



GEOTECHNICAL BORING LOG

Prepared By JPJ Date 5-30-08Checked By JPJ Date 5-30-08

SHEET 1 OF 2

BECHTEL PROJECT NO.: 25409					MACTEC PROJECT NO.: 6468-07-1950					COUNTY: Miami-Dade		GEOLOGIST: L. Bisson				
SITE DESCRIPTION: Turkey Point COL					DRILL MACHINE: CME-550 (ATL)					DRILLER: L. Carter/ J. Landeros			GROUND WATER (ft)			
BORING NO.: B-639					DRILL METHOD: Mud Rotary/Core					SAMPLE METHODS: SPT/Core			0 HR. NA			
GROUND ELEV.: -1.4 ft (NAVD88)					NORTHING: 396,964 US ft (NAD83/90)					EASTING: 876,998 US ft (NAD83/90)			24 HR. NA			
TOTAL DEPTH: 102.6 ft			BORING DIAMETER: 4" to 102.6"					CASING DEPTH: 4" to 15.0'			HAMMER (ID): 140 lb. Auto (MEC-03)					
DATE STARTED: 3/22/08			COMPLETED: 3/24/08			CORE SIZE: HQ3			BITS USED: 4" 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						
-1.4					Ground Surface											
-1.4	0.0	WOR	WOR	WOR	0						639-1			-1.4	0.0	MUCK, black (10YR2/1), very soft, wet, organic, trace shells
-3.9	2.5													-4.4	3.0	
-6.4	5.0	2	6	20							639-2A&B					LIMESTONE, boundstone, light gray (2.5Y7/2), soft, wet, sandy, fossiliferous, oolitic (Miami Formation) 5.0ft: pale yellow (2.5Y8/2), very soft
-8.9	7.5	7	9	8							639-3					
		6	8	4							639-4					10.0ft: white (10YR8/1)
-11.4	10.0	4	5	6							639-5					
-13.9	12.5	10	10	8							639-6					15.0ft: white (2.5Y8/1), to light gray (2.5Y7/1), hard 16.3ft: Switch sampling method to coring 16.3ft: moderately hard, moderately indurated 17.6ft: soft to medium hard, trace sand
-16.4	15.0	5	12	50/0.3							639-7					
-17.7	16.3										RUN-1					22.0ft: loss of circulation
-19.0	17.6										RUN-2					
																LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, few vugs, trace sand, trace recrystallized calcite, fossiliferous, strong HCl reaction, coralline (Upper Fort Thompson Formation)
-24.0	22.6										RUN-3			-25.4	24.0	
																32.6ft: trace vugs
-29.0	27.6										RUN-4					
																42.6ft: white (2.5Y8/1) to 45.7ft then gray (10YR6/1), to light gray (10YR7/1), little to trace vugs
-34.0	32.6										RUN-5					
																LIMESTONE, boundstone, white (10YR8/1), hard, indurated, fossiliferous, trace vugs, few gastropod shell molds and casts, strong HCl reaction (Lower Fort Thompson Formation)
-39.0	37.6										RUN-6					
																52.6ft: trace shell molds
-44.0	42.6										RUN-7					
																57.6ft: white (2.5Y8/1), to light gray (2.5Y7/1), moderately hard, sandy
-49.0	47.6										RUN-8			-49.0	47.6	
																62.6ft: white (2.5Y8/1) 52.6 to 74.6ft: possible interbedded sand lenses
-54.0	52.6										RUN-9					
-59.0	57.6										RUN-10					
-64.0	62.6										RUN-11					
-69.0	67.6										RUN-12					
-70.0	68.6										RUN-13					
-74.0	72.6										RUN-14					
-76.0	74.6															

TURKEY POINT COL BORE 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: L. Bisson									
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 (ATL)		DRILLER: L. Carter/ J. Landeros		GROUND WATER (ft)									
BORING NO.: B-639		DRILL METHOD: Mud Rotary/Core		SAMPLE METHODS: SPT/Core		0 HR. NA									
GROUND ELEV.: -1.4 ft (NAVD88)		NORTHING: 396,964 US ft (NAD83/90)		EASTING: 876,998 US ft (NAD83/90)		24 HR. NA									
TOTAL DEPTH: 102.6 ft		BORING DIAMETER: 4" to 102.6'		CASING DEPTH: 4" to 15.0'		HAMMER (ID): 140 lb. Auto (MEC-03)									
DATE STARTED: 3/22/08		COMPLETED: 3/24/08		CORE SIZE: HQ3		BITS USED: 4" 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					
-76.2					Continued from previous page										
-79.0	77.6										RUN-15		76.4ft: white (2.5Y8/1), to light gray (2.5Y7/1), hard, indurated LIMESTONE, boundstone, white (10YR8/1), hard, indurated, fossiliferous, trace vugs, few gastropod shell molds and casts, strong HCl reaction (Lower Fort Thompson Formation) (continued) 77.6ft: white (2.5Y8/1), few to little shell molds and casts		
-84.0	82.6										RUN-16				
-89.0	87.6										RUN-17				
-94.0	92.6										RUN-18				
-99.0	97.6										RUN-19				
											RUN-20		97.6ft: trace vugs		
													-104.0	102.6	Boring Terminated at Elevation -104.0 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: L. Bisson			
SITE DESCRIPTION: Turkey Point COL				DRILL MACHINE: CME-550 (ATL)				DRILLER: L. Carter/ J. Landeros				GROUND WATER (ft)	
BORING NO.: B-639				DRILL METHOD: Mud Rotary/Core				SAMPLE METHODS: SPT/Core				0 HR. NA	
GROUND ELEV.: -1.4 ft (NAVD88)				NORTHING: 396,964 US ft (NAD83/90)				EASTING: 876,998 US ft (NAD83/90)				24 HR. NA	
TOTAL DEPTH: 102.6 ft				CASING DEPTH: 4" to 15.0'						HAMMER (ID): 140 lb. Auto (MEC-03)			
DATE STARTED: 3/22/08		COMPLETED: 3/24/08		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 @ 16.3 ft		
-17.7	16.3	1.3	1:32	(1.0)	(0.5)	RUN-1	(4.5)	(1.1)			LIMESTONE, boundstone, light gray (2.5Y7/2), soft, wet, sandy, fossiliferous, oolitic (Miami Formation) (continued) 16.3ft: moderately hard, moderately indurated 17.6ft: soft to medium hard, trace sand		
-19.0	17.6	5.0	0:48/0.3	77%	38%	RUN-2	58%	14%					
			0:59 1:13 1:36 0:43 0:17	(2.5) 50%	(0.6) 12%								
-24.0	22.6										22.0ft: loss of circulation		
		5.0	0:45 0:13 1:31 1:13 2:33	(4.2) 84%	(2.7) 54%	RUN-3	(23.2) 98%	(21.6) 92%					
-29.0	27.6												
		5.0	1:03 1:08 1:27 1:59 1:37	(5.0) 100%	(4.7) 94%	RUN-4					LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, few vugs, trace sand, trace recrystallized calcite, fossiliferous, strong HCl reaction, coralline (Upper Fort Thompson Formation)		
-34.0	32.6												
		5.0	1:11 1:07 1:09 1:05 1:26	(5.0) 100%	(4.8) 96%	RUN-5							
-39.0	37.6										32.6ft: trace vugs		
		5.0	0:36 1:29 0:45 1:22 1:23	(5.0) 100%	(4.6) 92%	RUN-6							
-44.0	42.6												
		5.0	1:01 1:32 1:35 2:08 2:07	(5.0) 100%	(4.8) 96%	RUN-7					42.6ft: white (2.5Y8/1) to 45.7ft then gray (10YR6/1), to light gray (10YR7/1), little to trace vugs		
-49.0	47.6												
		5.0	0:59 2:08 1:32 1:06 1:13	(5.0) 100%	(5.0) 100%	RUN-8	(44.9) 82%	(27.3) 50%					
-54.0	52.6										LIMESTONE, boundstone, white (10YR8/1), hard, indurated, fossiliferous, trace vugs, few gastropod shell molds and casts, strong HCl reaction (Lower Fort Thompson Formation)		
		5.0	0:36 0:53 0:42 1:20 1:05	(5.0) 100%	(4.1) 82%	RUN-9							
-59.0	57.6												
		5.0	1:06 0:29 0:43 0:13 0:36	(3.8) 76%	(1.6) 32%	RUN-10					57.6ft: white (2.5Y8/1), to light gray (2.5Y7/1), moderately hard, sandy		
-64.0	62.6												
		5.0	0:31 0:27 0:40 0:25 0:29	(1.8) 36%	(0.0) 0%	RUN-11							
-69.0	67.6										62.6ft: white (2.5Y8/1) 52.6 to 74.6ft: possible interbedded sand lenses		
-70.0	68.6	1.0	2:00	(0.9) 90%	(0.0) 0%	RUN-12							
		4.0	0:58 0:10 0:24 2:04	(2.4) 60%	(0.8) 20%	RUN-13							
-74.0	72.6										76.4ft: white (2.5Y8/1), to light gray (2.5Y7/1), hard, indurated		
		2.0	0:30 3:47	(1.5) 75%	(0.0) 0%	RUN-14							
-76.0	74.6												
		3.0	3:13 1:27 1:04	(3.0) 100%	(1.9) 63%	RUN-15					77.6ft: white (2.5Y8/1), few to little shell molds and casts		
-79.0	77.6												
		5.0	1:31 0:56 0:45 0:43 0:58	(5.0) 100%	(3.7) 74%	RUN-16							
-84.0	82.6										87.6ft: few vugs, few shell molds and casts		
		5.0	0:49 0:14 1:07 0:53 1:06	(4.1) 82%	(2.3) 46%	RUN-17							
-89.0	87.6												
		5.0	0:59 0:16 0:46	(4.0) 80%	(2.3) 46%	RUN-18							

TURKEY POINT COL CORE TURKEY POINT G.P.I. TURKEY POINT COL GDT 5/30/08

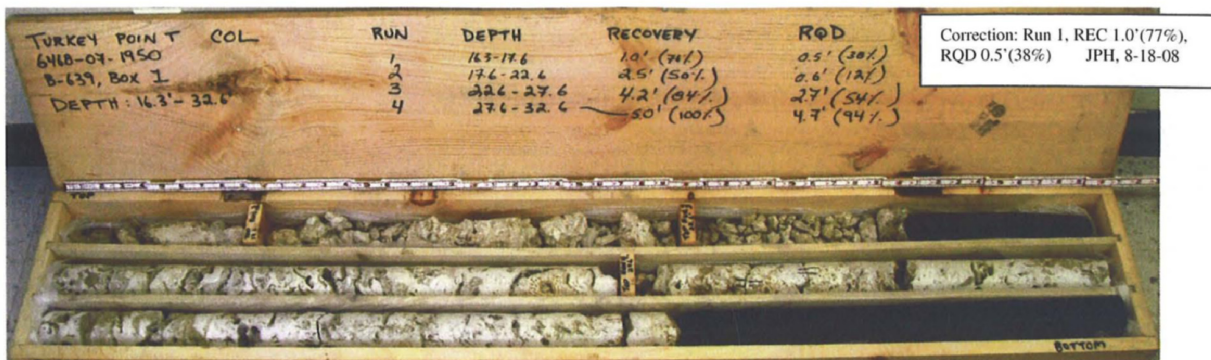


SHEET 2 OF 2

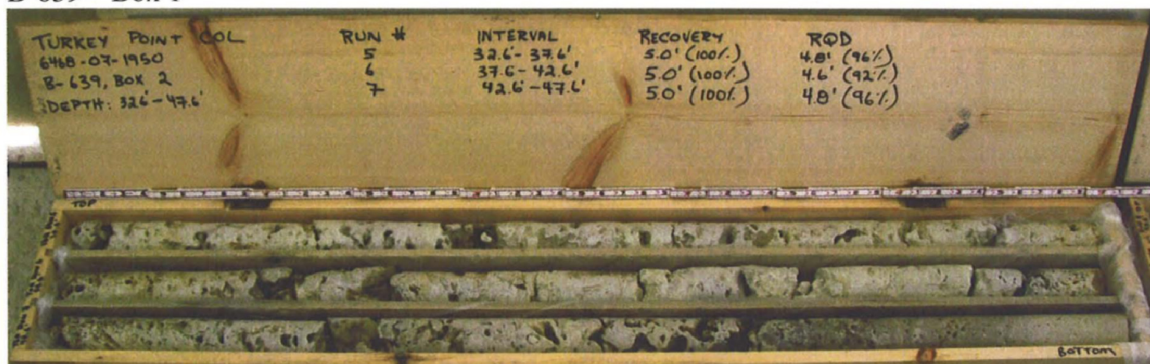
BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade		GEOLOGIST: L. Bisson	
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-550 (ATL)		DRILLER: L. Carter/ J. Landeros		GROUND WATER (ft)	
BORING NO.: B-639		DRILL METHOD: Mud Rotary/Core		SAMPLE METHODS: SPT/Core		0 HR. NA	
GROUND ELEV.: -1.4 ft (NAVD88)		NORTHING: 396,964 US ft (NAD83/90)		EASTING: 876,998 US ft (NAD83/90)		24 HR. NA	
TOTAL DEPTH: 102.6 ft		CASING DEPTH: 4" to 15.0'				HAMMER (ID): 140 lb. Auto (MEC-03)	
DATE STARTED: 3/22/08		COMPLETED: 3/24/08		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) %		
										Continued from previous page
-94.0	92.6	5.0	1:16 0:30	(4.3) 86%	(2.9) 58%	RUN-19				LIMESTONE, boundstone, white (10YR8/1), hard, indurated, fossiliferous, trace vugs, few gastropod shell molds and casts, strong HCl reaction (Lower Fort Thompson Formation) (continued)
-99.0	97.6	5.0	0:45 0:36 1:11 0:58 0:32	(4.1) 82%	(2.7) 54%	RUN-20				97.6ft: trace vugs
-104.0	102.6		0:57 1:38 1:05 1:35 1:32							Coring Terminated at Elevation -104.0

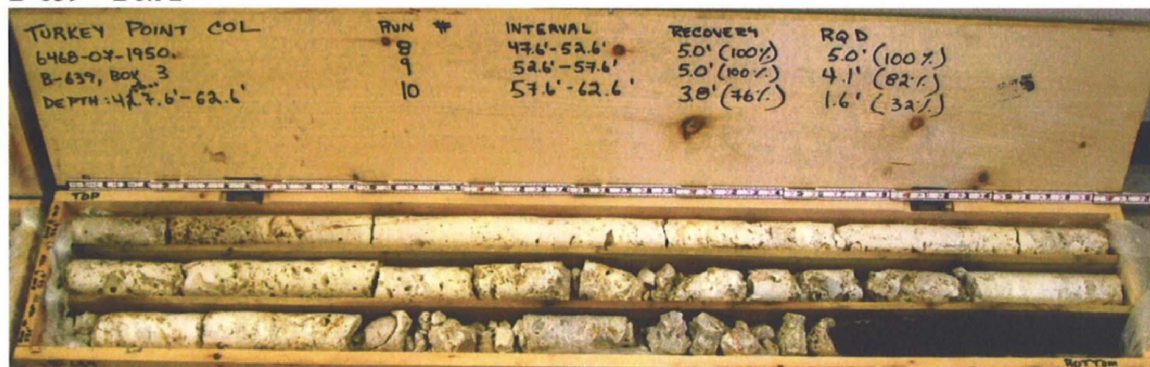
TURKEY POINT COL CORE TURKEY POINT GPJ TURKEY POINT COL GDI 5/30/08



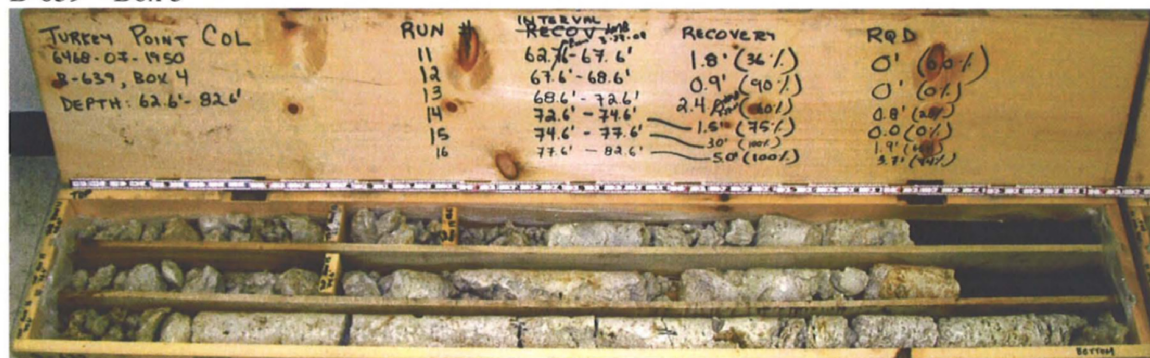
B-639 - Box 1



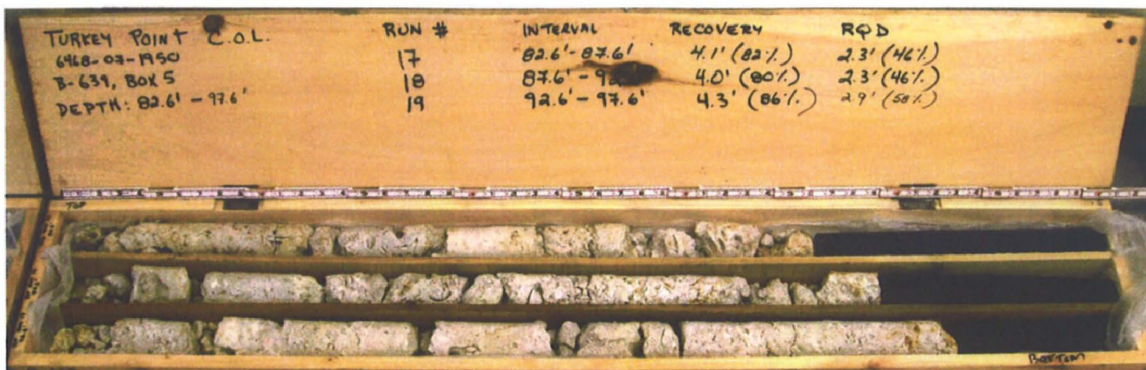
B-639 - Box 2



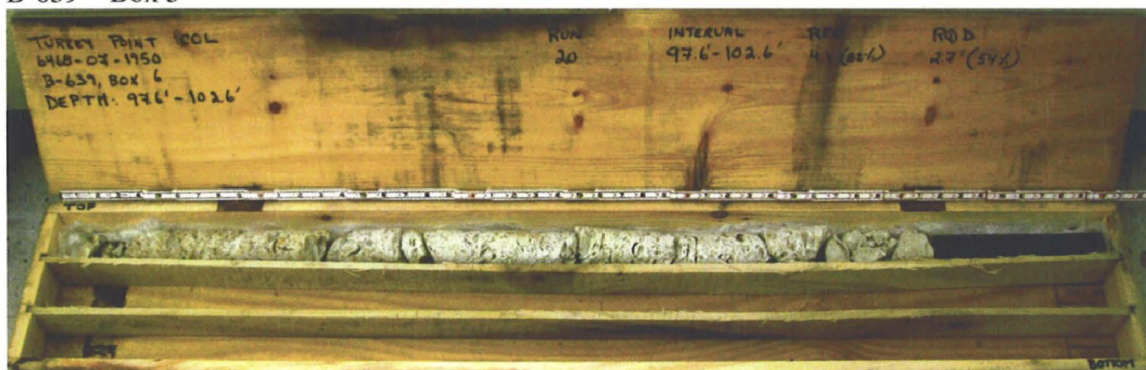
B-639 - Box 3



B-639 - Box 4



B-639 - Box 5



B-639 - Box 6

Prepared By MR Date 9/25/00

Checked By DAJ Date 8/25/09

SHEET 1 OF 9

BECHTEL PROJECT NO.: 25409					MACTEC PROJECT NO.: 6468-07-1950					COUNTY: Miami-Dade					GEOLOGIST: R. Clark				
SITE DESCRIPTION: Turkey Point COL					DRILL MACHINE: CME-750 (Miller)					DRILLER: G.Bilbrey/P.McKorkle/J.Tucker					GROUND WATER (ft)				
BORING NO.: B-701(DH)					DRILL METHOD: Mud Rotary/ Core					SAMPLE METHODS: SPT/Core					0 HR. NA				
GROUND ELEV.: -1.1 ft (NAVD88)					NORTHING: 396,976 US ft (NAD83/90)					EASTING: 875,792 US ft (NAD83/90)					24 HR. NA				
TOTAL DEPTH: 615.5 ft					BORING DIAMETER: 6" to 16.0', 4" to 615.5'					CASING DEPTH: 6" to 16.0', 4" to 457.5'					HAMMER (ID): 140 lb. Auto (07)				
DATE STARTED: 4/3/08					COMPLETED: 5/5/08					CORE SIZE: PQ3/HQ3					BITS USED: 6 7/8" & 3 7/8" Tricone, 3 7/8" wingbit				
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					
-1.1					Ground Surface														
-1.1	0.0	WOH	WOH	1	1						701(DH)-1		-1.1	0.0	MUCK, olive gray (5Y5/2), to black (5Y2.5/1), very soft, wet, mostly organic, strong HCl reaction				
-3.6	2.5										701(DH)-2A&B		-4.0	2.9					
-6.2	5.1	11	8	15		23					701(DH)-3				LIMESTONE, boundstone, pale yellow (5Y8/2), soft, friable, strong HCl reaction, wet, some sand, oolitic (Miami Formation)				
-8.6	7.5	17	14	15		29					701(DH)-4				5.1ft: pale yellow (5Y8/2), to white (5Y8/1), trace shell fragments				
-11.2	10.1	8	7	7		14					701(DH)-5				7.5ft: white (5Y8/1), very soft, some sand				
-13.6	12.5	4	7	9		16					701(DH)-6								
-16.2	15.1	10	15	6		21					701(DH)-7				12.5ft: soft				
-17.1	16.0	27	50/0.3							77/0.8	RUN-1				15.1ft: hard				
															16.0ft: Switched sampling method to coring				
															16.0ft: friable to indurated, trace locally interconnected vugs, recrystallized calcite				
-21.6	20.5										RUN-2		-23.1	22.0	20.5 to 22.0ft: fragmented zone				
-26.6	25.5														LIMESTONE, boundstone, white (5Y8/1), hard, indurated, wet, strong HCl reaction, few vugs, porous, fossiliferous, few shell molds and casts, recrystallized calcite (Upper Fort Thompson Formation)				
-31.6	30.5										RUN-3 701(DH)-CS-01				24.5ft: loss of circulation				
-36.6	35.5										RUN-4				25.5ft: few to little vugs, mostly shell molds and casts				
-41.6	40.5														30.5ft: soft to hard, friable to indurated, coralline				
-46.6	45.5										RUN-5				35.5ft: hard, indurated				
-51.6	50.5																		
-56.6	55.5										RUN-6 701(DH)-CS-02				40.5ft: soft to hard, friable to indurated, few vugs				
-61.6	60.5										RUN-7		-48.9	47.8	45.5ft: gray (5Y6/1), hard, indurated to 47.8ft				
-66.6	65.5										RUN-8 701(DH)-CS-03				LIMESTONE, boundstone, white (5Y8/1), to very pale brown (10YR8/3), hard, indurated, fossiliferous, little gastropod shell molds and cast, few vugs, strong HCl reaction (Lower Fort Thompson Formation)				
-71.6	70.5										RUN-9				50.5ft: white (5Y8/1)				
											RUN-10 701(DH)-CS-04 701(DH)-CS-05				55.5ft: trace to little sand				
											RUN-11				65.5ft: very soft to hard, friable to indurated				
											RUN-12				70.5ft: hard, indurated				



SHEET 2 OF 9

BECHTEL PROJECT NO.: 25409					MACTEC PROJECT NO.: 6468-07-1950					COUNTY: Miami-Dade			GEOLOGIST: R. Clark				
SITE DESCRIPTION: Turkey Point COL					DRILL MACHINE: CME-750 (Miller)					DRILLER: G.Bilbrey/P.McKorkle/J.Tucker					GROUND WATER (ft)		
BORING NO.: B-701(DH)					DRILL METHOD: Mud Rotary/ Core					SAMPLE METHODS: SPT/Core					0 HR. NA		
GROUND ELEV.: -1.1 ft (NAVD88)					NORTHING: 396,976 US ft (NAD83/90)					EASTING: 875,792 US ft (NAD83/90)					24 HR. NA		
TOTAL DEPTH: 615.5 ft					BORING DIAMETER: 6" to 16.0', 4" to 615.5'					CASING DEPTH: 6" to 16.0', 4" to 457.5'					HAMMER (ID):140 lb. Auto (07)		
DATE STARTED: 4/3/08					COMPLETED: 5/5/08					CORE SIZE: PQ3/HQ3					BITS USED: 6 7/8" & 3 7/8" Tricone, 3 7/8" wingbit		
ELEV.	DEPTH	BLOW COUNT			BLOWS PER FOOT					SAMP.	MOI	LOG	SOIL AND ROCK DESCRIPTION				
(ft)	(ft)	0.5ft	0.5ft	0.5ft	0	20	40	60	80	100				NO.			
-75.9					Continued from previous page												
-76.6	75.5										701(DH)-CS-06 RUN-13		LIMESTONE, boundstone, white (5Y8/1), to very pale brown (10YR8/3), hard, indurated, fossiliferous, little gastropod shell molds and cast, few vugs, strong HCl reaction (Lower Fort Thompson Formation) (continued)				
-81.6	80.5										RUN-14		83.5 to 84.5ft: soft, friable zone				
-86.6	85.5										RUN-15						
-91.6	90.5										RUN-16		90.5ft: soft to hard, friable to indurated, sandy				
-96.6	95.5										RUN-17		95.5ft: moderately hard, moderately indurated 96.0 to 98.5ft: soft, friable, sandy zone				
-101.6	100.5										RUN-18		100.5ft: hard, indurated, few to little vugs				
-106.6	105.5										RUN-19		105.5ft: very soft to hard, friable to indurated				
-111.6	110.5										RUN-20		110.5ft: hard, indurated, some sand				
-116.6	115.5	2	5	4							701(DH)-8		115.5ft: Switched sampling method to SPT Silty SAND (SM), white (5Y8/1), loose, wet, strong HCl reaction, trace shell fragments, fine to coarse grained sand, few fine gravel-sized cemented sand fragments (Tamiami Formation)				
-123.8	122.7	3	4	6							701(DH)-9		122.7ft: mostly fine grained sand				
-128.6	127.5	4	5	5							701(DH)-10		127.5ft: light olive gray (5Y6/2), trace gravel-sized cemented sand fragments				
-138.6	137.5	8	5	6							701(DH)-11		137.5ft: gray (5Y6/1), medium dense				
-148.6	147.5	5	4	10							701(DH)-12		147.5ft: olive gray (5Y5/2)				

TURKEY POINT COL BORE TURKEY POINT GP TURKEY POINT COL GDT 9/25/08

TURKEY POINT COL BORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 9-25'08



SHEET 4 OF 9

BECHTEL PROJECT NO.: 25409			MACTEC PROJECT NO.: 6468-07-1950			COUNTY: Miami-Dade			GEOLOGIST: R. Clark				
SITE DESCRIPTION: Turkey Point COL			DRILL MACHINE: CME-750 (Miller)			DRILLER: G.Bilbrey/P.McKorkle/J.Tucker			GROUND WATER (ft)				
BORING NO.: B-701(DH)			DRILL METHOD: Mud Rotary/ Core			SAMPLE METHODS: SPT/Core			0 HR. NA				
GROUND ELEV.: -1.1 ft (NAVD88)			NORTHING: 396,976 US ft (NAD83/90)			EASTING: 875,792 US ft (NAD83/90)			24 HR. NA				
TOTAL DEPTH: 615.5 ft			BORING DIAMETER: 6" to 16.0', 4" to 615.5'			CASING DEPTH: 6" to 16.0', 4" to 457.5'			HAMMER (ID): 140 lb. Auto (07)				
DATE STARTED: 4/3/08			COMPLETED: 5/5/08			CORE SIZE: PQ3/HQ3			BITS USED: 6 7/8" & 3 7/8" Tricone, 3 7/8" wingbit				
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		
-225.5					Continued from previous page								
-228.6	227.5	15	12	22									Silty SAND (SM), olive gray (5Y5/2), dense, wet, strong HCl reaction, fine grained sand, little silt (Hawthorn Group) (continued)
-238.6	237.5	12	14	21									
-248.6	247.5	5	8	17									247.5ft: gray (5Y5/1) medium dense
-258.6	257.5	8	11	22									257.5ft: greenish gray (10Y6/1), dense
-268.6	267.5	8	13	20									
-278.6	277.5	5	10	24									277.5ft: dark greenish gray (10Y4/1)
-288.6	287.5	7	9	21									287.5ft: medium dense
-298.6	297.5	7	14	26									297.5ft: olive gray (5Y5/2), dense, fine to

TURKEY POINT COL BORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 9/25/08



SHEET 5 OF 9

BECHTEL PROJECT NO.: 25409					MACTEC PROJECT NO.: 6468-07-1950					COUNTY: Miami-Dade			GEOLOGIST: R. Clark				
SITE DESCRIPTION: Turkey Point COL					DRILL MACHINE: CME-750 (Miller)					DRILLER: G.Bilbrey/P.McKorkle/J.Tucker					GROUND WATER (ft) 0 HR. NA 24 HR. NA		
BORING NO.: B-701(DH)					DRILL METHOD: Mud Rotary/ Core					SAMPLE METHODS: SPT/Core							
GROUND ELEV.: -1.1 ft (NAVD88)					NORTHING: 396,976 US ft (NAD83/90)					EASTING: 875,792 US ft (NAD83/90)							
TOTAL DEPTH: 615.5 ft					BORING DIAMETER: 6" to 16.0', 4" to 615.5'					CASING DEPTH: 6" to 16.0', 4" to 457.5'					HAMMER (ID):140 lb. Auto (07)		
DATE STARTED: 4/3/08					COMPLETED: 5/5/08					CORE SIZE: PQ3/HQ3					BITS USED: 6 7/8" & 3 7/8" Tricone, 3 7/8" wingbit		
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.						
-300.3					Continued from previous page												
														medium grained sand Silty SAND (SM), olive gray (5Y5/2), dense, wet, strong HCl reaction, fine grained sand, little silt (Hawthorn Group) (continued)			
-308.6	307.5	10	12	21							701(DH)-29			307.5ft: olive (5Y5/3)			
-318.6	317.5	16	50/0.4								701(DH)-30			317.5ft: light gray (5Y7/2), very dense, weak HCl reaction			
-328.6	327.5	41	50/0.4								701(DH)-31			327.5ft: light gray (5Y7/1)			
-338.7	337.6	42	50/0.4								701(DH)-32			337.6ft: gray (5Y6/1)			
-348.6	347.5	32	48	50/0.4							701(DH)-33		-348.6	POORLY GRADED SAND with silt (SP-SM), gray (5Y6/1), very dense, wet, fine grained sand, few fines, weak HCl reaction			
-358.6	357.5	31	50	50/0.4							701(DH)-34			357.5ft: light olive gray (5Y6/2)			
-368.6	367.5	8	38	50/0.3							701(DH)-35			367.5ft: gray (5Y6/1)			

TURKEY POINT COL BORE TURKEY POINT COL GDT 9-25-08



SHEET 6 OF 9

BECHTEL PROJECT NO.: 25409		MACTEC PROJECT NO.: 6468-07-1950		COUNTY: Miami-Dade		GEOLOGIST: R. Clark	
SITE DESCRIPTION: Turkey Point COL		DRILL MACHINE: CME-750 (Miller)		DRILLER: G.Bilbrey/P.McKorkle/J.Tucker		GROUND WATER (ft)	
BORING NO.: B-701(DH)		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR. NA	
GROUND ELEV.: -1.1 ft (NAVD88)		NORTHING: 396,976 US ft (NAD83/90)		EASTING: 875,792 US ft (NAD83/90)		24 HR. NA	
TOTAL DEPTH: 615.5 ft		BORING DIAMETER: 6" to 16.0', 4" to 615.5'		CASING DEPTH: 6" to 16.0', 4" to 457.5'		HAMMER (ID): 140 lb. Auto (07)	
DATE STARTED: 4/3/08		COMPLETED: 5/5/08		CORE SIZE: PQ3/HQ3		BITS USED: 6 7/8" & 3 7/8" Tricone, 3 7/8" wingbit	

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			
-375.1					Continued from previous page								
-378.6	377.5	41	50/0.5								701(DH)-36		POORLY GRADED SAND with silt (SP-SM), gray (5Y6/1), very dense, wet, fine grained sand, few fines, weak HCl reaction (continued)
-388.6	387.5	31	50/0.5								701(DH)-37		
-398.6	397.5	12	49	50/0.5							701(DH)-38		397.5ft: light gray (5Y7/1), fine to medium grained sand
-408.6	407.5	32	42	40							701(DH)-39		407.5ft: gray (5Y6/1)
-421.3	420.2	42	50/0.4								701(DH)-40		
-428.6	427.5	31	41	50/0.4							701(DH)-41		
-438.8	437.7	26	37	50							701(DH)-42		437.7ft: crossbedding/laminations, trace silt/clay lenses
-448.6	447.5	17	12	25							701(DH)-43		447.5ft: greenish gray (10Y6/1), dense

TURKEY POINT COL BORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 9/25/08



SHEET 8 OF 9

BECHTEL PROJECT NO.: 25409					MACTEC PROJECT NO.: 6468-07-1950					COUNTY: Miami-Dade			GEOLOGIST: R. Clark				
SITE DESCRIPTION: Turkey Point COL					DRILL MACHINE: CME-750 (Miller)					DRILLER: G.Bilbrey/P.McKorkle/J.Tucker					GROUND WATER (ft)		
BORING NO.: B-701(DH)					DRILL METHOD: Mud Rotary/ Core					SAMPLE METHODS: SPT/Core					0 HR. NA		
GROUND ELEV.: -1.1 ft (NAVD88)					NORTHING: 396,976 US ft (NAD83/90)					EASTING: 875,792 US ft (NAD83/90)					24 HR. NA		
TOTAL DEPTH: 615.5 ft					BORING DIAMETER: 6" to 16.0', 4" to 615.5'					CASING DEPTH: 6" to 16.0', 4" to 457.5'					HAMMER (ID): 140 lb. Auto (07)		
DATE STARTED: 4/3/08					COMPLETED: 5/5/08					CORE SIZE: PQ3/HQ3					BITS USED: 6 7/8" & 3 7/8" Tricone, 3 7/8" wingbit		
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.						
-524.7					Continued from previous page												
-526.6	525.5										RUN-36		-526.6	525.5			
-531.6	530.5										RUN-37						
-536.6	535.5										RUN-38						
-541.6	540.5										RUN-39						
-546.6	545.5										RUN-40						
-551.6	550.5										RUN-41		-551.6	550.5			
-556.6	555.5										RUN-42						
-561.6	560.5										RUN-43						
-566.6	565.5										RUN-44						
-571.6	570.5										RUN-45						
-576.6	575.5										RUN-46						
-581.6	580.5										RUN-47						
-586.6	585.5										RUN-48						
-591.6	590.5										RUN-49		-593.1	592.0			
-596.6	595.5										RUN-50		-594.1	593.0			
													-597.1	596.0			
													-598.1	597.0			

TURKEY POINT COL BORE TURKEY POINT COL GDT 9 25 08

TURKEY POINT COL. BORE TURKEY POINT GPJ TURKEY POINT COL.GDT 9/25/08



SHEET 1 OF 9

BECHTEL PROJECT NO.: 25409				MACTEC PROJECT NO.: 6468-07-1950				COUNTY: Miami-Dade		GEOLOGIST: R. Clark			
SITE DESCRIPTION: Turkey Point COL				DRILL MACHINE: CME-750 (Miller)				DRILLER: G.Bilbrey/P.McKorkle/J.Tucker				GROUND WATER (ft)	
BORING NO.: B-701(DH)				DRILL METHOD: Mud Rotary/ Core				SAMPLE METHODS: SPT/Core				0 HR. NA	
GROUND ELEV.: -1.1 ft (NAVD88)				NORTHING: 396,976 US ft (NAD83/90)				EASTING: 875,792 US ft (NAD83/90)				24 HR. NA	
TOTAL DEPTH: 615.5 ft				CASING DEPTH: 6" to 16.0', 4" to 457.5'						HAMMER (ID): 140 lb. Auto (07)			
DATE STARTED: 4/3/08		COMPLETED: 5/5/08		CORE SIZE: PQ3/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 @ 16.0 ft	
-17.1	16.0	4.5	2:57 2:48 1:52 1:48 0.48/0.5	(3.6) 80%	(1.5) 33%		RUN-1	(4.3) 72%	(1.5) 25%				LIMESTONE, boundstone, pale yellow (5Y8/2), soft, friable, strong HCl reaction, wet, some sand, oolitic (Miami Formation) (continued)
-21.6	20.5												16.0ft: friable to indurated, trace locally interconnected vugs, recrystallized calcite
		5.0		(3.6) 72%	(2.7) 54%		RUN-2					-23.1	20.5 to 22.0ft: fragmented zone
			2:58 1:48 1:51 3:04 2:28					(24.5) 95%	(19.1) 74%				LIMESTONE, boundstone, white (5Y8/1), hard, indurated, wet, strong HCl reaction, few vugs, porous, fossiliferous, few shell molds and casts, recrystallized calcite (Upper Fort Thompson Formation)
-26.6	25.5	5.0		(4.8) 96%	(4.3) 86%		RUN-3 701(DH)- CS-01						24.5ft: loss of circulation 25.5ft: few to little vugs, mostly shell molds and casts
		5.0	3:04 3:05 5:12 4:48 4:12	(4.9) 98%	(3.5) 70%		RUN-4						30.5ft: soft to hard, friable to indurated, coralline
-31.6	30.5												
		5.0	2:59 3:01 3:28 3:22 4:17	(4.6) 92%	(3.0) 60%		RUN-5						35.5ft: hard, indurated
-36.6	35.5												
		5.0	3:05 3:01 2:32 1:53 3:01	(5.0) 100%	(4.6) 92%		RUN-6 701(DH)- CS-02						40.5ft: soft to hard, friable to indurated, few vugs
-41.6	40.5												
		5.0	0:33 1:43 1:48 1:44 1:59	(4.7) 94%	(3.3) 66%		RUN-7	(58.3) 87%	(43.2) 65%			-48.9	45.5ft: gray (5Y6/1), hard, indurated to 47.8ft
-46.6	45.5												
		5.0	2:30 3:23 2:22 2:23 2:33	(4.8) 96%	(4.2) 84%		RUN-8 701(DH)- CS-03						LIMESTONE, boundstone, white (5Y8/1), to very pale brown (10YR8/3), hard, indurated, fossiliferous, little gastropod shell molds and cast, few vugs, strong HCl reaction (Lower Fort Thompson Formation)
-51.6	50.5												50.5ft: white (5Y8/1)
		5.0	2:29 2:55 3:01 3:33 3:28	(5.0) 100%	(5.0) 100%		RUN-9						55.5ft: trace to little sand
-56.6	55.5												
		5.0	2:35 2:30 2:07 1:25 0:35	(4.7) 94%	(4.5) 90%		RUN-10 701(DH)- CS-04 701(DH)- CS-05						
-61.6	60.5												
		5.0	1:49 4:41 4:34 3:04 5:23	(2.6) 52%	(1.0) 20%		RUN-11						65.5ft: very soft to hard, friable to indurated
-66.6	65.5												
		5.0	2:15 2:54 3:21 2:54 2:58	(5.0) 100%	(4.9) 98%		RUN-12						70.5ft: hard, indurated
-71.6	70.5												
		5.0	2:34 2:13 1:45 0:54 0:35	(5.0) 100%	(4.4) 88%		RUN-13 701(DH)- CS-06						
-76.6	75.5												
		5.0	1:41 1:33 1:28 1:51 1:35	(4.0) 80%	(1.7) 34%		RUN-14						83.5 to 84.5ft: soft, friable zone
-81.6	80.5												
		5.0	2:31 2:22 2:51 2:48 2:55	(4.8) 96%	(4.1) 82%		RUN-15						
-86.6	85.5												
		5.0											
-91.6	90.5												

TURKEY POINT COL CORE TURKEY POINT GPJ TURKEY POINT COL GDT 9/25/08



SHEET 2 OF 9

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: R. Clark
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-750 (Miller)	DRILLER: G.Bilbrey/P.McKorkle/J.Tucker	GROUND WATER (ft)
BORING NO.: B-701(DH)	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.1 ft (NAVD88)	NORTHING: 396,976 US ft (NAD83/90)	EASTING: 875,792 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 615.5 ft	CASING DEPTH: 6" to 16.0', 4" to 457.5'	HAMMER (ID): 140 lb. Auto (07)	
DATE STARTED: 4/3/08	COMPLETED: 5/5/08	CORE SIZE: PQ3/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										
-96.6	95.5	5.0	0.49 0.55 0.47 0.36 0.35	(3.6) 72%	(1.6) 32%	RUN-16				90.5ft: soft to hard, friable to indurated, sandy LIMESTONE, boundstone, white (5Y8/1), to very pale brown (10YR8/3), hard, indurated, fossiliferous, little gastropod shell molds and cast, few vugs, strong HCl reaction (Lower Fort Thompson Formation) (continued)
-101.6	100.5	5.0	0.41 0.22 0.05 0.33 0.41	(3.4) 68%	(1.4) 28%	RUN-17				95.5ft: moderately hard, moderately indurated 96.0 to 98.5ft: soft, friable, sandy zone
-106.6	105.5	5.0	0.35 1:14 0.52 0.41 1:10	(5.0) 100%	(3.3) 66%	RUN-18				100.5ft: hard, indurated, few to little vugs
-111.6	110.5	5.0	1:35 1:01 1:12 2:00 2:35	(5.0) 100%	(3.7) 74%	RUN-19				105.5ft: very soft to hard, friable to indurated
-116.6	115.5	5.0	1:01 1:05 1:03 0:59 0:22	(3.7) 74%	(1.1) 22%	RUN-20				110.5ft: hard, indurated, some sand
			N=9			701(DH)-8	(0.7) 70%	(NA) 0%		115.5ft: Switched sampling method to SPT Silty SAND (SM), white (5Y8/1), loose, wet, strong HCl reaction, trace shell fragments, fine to coarse grained sand, few fine gravel-sized cemented sand fragments (Tamiami Formation)
			N=10			701(DH)-9				122.7ft: mostly fine grained sand
			N=10			701(DH)-10				127.5ft: light olive gray (5Y6/2), trace gravel-sized cemented sand fragments
			N=11			701(DH)-11				137.5ft: gray (5Y6/1), medium dense
			N=14			701(DH)-12				147.5ft: olive gray (5Y5/2)
			N=13			701(DH)-13				157.5ft: light olive gray (5Y6/2)

TURKEY POINT COL CORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 9 25 08



SHEET 3 OF 9

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: R. Clark
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-750 (Miller)	DRILLER: G.Bilbrey/P.McKorkle/J.Tucker	GROUND WATER (ft)
BORING NO.: B-701(DH)	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.1 ft (NAVD88)	NORTHING: 396,976 US ft (NAD83/90)	EASTING: 875,792 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 615.5 ft	CASING DEPTH: 6" to 16.0', 4" to 457.5'	HAMMER (ID): 140 lb. Auto (07)	
DATE STARTED: 4/3/08	COMPLETED: 5/5/08	CORE SIZE: PQ3/HQ3	CORE BARREL TYPE: Triple Tube Wireline (Split inner liners)

ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	REC. (ft) %	RQD (ft) %	SAMP. NO.	REC. (ft) %	RQD (ft) %	L O G	DESCRIPTION AND REMARKS
										Continued from previous page
			N=15			701(DH)-14				115.5ft: Switched sampling method to SPT Silty SAND (SM), white (5Y8/1), loose, wet, strong HCl reaction, trace shell fragments, fine to coarse grained sand, few fine gravel-sized cemented sand fragments (Tamiami Formation) (continued) 167.5ft: no recovery
			N=12			701(DH)-15				-173.6 Sandy SILT (ML), olive gray (5Y5/2), stiff, moist, mostly fine grained sand 172.5
			N=9			701(DH)-16				
			N=13			701(DH)-17				
			N=9			701(DH)-18				gray (5Y6/1), stiff, wet, strong HCl reaction, fine grained sand, trace gravel-sized cemented sand fragments
			N=7			701(DH)-19				-206.1 Silty SAND (SM), gray (5Y6/1), loose, wet, fine to medium grained sand, little fines, strong HCl reaction 205.0
			N=28			701(DH)-20				217.5ft: olive (5Y5/3), medium dense, some fines
			N=34			701(DH)-21				-223.6 Silty SAND (SM), olive gray (5Y5/2), dense, wet, strong HCl reaction, fine grained sand, little silt (Hawthorn Group) 222.5
			N=35			701(DH)-22				

TURKEY POINT COL CORE TURKEY POINT COL GDT 9/25/08



SHEET 4 OF 9

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: R. Clark
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-750 (Miller)	DRILLER: G.Bilbrey/P.McKorkle/J.Tucker	GROUND WATER (ft)
BORING NO.: B-701(DH)	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.1 ft (NAVD88)	NORTHING: 396,976 US ft (NAD83/90)	EASTING: 875,792 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 615.5 ft	CASING DEPTH: 6" to 16.0', 4" to 457.5'	HAMMER (ID): 140 lb. Auto (07)	
DATE STARTED: 4/3/08	COMPLETED: 5/5/08	CORE SIZE: PQ3/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
										Silty SAND (SM), olive gray (5Y5/2), dense, wet, strong HCl reaction, fine grained sand, little silt (Hawthorn Group) (continued)
			N=25			701(DH)-23				247.5ft: gray (5Y5/1) medium dense
			N=33			701(DH)-24				257.5ft: greenish gray (10Y6/1), dense
			N=33			701(DH)-25				
			N=34			701(DH)-26				277.5ft: dark greenish gray (10Y4/1)
			N=30			701(DH)-27				287.5ft: medium dense
			N=40			701(DH)-28				297.5ft: olive gray (5Y5/2), dense, fine to medium grained sand
			N=33			701(DH)-29				307.5ft: olive (5Y5/3)

TURKEY POINT COL CORE TURKEY POINT GPJ TURKEY POINT COL.GDT 9 25.08



SHEET 5 OF 9

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: R. Clark
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-750 (Miller)	DRILLER: G.Bilbrey/P.McKorkle/J.Tucker	GROUND WATER (ft)
BORING NO.: B-701(DH)	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.1 ft (NAVD88)	NORTHING: 396,976 US ft (NAD83/90)	EASTING: 875,792 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 615.5 ft	CASING DEPTH: 6" to 16.0', 4" to 457.5'	HAMMER (ID): 140 lb. Auto (07)	
DATE STARTED: 4/3/08	COMPLETED: 5/5/08	CORE SIZE: PQ3/HQ3	CORE BARREL TYPE: Triple Tube Wireline (Split inner liners)

ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	REC (ft) %	RQD (ft) %	SAMP. NO.	REC (ft) %	RQD (ft) %	LOG	DESCRIPTION AND REMARKS
										Continued from previous page
			N=66/0.9			701(DH)-30				Silty SAND (SM), olive gray (5Y5/2), dense, wet, strong HCl reaction, fine grained sand, little silt (Hawthorn Group) (continued) 317.5ft: light gray (5Y7/2), very dense, weak HCl reaction
			N=91/0.9			701(DH)-31				327.5ft: light gray (5Y7/1)
			N=92/0.9			701(DH)-32				337.6ft: gray (5Y6/1)
			N=90/0.9			701(DH)-33				POORLY GRADED SAND with silt (SP-SM), gray (5Y6/1), very dense, wet, fine grained sand, few fines, weak HCl reaction
			N=100/0.9			701(DH)-34				357.5ft: light olive gray (5Y6/2)
			N=88/0.8			701(DH)-35				367.5ft: gray (5Y6/1)
			N=91/1.0			701(DH)-36				
			N=81/1.0			701(DH)-37				

TURKEY POINT COL CORE TURKEY POINT COL.GPJ TURKEY POINT COL.GDT 9.25.08



SHEET 6 OF 9

BECHTEL PROJECT NO.: 25409				MACTEC PROJECT NO.: 6468-07-1950				COUNTY: Miami-Dade		GEOLOGIST: R. Clark			
SITE DESCRIPTION: Turkey Point COL				DRILL MACHINE: CME-750 (Miller)				DRILLER: G.Bilbrey/P.McKorkle/J.Tucker				GROUND WATER (ft)	
BORING NO.: B-701(DH)				DRILL METHOD: Mud Rotary/ Core				SAMPLE METHODS: SPT/Core				0 HR. NA	
GROUND ELEV.: -1.1 ft (NAVD88)				NORTHING: 396,976 US ft (NAD83/90)				EASTING: 875,792		US ft (NAD83/90)		24 HR. NA	
TOTAL DEPTH: 615.5 ft				CASING DEPTH: 6" to 16.0', 4" to 457.5'						HAMMER (ID): 140 lb. Auto (07)			
DATE STARTED: 4/3/08		COMPLETED: 5/5/08		CORE SIZE: PQ3/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	
												Continued from previous page	
			N=99/1.0				701(DH)-38					POORLY GRADED SAND with silt (SP-SM), gray (5Y6/1), very dense, wet, fine grained sand, few fines, weak HCl reaction (continued)	
												397.5ft: light gray (5Y7/1), fine to medium grained sand	
			N=82				701(DH)-39					407.5ft: gray (5Y6/1)	
			N=92/0.9				701(DH)-40						
			N=91/0.9				701(DH)-41						
			N=87				701(DH)-42					437.7ft: crossbedding/laminations, trace silt/clay lenses	
			N=37				701(DH)-43					447.5ft: greenish gray (10Y6/1), dense	
								(1.7) 100%	(0.3) 18%			DOLOSTONE, grainstone, gray (5Y6/1), hard, indurated, wet, weak HCl reaction (Hawthorn Group)	
-458.7	457.6	2.9	N=50/0.1 1.48/0.9 2.22	(1.7) 59%	(0.3) 10%	701(DH)-44 RUN-21						457.6ft: Switched sampling method to coring	
-461.6	460.5	4.1	2.34					(1.1) 27%	(NA) 0%			light greenish gray (10Y7/1), few gastropod shell molds and casts, sugary texture, slight organic odor	
			1.30 1.39 1.52 0.15	(2.4) 59%	(1.2) 29%	RUN-22						Silty SAND (SM), light greenish gray (10YR7/1), wet, fine grained sand, weak HCl reaction, little shell hash	
-465.7	464.6							(7.5) 100%	(6.1) 18%			463.4ft: DOLOSTONE, grainstone, gray (5Y6/1), hard, indurated, wet, weak HCl reaction (Hawthorn Group)	

TURKEY POINT COL CORE TURKEY POINT GPJ TURKEY POINT COL.GDT 9 25.08



SHEET 7 OF 9

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: R. Clark
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-750 (Miller)	DRILLER: G.Bilbrey/P.McKorkle/J.Tucker	GROUND WATER (ft)
BORING NO.: B-701(DH)	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.1 ft (NAVD88)	NORTHING: 396,976 US ft (NAD83/90)	EASTING: 875,792 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 615.5 ft	CASING DEPTH: 6" to 16.0', 4" to 457.5'	HAMMER (ID): 140 lb. Auto (07)	
DATE STARTED: 4/3/08	COMPLETED: 5/5/08	CORE SIZE: PQ3/HQ3	CORE BARREL TYPE: Triple Tube Wireline (Split inner liners)

ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	REC (ft) %	RQD (ft) %	SAMP. NO.	REC (ft) %	RQD (ft) %	L O G	DESCRIPTION AND REMARKS
Continued from previous page										
-466.6	465.5	0.9	4:57/0.1	(0.3)	(0.0)	RUN-23	93%	75%		464.6ft: green gray (10Y6/1), hard, indurated, fossiliferous
		5.0	2:50/0.9	33%	0%	RUN-24				DOLOSTONE, wackestone, light greenish gray (10Y7/1), soft, friable to moderately indurated, wet, weak HCl reaction (continued)
			1:54	(5.0)	(4.5)					465.5ft: pale olive (5Y6/3), soft, friable to moderately indurated,
			1:18	100%	90%					
-471.6	470.5	5.0	1:09							
			1:20	(0.9)	(0.4)	RUN-25				470.5ft: greenish gray (5GY6/1), hard, indurated
			2:28	18%	8%		(0.0)	(NA)		Silty SAND (SM), no recovery-cuttings observed in drill fluid return, dark in color
			4:27				0%	0%		
			1:21							
-476.6	475.5	5.0	2:49							
			4:58	(4.2)	(2.0)	RUN-26				477.6
			1:47	84%	40%		(9.2)	(5.0)		LIMESTONE, packstone, pale yellow (5Y8/2), soft to hard, friable to indurated,
			WOR				92%	50%		wet, strong HCl reaction, fossiliferous, mostly shell molds and casts, few vugs
			2:12							
-481.6	480.5	5.0	3:07	(4.0)	(2.6)	RUN-27				480.5ft: soft to very soft, friable
			4:08	80%	52%					
			1:53							
			2:18							
-486.6	485.5	5.0	4:04	(3.8)	(1.6)	RUN-28				485.5ft: hard, indurated
			4:24	76%	32%		(12.8)	(8.3)		LIMESTONE, wackestone, pale yellow (5Y8/2), soft, friable to moderately
			3:38				91%	59%		indurated, wet, strong HCl reaction, fossiliferous
			3:27							
-491.6	490.5	5.0	1:14	(5.0)	(4.8)	RUN-29				490.5ft: medium hard to very soft, moderately indurated to friable
			3:44	100%	96%					
			3:14							
			2:52							
-496.6	495.5	5.0	2:58	(4.7)	(2.3)	RUN-30				495.5ft: soft to hard, friable to moderately indurated
			4:20	94%	46%					
			1:34							
-501.6	500.5	5.0	1:23	(3.8)	(1.8)	RUN-31	(1.1)	(NA)		501.6
			2:25	76%	36%		55%	0%		Silty SAND (SM), gray (5Y5/1), wet, strong HCl reaction, trace mica, some
			4:07							limestone fragments (Interpreted as medium dense to dense based on drill rate
			4:32				(20.8)	(14.2)		and recovery)
-506.6	505.5	5.0	3:05	(5.0)	(5.0)	RUN-32	90%	62%		LIMESTONE, packstone, pale yellow (5Y8/2), wet, soft, friable, fossiliferous,
			4:15	100%	100%					mostly shell molds and casts
			1:35							505.5ft: soft to medium hard, friable to moderately indurated, fossil-rich mud
			1:35							zones
-511.6	510.5	5.0	2:32	(5.0)	(3.6)	RUN-33				510.5ft: medium hard, moderately indurated, and soft, friable zones
			3:11	100%	72%					
			4:04							
-516.6	515.5	5.0	1:39	(3.5)	(1.9)	RUN-34				515.5ft: hard, indurated
			3:38	70%	38%					
			2:58							
			1:41							
-521.6	520.5	5.0	1:35	(4.6)	(1.9)	RUN-35				520.5ft: medium hard to moderately hard, moderately indurated to indurated,
			0:29	92%	38%					524.5 to 525.5ft: soft zone
			0:37							
			1:25							
-526.6	525.5	5.0	1:19	(3.4)	(2.8)	RUN-36	(19.8)	(11.0)		526.6
			3:17	68%	56%		79%	44%		LIMESTONE, wackestone, white (5Y8/1), soft to medium hard, friable to
			1:43							moderately indurated, wet, strong HCl reaction, fossiliferous, shell molds and
			1:01							casts
-531.6	530.5	5.0	1:48	(3.7)	(1.3)	RUN-37				530.5ft: pale yellow (5Y8/2), soft to moderately hard, friable to indurated
			2:03	74%	26%					
			1:45							
-536.6	535.5	5.0	4:06	(4.1)	(3.0)	RUN-38				535.5ft: medium hard to moderately hard, moderately indurated to indurated
			1:31	82%	60%					
			2:01							
			1:40							
			1:41							
			4:47							
			1:16							
			3:03							
			5:40							
			2:35							

TURKEY POINT COL CORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 9:25:08



SHEET 8 OF 9

BECHTEL PROJECT NO.: 25409				MACTEC PROJECT NO.: 6468-07-1950				COUNTY: Miami-Dade		GEOLOGIST: R. Clark			
SITE DESCRIPTION: Turkey Point COL				DRILL MACHINE: CME-750 (Miller)				DRILLER: G.Bilbrey/P.McKorkle/J.Tucker				GROUND WATER (ft)	
BORING NO.: B-701(DH)				DRILL METHOD: Mud Rotary/ Core				SAMPLE METHODS: SPT/Core				0 HR. NA	
GROUND ELEV.: -1.1 ft (NAVD88)				NORTHING: 396,976 US ft (NAD83/90)				EASTING: 875,792 US ft (NAD83/90)				24 HR. NA	
TOTAL DEPTH: 615.5 ft				CASING DEPTH: 6" to 16.0', 4" to 457.5'						HAMMER (ID): 140 lb. Auto (07)			
DATE STARTED: 4/3/08		COMPLETED: 5/5/08		CORE SIZE: PQ3/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			
Continued from previous page													
-541.6	540.5	5.0	3:21 1:24 1:13 0:48 1:05 1:00	(4.9) 98%	(2.3) 46%	RUN-39					LIMESTONE, wackestone, white (5Y8/1), soft to medium hard, friable to moderately indurated, wet, strong HCl reaction, fossiliferous, shell molds and casts (continued) 540.5ft: moderately hard, moderately indurated		
-546.6	545.5	5.0	0:37 0:34 2:00 2:35 5:04	(3.7) 74%	(1.6) 32%	RUN-40					545.5ft: trace dark phosphatic material, trace soft friable zone		
-551.6	550.5	5.0	2:07 2:11 2:14 2:14 3:24	(5.0) 100%	(4.1) 82%	RUN-41	(38.3) 92%	(31.2) 75%			LIMESTONE, mudstone, light greenish gray (10Y8/1), moderately hard, moderately indurated, wet, strong HCl reaction, fossiliferous		
-556.6	555.5	5.0	2:10 0:52 1:18 1:08 1:49	(4.4) 88%	(3.8) 76%	RUN-42					555.5ft: medium hard		
-561.6	560.5	5.0	1:09 1:09 0:58 1:00 0:58	(4.3) 86%	(1.3) 26%	RUN-43							
-566.6	565.5	5.0	0:16 0:22 0:39 1:34 1:12	(3.2) 64%	(2.9) 58%	RUN-44					565.5ft: soft to medium hard		
-571.6	570.5	5.0	1:22 1:32 1:49 0:25 1:23	(5.0) 100%	(3.7) 74%	RUN-45					570.5ft: medium hard		
-576.6	575.5	5.0	1:28 0:54 0:28 1:28 2:36	(5.0) 100%	(5.0) 100%	RUN-46					575.5ft: pale yellow (5Y8/2), very soft to soft, friable to moderately indurated		
-581.6	580.5	5.0	1:22 0:59 1:06 2:33 4:03	(5.0) 100%	(4.0) 80%	RUN-47					580.5ft: light greenish gray (10Y7/1), to pale yellow (5Y8/2), very soft to medium hard		
-586.6	585.5	5.0	2:04 2:54 2:37 2:04 1:42	(4.9) 98%	(4.9) 98%	RUN-48					585.5ft: light gray (5Y7/2), medium hard, trace fine grained sand-sized dark material (possible phosphate)		
-591.6	590.5	5.0	0:58 2:22 2:24 3:20 2:20	(4.7) 94%	(4.1) 82%	RUN-49					590.5ft: pale yellow (5Y7/3)		
-596.6	595.5	5.0	1:22 2:20 2:40 1:26 2:23	(3.0) 60%	(1.0) 20%	RUN-50	(1.0) 100%	(0.4) 40%			LIMESTONE, wackestone, white (5Y8/1), hard, indurated, fossiliferous, mostly shell molds and casts		
-601.6	600.5	5.0	2:21 3:54 4:07 4:26 2:39	(5.0) 100%	(4.7) 94%	RUN-51	(2.7) 90%	(2.2) 73%			LIMESTONE, mudstone, white (5Y8/1), soft to medium hard, friable to moderately indurated, moist, strong HCl reaction, fossiliferous		
-606.6	605.5	5.0	2:21 1:05 1:04 2:21 5:13	(2.0) 100%	(1.6) 80%	RUN-52	(1.0) 100%	(0.0) 0%			LIMESTONE, wackestone, white (5Y8/1), hard, indurated, moist, fossiliferous, mostly shell fragments, strong HCl reaction		
-611.6	610.5	2.0	2:21 5:13	(3.0) (3.0)	(3.0) (3.0)	RUN-53	(14.9) 81%	(13.7) 74%			LIMESTONE, mudstone, pale yellow (5Y8/2), soft, friable, wet, strong HCl reaction, fossiliferous, trace fine grained sand		
-613.6	612.5	3.0				RUN-54					600.5ft: light gray (5Y7/3), medium hard, moderately indurated		
											605.5ft: pale yellow (5Y8/2)		

TURKEY POINT COL CORE TURKEY POINT GPJ TURKEY POINT COL GDT 9-25-08

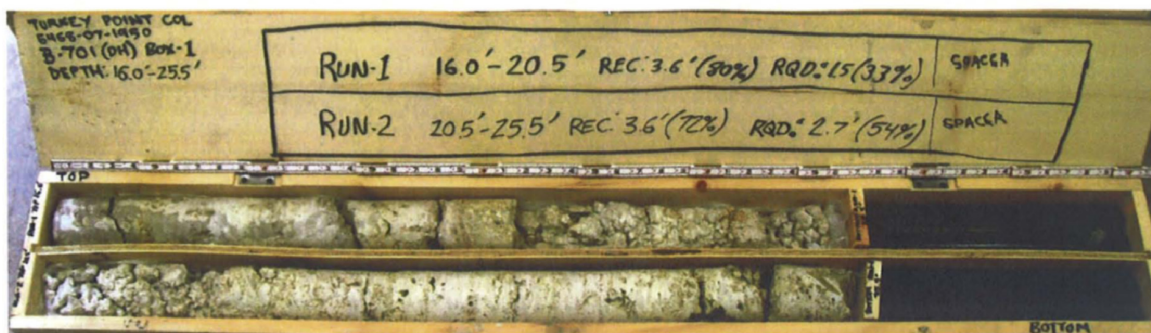


SHEET 9 OF 9

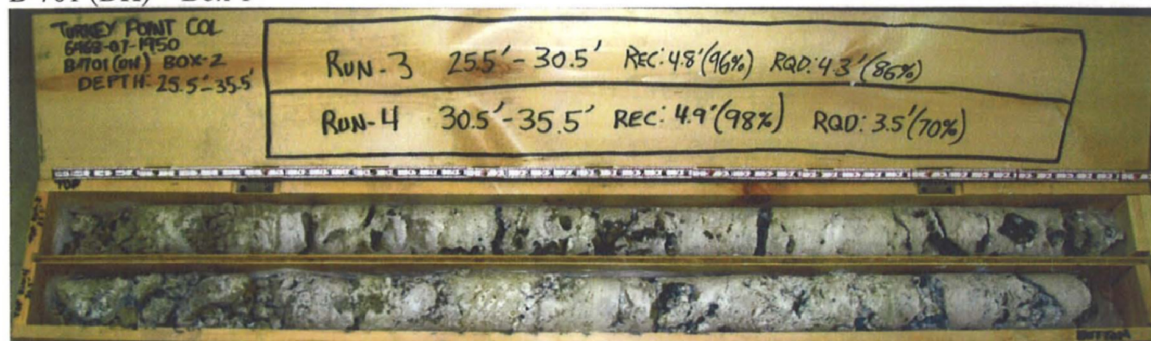
BECHTEL PROJECT NO.: 25409				MACTEC PROJECT NO.: 6468-07-1950				COUNTY: Miami-Dade		GEOLOGIST: R. Clark	
SITE DESCRIPTION: Turkey Point COL				DRILL MACHINE: CME-750 (Miller)				DRILLER: G.Bilbrey/P.McKorkle/J.Tucker		GROUND WATER (ft) 0 HR. NA 24 HR. NA	
BORING NO.: B-701(DH)				DRILL METHOD: Mud Rotary/ Core				SAMPLE METHODS: SPT/Core			
GROUND ELEV.: -1.1 ft (NAVD88)				NORTHING: 396,976 US ft (NAD83/90)				EASTING: 875,792 US ft (NAD83/90)			
TOTAL DEPTH: 615.5 ft				CASING DEPTH: 6" to 16.0', 4" to 457.5'						HAMMER (ID): 140 lb. Auto (07)	
DATE STARTED: 4/3/08		COMPLETED: 5/5/08		CORE SIZE: PQ3/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) %		
-616.6	615.5		4.04	100%	100%					Continued from previous page
										Coring Terminated at Elevation -616.6

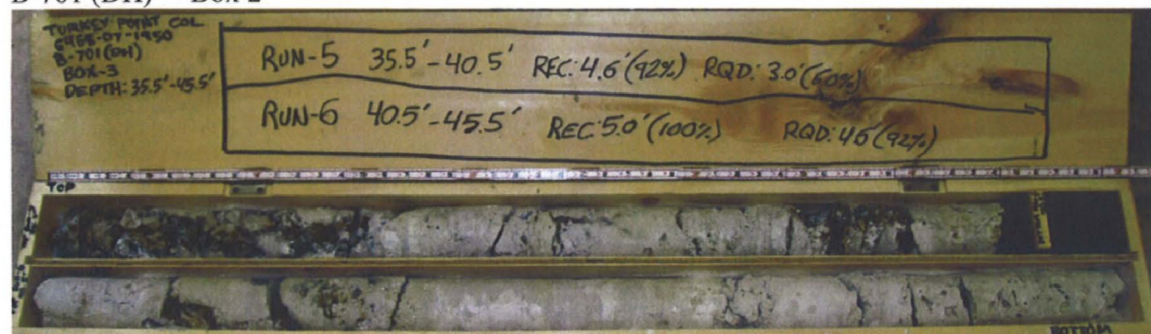
TURKEY POINT COL CORE TURKEY POINT GPJ TURKEY POINT COL GDT 9/25/08



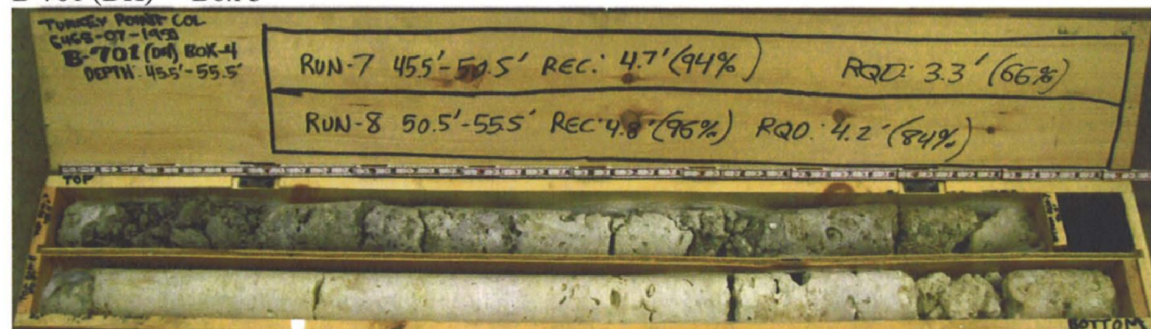
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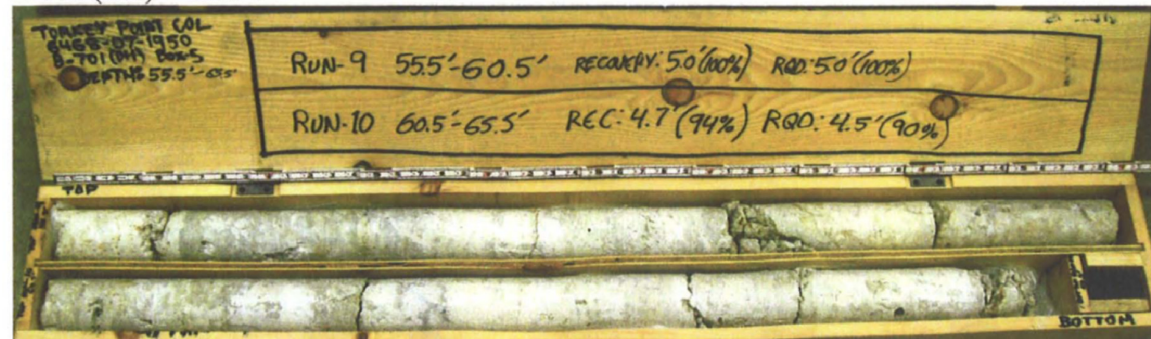
B-701 (DH) – Box 2



B-701 (DH) – Box 3



B-701 (DH) – Box 4



B-701 (DH) – Box 5