
			1.15										
			0.46										
-57.2	56.5	5.0		(2.7)	(0.8)	RUN-7						56.5ft: white (2.5Y8/1)	
			0.48	54%	16%								
			0.48										
			2.00										
			2.45										
			2.21										
-62.2	61.5	5.0		(3.0)	(0.0)	RUN-8						61.5ft: white (7.5YR8/1), hard, indurated	
			1.10	60%	0%								
			0.41										
			1.10										
			0.33										
			0.50										
-67.2	66.5	5.0		(1.0)	(0.0)	RUN-9						66.5ft: white (10YR8/1)	
			0.45	20%	0%							66.5 to 76.5ft: interbedded sand layers	
			0.10										
			0.10										
			0.06										
			0.08										
-72.2	71.5	5.0		(0.8)	(0.0)	RUN-10						71.5ft: moderately hard, moderately indurated	
			0.28	16%	0%								
			0.17										
			0.40										
			0.10										
			0.10										
-77.2	76.5												
			N=20			634-11A&B							
-78.7	78.0	3.5		(1.8)	(0.4)	RUN-11							
			2.00	51%	11%								
			0.47										
			0.56										
-82.2	81.5	5.0	0.33/0.5	(2.4)	(0.4)	RUN-12						81.5ft: medium hard	
			0.40	48%	8%								
			0.20										
			0.22										
			0.15										
			0.15										
-87.2	86.5	5.0		(1.2)	(0.0)	RUN-13						86.5ft: little shell molds and casts	
			0.36	24%	0%								
			0.36										
			0.16										
			0.56										
			1.06										
-92.2	91.5	5.0		(3.2)	(1.4)	RUN-14							
			1.10	64%	28%								
			0.58										
			0.25										
			0.40										
			0.35										
-97.2	96.5	5.0		(2.0)	(0.0)	RUN-15							
			0.21	40%	0%								
			0.28										
			0.15										
			0.25										
			0.16										
-102.2	101.5	5.0		(4.2)	(0.7)	RUN-16						101.5ft: mostly shell molds and casts	
			0.25	84%	14%								
			0.44										
			0.43										

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