

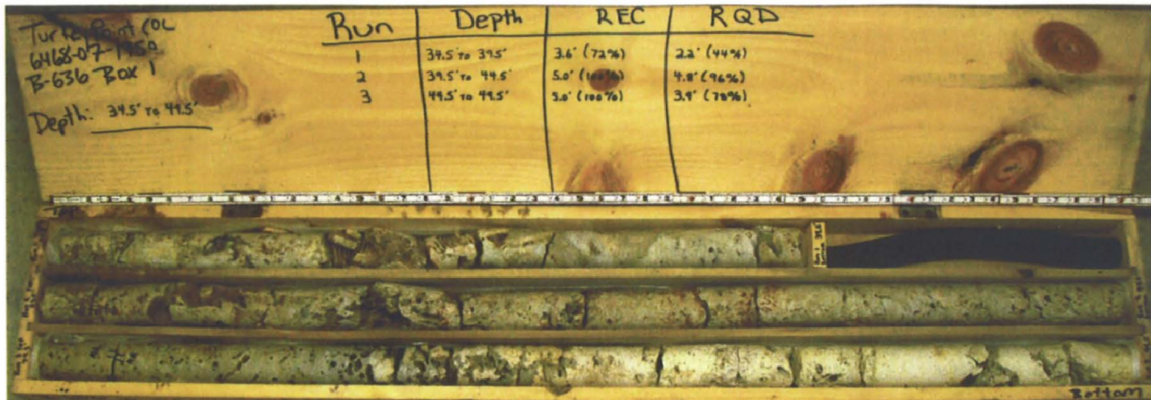


SHEET 2 OF 2

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: Burroughs/ Liles/ Lehman
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-55 Marsh Buggy	DRILLER: P. Pitts/ B. Carrasco	GROUND WATER (ft)
BORING NO.: B-636	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.1 ft (NAVD88)	NORTHING: 395,715 US ft (NAD83/90)	EASTING: 877,193 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 126.0 ft	CASING DEPTH: 4" to 27.6', 3" to 119.5'	HAMMER (ID): 140 lb. Auto (MEC-425)	
DATE STARTED: 4/23/08	COMPLETED: 5/1/08	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
		5.0	2.32 5.02 4.20 4.14 3.24	(2.5) 50%	(1.8) 36%	RUN-16				LIMESTONE, boundstone, white (2.5YR8/1), hard, indurated, few vugs, fossiliferous, strong HCl reaction (Lower Fort Thompson Formation) (continued)
							(0.0) 0%	(NA) 0%		109.5ft: moderately hard, moderately indurated, trace vugs
-115.6	114.5									POORLY GRADED SAND with silt (SP-SM), light yellowish brown (2.5YR6/3), wet, strong HCl reaction, fine grained sand, trace shell fragments (Tamiami Formation)
		5.0	1.18 1.36 1.30 2.36 2.24	(0.0) 0%	(0.0) 0%	RUN-17				114.5ft: No recovery (SP-SM)
-120.6	119.5									
										Coring Terminated at Elevation -120.6

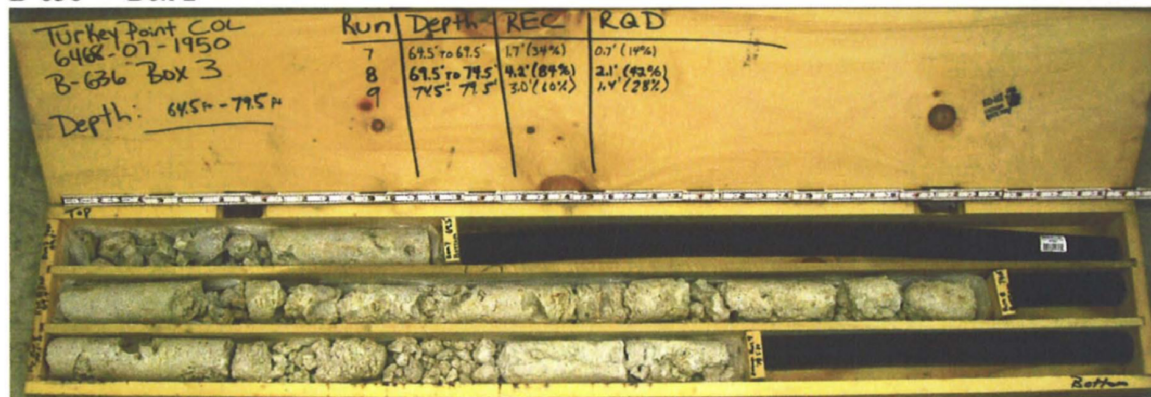
TURKEY POINT COL CORE TURKEY POINT GPJ TURKEY POINT COL GDT 10/2/08



B-636 - Box 1



B-636 - Box 2



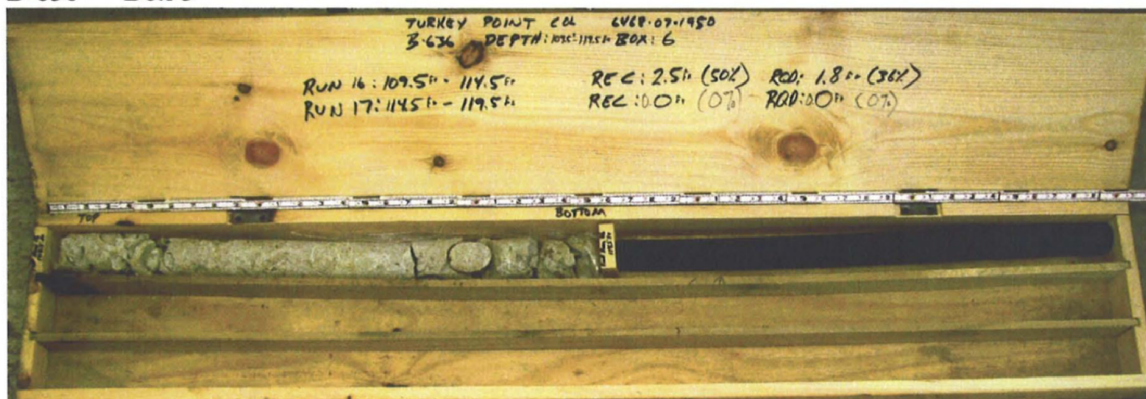
B-636 - Box 3



B-636 - Box 4



B-636 - Box 5



B-636 - Box 6



GEOTECHNICAL BORING LOG

Prepared By DPZ Date 5-20-08

Checked By [Signature] Date 5-30-08

SHEET 1 OF 3

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-637				DRILL METHOD: Mud Rotary/ Core				SAMPLE METHODS: SPT/Core							
GROUND ELEV.: -0.2 ft (NAVD88)				NORTHING: 395,693 US ft (NAD83/90)				EASTING: 877,310 US ft (NAD83/90)							
TOTAL DEPTH: 150.0 ft		BORING DIAMETER: 4" to 47.2', 3" to 150.0'				CASING DEPTH: 4" to 47.2', 3" to 121.5'			HAMMER (ID): 140 lb. Auto (MEC-425)						
DATE STARTED: 5/2/08		COMPLETED: 5/6/08		CORE SIZE: HQ3			BITS USED: 3 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					
-0.2					Ground Surface										
-0.2	0.0	WOH	WOH	WOH	WOH						637-1		-0.2	0.0	MUCK, very dark grayish brown (2.5Y3/2), very soft, moist, strong HCl reaction
-3.7	3.5										637-2		-4.2	4.0	Field notes do not indicate sample 637-2 was split into separate jars
-6.2	6.0	1	4	25							637-3				LIMESTONE, boundstone, white (2.5Y8/1), soft, moderately indurated, wet, strong HCl reaction, oolitic (Miami Formation)
-8.5	8.3										637-4				8.3ft: very soft
-11.5	11.3	10	11	17							637-5				
-13.7	13.5	14	6	3							637-6				13.5ft: white (2.5Y8/1), to light gray (2.5Y7/1), hard, indurated
		5	3	3											
		6	50/0.3							56/0.8					
-18.8	18.6										637-7				18.6ft: very soft, friable to moderately indurated
		4	5	11											
-23.8	23.6										637-8				23.6ft: moderately indurated
		5	8	10											
-28.8	28.6										637-9				28.6 to 30.6ft: rod drop
		WOR	WOR	4											
-33.8	33.6										637-10		-33.2	33.0	LIMESTONE, boundstone, white (2.5Y8/1), soft, wet, moderately indurated, strong HCl reaction, little medium to coarse sand (Upper Fort Thompson Formation)
-35.3	35.1	35	18	11							RUN-1				35.1ft: Switch sampling method to coring
-40.3	40.1										RUN-2				35.1ft: hard, indurated, recrystallized calcite, little vugs
-45.3	45.1										RUN-3				40.1ft: white (2.5Y8/1), to gray (2.5Y5/1), few vugs, coralline
-50.3	50.1										RUN-4		-47.8	47.6	45.1ft: gray (2.5Y5/1), fossiliferous, trace vugs, to 47.6ft
-55.3	55.1										RUN-5				LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, fossiliferous, trace vugs, strong HCl reaction (Lower Fort Thompson Formation)
-60.3	60.1										RUN-6				50.1ft: few vugs
-65.3	65.1										RUN-7				65.1ft: moderately indurated to indurated, trace vugs, trace to few sand
-70.3	70.1										RUN-8				70.1ft: indurated, few vugs, few shell molds and casts
-75.0	74.8														

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



SHEET 2 OF 3

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-637		DRILL METHOD: Mud Rotary/ Core		SAMPLE METHODS: SPT/Core		0 HR. NA	
GROUND ELEV.: -0.2 ft (NAVD88)		NORTHING: 395,693 US ft (NAD83/90)		EASTING: 877,310 US ft (NAD83/90)		24 HR. NA	
TOTAL DEPTH: 150.0 ft		BORING DIAMETER: 4" to 47.2', 3" to 150.0'		CASING DEPTH: 4" to 47.2', 3" to 121.5'		HAMMER (ID): 140 lb. Auto (MEC-425)	
DATE STARTED: 5/2/08		COMPLETED: 5/6/08		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					
-75.0					Continued from previous page										
-80.0	79.8														74.8ft: moderately hard, moderately indurated, few vugs, few to little shell molds and casts
-85.0	84.8														LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, fossiliferous, trace vugs, strong HCl reaction (Lower Fort Thompson Formation) (continued)
-90.0	89.8														79.8ft: medium hard to hard, moderately indurated to indurated, few vugs
-95.0	94.8														84.8ft: moderately hard, moderately indurated, trace vugs, trace shell molds
-100.0	99.8														89.8ft: little shell molds and casts
-105.0	104.8														94.8ft: hard, indurated, few shell molds and casts
-110.0	109.8														99.8ft: moderately hard to hard, moderately indurated to indurated, few to little shell molds
-115.0	114.8														104.8ft: indurated
-121.7	121.5	16	10	12											109.8ft: moderately hard, moderately indurated, some sand, few vugs, trace shell molds and casts
-128.7	128.5	7	13	26											121.5ft: Switch sampling method to SPT 121.5ft: medium dense
-138.7	138.5	3	4	18											128.5ft: dense
-148.7	148.5	13	21	30											134.2ft: Silty SAND (SM), greenish gray (10Y6/1), medium dense, wet, strong HCl reaction, fine grained sand, cemented sand fragments

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: S. Lehman					
SITE DESCRIPTION: Turkey Point COL			DRILL MACHINE: CME-55 Marsh Buggy			DRILLER: P. Pitts/ B. Carrasco			GROUND WATER (ft)					
BORING NO.: B-637			DRILL METHOD: Mud Rotary/ Core			SAMPLE METHODS: SPT/Core			0 HR. NA					
GROUND ELEV.: -0.2 ft (NAVD88)			NORTHING: 395,693 US ft (NAD83/90)			EASTING: 877,310 US ft (NAD83/90)			24 HR. NA					
TOTAL DEPTH: 150.0 ft			BORING DIAMETER: 4" to 47.2', 3" to 150.0'			CASING DEPTH: 4" to 47.2', 3" to 121.5'			HAMMER (ID):140 lb. Auto (MEC-425)					
DATE STARTED: 5/2/08			COMPLETED: 5/6/08			CORE SIZE: HQ3			BITS USED: 3 7/8" Roller Cone					
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT						SAMP. NO.	LOG MOI	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100				
-149.8					Continued from previous page									
														148.5ft: very dense Boring Terminated at Elevation -150.2 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: S. Lehman	
SITE DESCRIPTION: Turkey Point COL				DRILL MACHINE: CME-55 Marsh Buggy				DRILLER: P. Pitts/ B. Carrasco		GROUND WATER (ft)	
BORING NO.: B-637				DRILL METHOD: Mud Rotary/ Core				SAMPLE METHODS: SPT/Core		0 HR. NA	
GROUND ELEV.: -0.2 ft (NAVD88)				NORTHING: 395,693 US ft (NAD83/90)				EASTING: 877,310 US ft (NAD83/90)		24 HR. NA	
TOTAL DEPTH: 150.0 ft				CASING DEPTH: 4" to 47.2', 3" to 121.5'						HAMMER (ID): 140 lb. Auto (MEC-425)	
DATE STARTED: 5/2/08		COMPLETED: 5/6/08		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 @ 35.1 ft	
-35.3	35.1	5.0	4:43 4:45 4:23 4:14 5:48	(4.2) 84%	(4.0) 80%	RUN-1	(11.6) 93%	(11.4) 91%		LIMESTONE, boundstone, white (2.5Y8/1), soft, wet, moderately indurated, strong HCl reaction, little medium to coarse sand (Upper Fort Thompson Formation) (continued)	
-40.3	40.1	5.0	5:56 4:16 4:32 7:14 10:28	(4.9) 98%	(4.9) 98%	RUN-2				35.1ft: hard, indurated, recrystallized calcite, little vugs 40.1ft: white (2.5Y8/1), to gray (2.5Y5/1), few vugs, coralline	
-45.3	45.1	5.0	8:33 6:30 2:21 3:10 2:29	(5.0) 100%	(4.7) 94%	RUN-3				45.1ft: gray (2.5Y5/1), fossiliferous, trace vugs, to 47.6ft	
-50.3	50.1	5.0	4:50 4:00 4:26 4:30 3:50	(4.5) 90%	(4.2) 84%	RUN-4	(55.1) 81%	(41.8) 61%	-47.8	LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, fossiliferous, trace vugs, strong HCl reaction (Lower Fort Thompson Formation)	
-55.3	55.1	5.0	4:50 8:24 11:43 16:56 5:26	(5.0) 100%	(4.0) 80%	RUN-5				50.1ft: few vugs	
-60.3	60.1	5.0	4:10 0:42 4:05 4:27 4:39	(3.6) 72%	(2.4) 48%	RUN-6					
-65.3	65.1	5.0	1:40 0:13 0:56 0:30 6:29	(1.4) 28%	(0.6) 12%	RUN-7				65.1ft: moderately indurated to indurated, trace vugs, trace to few sand	
-70.3	70.1	4.7	2:52/0.7 4:07 3:35 14:50 10:23	(3.4) 72%	(1.6) 34%	RUN-8				70.1ft: indurated, few vugs, few shell molds and casts	
-75.0	74.8	5.0	3:53 8:06 7:44 5:07 2:46	(3.7) 74%	(2.9) 58%	RUN-9				74.8ft: moderately hard, moderately indurated, few vugs, few to little shell molds and casts	
-80.0	79.8	5.0	6:51 7:59 2:36 5:47 6:10	(3.0) 60%	(1.1) 22%	RUN-10				79.8ft: medium hard to hard, moderately indurated to indurated, few vugs	
-85.0	84.8	5.0	2:08 2:54 3:08 4:22 3:58	(4.4) 88%	(3.7) 74%	RUN-11				84.8ft: moderately hard, moderately indurated, trace vugs, trace shell molds	
-90.0	89.8	5.0	3:08 4:13 3:51 5:10 7:56	(5.0) 100%	(5.0) 100%	RUN-12				89.8ft: little shell molds and casts	
-95.0	94.8	5.0	4:33 3:19 2:50 4:37 6:35	(4.0) 80%	(1.4) 28%	RUN-13				94.8ft: hard, indurated, few shell molds and casts	
-100.0	99.8	5.0	4:18 6:42 3:33 3:07 4:15	(5.0) 100%	(4.7) 94%	RUN-14				99.8ft: moderately hard to hard, moderately indurated to indurated, few to little shell molds	
-105.0	104.8	5.0	5:13 2:55 5:30 5:34 3:43	(4.8) 96%	(4.8) 96%	RUN-15				104.8ft: indurated	
-110.0	109.8										

TURKEY POINT COL CORE TURKEY POINT GPJ TURKEY POINT COL GDI 5.30.08



SHEET 2 OF 2

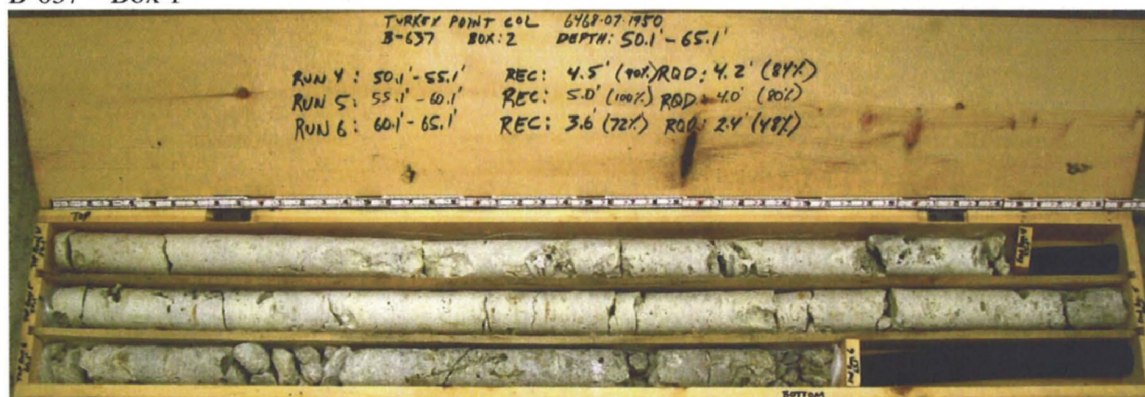
BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: S. Lehman
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-55 Marsh Buggy	DRILLER: P. Pitts/ B. Carrasco	GROUND WATER (ft)
BORING NO.: B-637	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -0.2 ft (NAVD88)	NORTHING: 395,693 US ft (NAD83/90)	EASTING: 877,310 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 150.0 ft	CASING DEPTH: 4" to 47.2', 3" to 121.5'	HAMMER (ID): 140 lb. Auto (MEC-425)	
DATE STARTED: 5/2/08	COMPLETED: 5/6/08	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
-115.0	114.8	5.0	3.49 3.31 3.16 4.12 2.52	(4.0) 80%	(2.8) 56%	RUN-16				109.8ft: moderately hard, moderately indurated, some sand, few vugs, trace shell molds and casts LIMESTONE, boundstone, white (2.5Y8/1), hard, indurated, fossiliferous, trace vugs, strong HCl reaction (Lower Fort Thompson Formation) (continued)
-120.0	119.8	5.0	1.54 3.55 3.40 5.06 2.08	(0.8) 16%	(0.4) 8%	RUN-17	(0.0) 0%	(NA)		POORLY GRADED SAND with silt (SP-SM), greenish gray (10Y6/1), wet, strong HCl reaction, fine grained sand, trace shell fragments (Tamiami Formation)
										Coring Terminated at Elevation -120.0

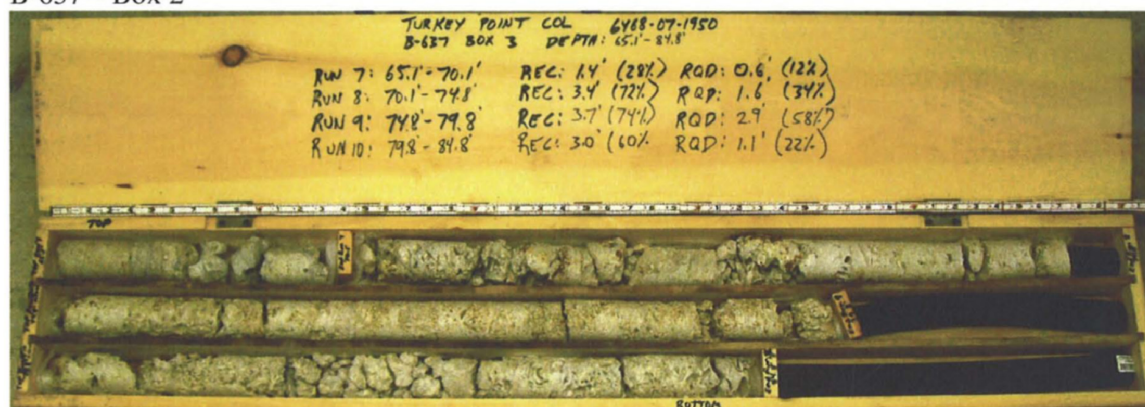
TURKEY POINT COL CORE TURKEY POINT GPJ TURKEY POINT COL GDT 5/30/08



B-637 - Box 1



B-637 - Box 2



B-637 - Box 3



B-637 - Box 4



B-637 - Box 5