MACTEC

GEOTECHNICAL BORING LOG

Prepared By [illegible] Date 7-10-08

Checked By TM Date 7-10-08

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: R. Clark
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 Marsh Buggy	DRILLER: D. White/ R. Hall	GROUND WATER (ft)
BORING NO.: B-808	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.0 ft (NAVD88)	NORTHING: 396,205 US ft (NAD83/90)	EASTING: 875,332 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 126.4 ft	BORING DIAMETER: 4" to 25.0', 3" to 126.4'	CASING DEPTH: 4" to 25.0', 3" to 117.8'	HAMMER (ID):140 lb. Auto (893)
DATE STARTED: 3/10/08	COMPLETED: 3/18/08	CORE SIZE: HQ3	BITS USED: 4" Tricone

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
-1.0					Ground Surface				
-1.0	0.0	WOH	WOH	WOH	WOH 0	808-1			-1.0 0.0 MUCK, light gray (10YR7/2), to grayish brown (10YR5/2), very soft, moist to wet, strong HCl reaction
-3.8	2.8	WOH	8	12	20	808-2A&B			-4.4 3.4 2.8ft: dark gray (10YR4/1)
-6.1	5.1	10	7	6	SEE LEGEND FOR ROCK HARDNESS CRITERIA BASED ON SPT DATA 13	808-3			LIMESTONE, boundstone, pale yellow (5Y8/2), very soft, friable, wet, strong HCl reaction, fossiliferous (Miami Formation)
-8.5	7.5	2	2	2	4	808-4			5.1ft: oolitic
-11.0	10.0	10	40	27	67	808-5			8.0ft: loss of circulation 10.0ft: hard
-13.0	12.0	7	9	15	24	808-6			12.0ft: soft
-16.0	15.0	19	21	50/0.5	71/1.0	808-7			15.0ft: hard
-20.6	19.6	6	6	5	11	808-8			19.6ft: white (5Y8/1), very soft
-25.1	24.1								-25.0 24.0
-26.0	25.0	50/0.1			50/0.1	808-9			LIMESTONE, boundstone, white (10YR8/1), hard to moderately hard, moderately indurated, fossiliferous, trace to little locally interconnected vugs, strong HCl reaction (Upper Fort Thompson Formation)
-29.0	28.0					RUN-1			25.0ft: Switch sampling method to coring
-34.0	33.0					RUN-2			28.0ft: coralline, recrystallized calcite, few vugs
-39.0	38.0					RUN-3			33.0ft: hard, indurated, little vugs
-44.0	43.0					RUN-4			38.0ft: few vugs, trace coralline 39.0ft: loss of circulation
-49.0	48.0					RUN-5			43.0ft: light gray (10YR7/1), to gray (10YR6/1)
-54.0	53.0					RUN-6			-50.0 48.0ft: gray (10YR6/1), to 49.0ft 49.0 LIMESTONE, boundstone, white (10YR8/1), hard, indurated, fossiliferous, strong HCl reaction (Lower Fort Thompson Formation)
-55.6	54.6					RUN-7			53.0ft: white (10YR8/1), medium hard, moderately indurated
-59.0	58.0					RUN-8			54.6ft: little vugs, trace shell molds and casts
-64.0	63.0					RUN-9			58.0ft: few vugs
-69.0	68.0					RUN-10			63.0 to 73.0ft: possible interbedded sand layers; based on recovery and drilling rates
-74.0	73.0					RUN-11			
						RUN-12			73.0ft: trace vugs

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

MACTEC

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: R. Clark	
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 Marsh Buggy	DRILLER: D. White/ R. Hall	GROUND WATER (ft)	
BORING NO.: B-808	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA	
GROUND ELEV.: -1.0 ft (NAVD88)	NORTHING: 396,205 US ft (NAD83/90)	EASTING: 875,332 US ft (NAD83/90)	24 HR. NA	
TOTAL DEPTH: 126.4 ft	BORING DIAMETER: 4" to 25.0', 3" to 126.4'	CASING DEPTH: 4" to 25.0', 3" to 117.8'	HAMMER (ID):140 lb. Auto (893)	
DATE STARTED: 3/10/08	COMPLETED: 3/18/08	CORE SIZE: HQ3	BITS USED: 4" Tricone	

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
-75.8					Continued from previous page				
-79.0	78.0					RUN-13			LIMESTONE, boundstone, white (10YR8/1), hard, indurated, fossiliferous, strong HCl reaction (Lower Fort Thompson Formation) *(continued)* 78.0ft: hard, indurated, little vugs
-84.0	83.0					RUN-14			83.0ft: few vugs, few shell molds and casts
-89.0	88.0					RUN-15			88.0ft: moderately hard, moderately indurated, little vugs
-94.0	93.0					RUN-16			93.0ft: few vugs
-99.0	98.0					RUN-17			98.0ft: little vugs, few to little shell molds and casts
-104.0	103.0					RUN-18			103.0ft: some vugs
-109.0	108.0					RUN-19			108.0ft: little vugs
-114.0	113.0					RUN-20			113.0ft: few vugs
-116.0	115.0								POORLY GRADED SAND (SP), light gray (10YR7/1), medium dense, wet, trace shell fragments, strong HCl reaction, fine grained sand (Tamiami Formation)
-119.0	118.0	4	8	11	19	808-10			118.0ft: Switch sampling method to SPT
-123.0	122.0								Silty SAND (SM), olive gray (10YR5/2), medium dense, wet, fine grained sand, trace shells, strong HCl reaction
-125.9	124.9	13	10	12	22	808-11			
-127.4	126.4								Boring Terminated at Elevation -127.4 ft

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

MACTEC

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: R. Clark
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 Marsh Buggy	DRILLER: D. White/ R. Hall	GROUND WATER (ft)
BORING NO.: B-808	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.0 ft (NAVD88)	NORTHING: 396,205 US ft (NAD83/90)	EASTING: 875,332 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 126.4 ft	CASING DEPTH: 4" to 25.0', 3" to 117.8'		HAMMER (ID): 140 lb. Auto (893)
DATE STARTED: 3/10/08	COMPLETED: 3/18/08	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 @ 25.0 ft
-26.0	25.0	3.0	1:45 1:46 1:52	(3.0) 100%	(1.6) 53%	RUN-1	(22.6) 94%	(18.2) 76%		LIMESTONE, boundstone, white (10YR8/1), hard to moderately hard, moderately indurated, fossiliferous, trace to little locally interconnected vugs, strong HCl reaction (Upper Fort Thompson Formation) *(continued)*
-29.0	28.0	5.0	1:58 1:03 0:51 1:03 1:01	(4.5) 90%	(3.8) 76%	RUN-2				25.0ft: Switch sampling method to coring 28.0ft: coralline, recrystallized calcite, few vugs
-34.0	33.0	5.0	1:10 1:05 0:45 0:58 1:14	(4.3) 86%	(3.0) 60%	RUN-3				33.0ft: hard, indurated, little vugs
-39.0	38.0	5.0	1:12 1:13 1:02 1:17 1:10	(4.9) 98%	(4.4) 88%	RUN-4				38.0ft: few vugs, trace coralline 39.0ft: loss of circulation
-44.0	43.0	5.0	1:14 1:04 1:27 1:20 1:45	(4.9) 98%	(4.4) 88%	RUN-5				43.0ft: light gray (10YR7/1), to gray (10YR6/1)
-49.0	48.0	5.0	1:12 1:25 2:05 0:58 1:00	(4.9) 98%	(4.8) 96%	RUN-6				-50.0 48.0ft: gray (10YR6/1), to 49.0ft 49.0
-54.0	53.0						(44.2) 67%	(27.7) 42%		LIMESTONE, boundstone, white (10YR8/1), hard, indurated, fossiliferous, strong HCl reaction (Lower Fort Thompson Formation)
-55.6	54.6	1.6	1:39 3:18/0.6	(1.6) 100%	(0.5) 31%	RUN-7				53.0ft: white (10YR8/1), medium hard, moderately indurated
-59.0	58.0	3.4	0:43/0.4 0:51 0:41 1:01	(3.4) 100%	(2.4) 71%	RUN-8				54.6ft: little vugs, trace shell molds and casts
-64.0	63.0	5.0	1:46 1:41 1:25 1:06 1:21	(4.9) 98%	(4.5) 90%	RUN-9				58.0ft: few vugs
-69.0	68.0	5.0	0:25 0:36 0:21 0:11 0:09	(1.2) 24%	(0.0) 0%	RUN-10				63.0 to 73.0ft: possible interbedded sand layers; based on recovery and drilling rates
-74.0	73.0	5.0	0:29 1:01 0:23 1:52 0:54	(1.3) 26%	(0.4) 8%	RUN-11				
-79.0	78.0	5.0	0:38 0:45 0:33 1:10 0:54	(2.4) 48%	(1.1) 22%	RUN-12				73.0ft: trace vugs
-84.0	83.0	5.0	1:00 0:51 0:38 1:26 2:43	(3.6) 72%	(1.9) 38%	RUN-13				78.0ft: hard, indurated, little vugs
-89.0	88.0	5.0	0:23 0:48 1:40 1:59 1:26	(4.3) 86%	(3.6) 72%	RUN-14				83.0ft: few vugs, few shell molds and casts
-94.0	93.0	5.0	0:40 0:56 0:46 1:08 0:39	(4.7) 94%	(3.7) 74%	RUN-15				88.0ft: moderately hard, moderately indurated, little vugs
-99.0	98.0	5.0	0:53 0:32 1:33 0:49 1:07	(2.0) 40%	(0.0) 0%	RUN-16				93.0ft: few vugs
		5.0	0:52 0:46	(3.2)	(2.0)	RUN-17				98.0ft: little vugs, few to little shell molds and casts

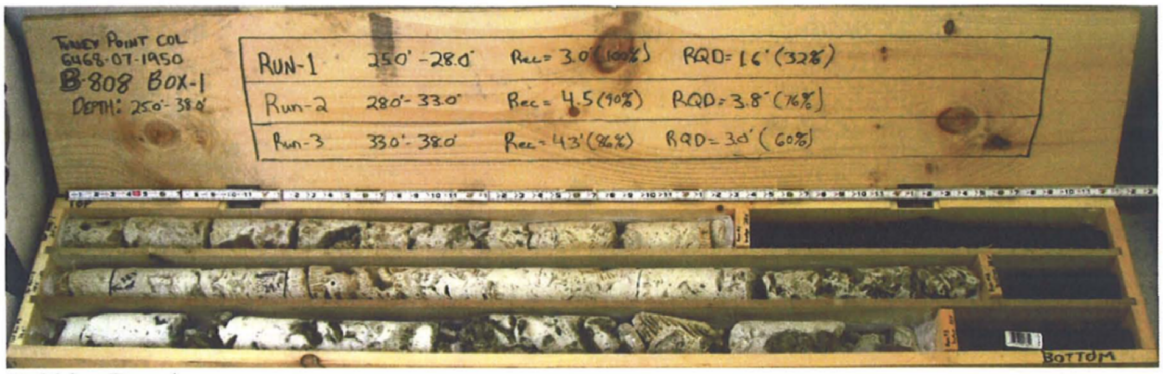
TURKEY POINT COL CORE TURKEY POINT GPJ TURKEY POINT COL.GDT 7/10/08

MACTEC

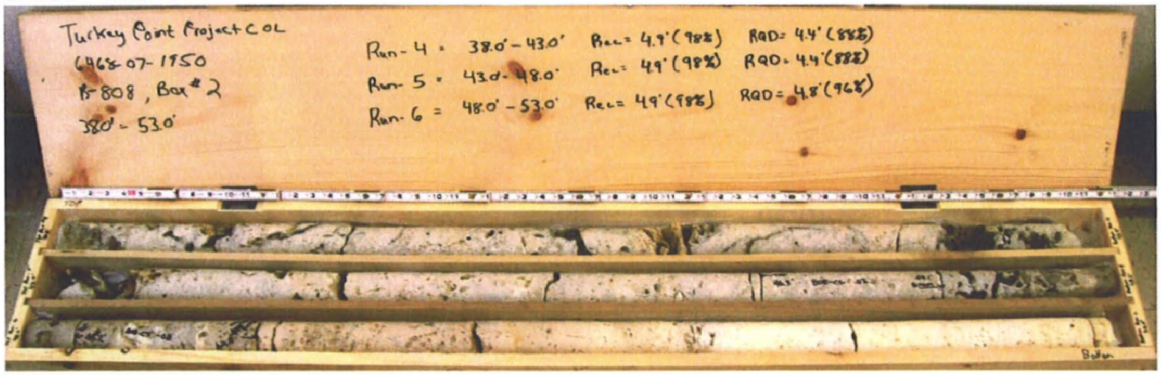
BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: R. Clark
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 Marsh Buggy	DRILLER: D. White/ R. Hall	GROUND WATER (ft)
BORING NO.: B-808	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.0 ft (NAVD88)	NORTHING: 396,205 US ft (NAD83/90)	EASTING: 875,332 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 126.4 ft	CASING DEPTH: 4" to 25.0', 3" to 117.8'		HAMMER (ID): 140 lb. Auto (893)
DATE STARTED: 3/10/08	COMPLETED: 3/18/08	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
										Continued from previous page
			1:03	64%	40%					LIMESTONE, boundstone, white (10YR8/1), hard, indurated, fossiliferous,
			0:56							strong HCl reaction (Lower Fort Thompson Formation) *(continued)*
-104.0	103.0		0:45							
		5.0	0:37	(4.9)	(3.3)	RUN-18				103.0ft: some vugs
			0:39	98%	66%					
			0:36							
			0:46							
-109.0	108.0		0:38							
		5.0	0:29	(2.0)	(0.5)	RUN-19				108.0ft: little vugs
			0:21	40%	10%					
			0:19							
			1:20							113.0ft: few vugs
-114.0	113.0		0:40							
		5.0	0:14	(0.8)	(0.0)	RUN-20				
			1:37	16%	0%					-116.0 115.0
			0:56				(0.0)	(NA)		POORLY GRADED SAND (SP), light gray (10YR7/1), medium dense, wet,
			0:13				0%			trace shell fragments, strong HCl reaction, fine grained sand (Tamiami
-119.0	118.0		0:27							-119.0 Formation) 118.0
										Coring Terminated at Elevation -119.0

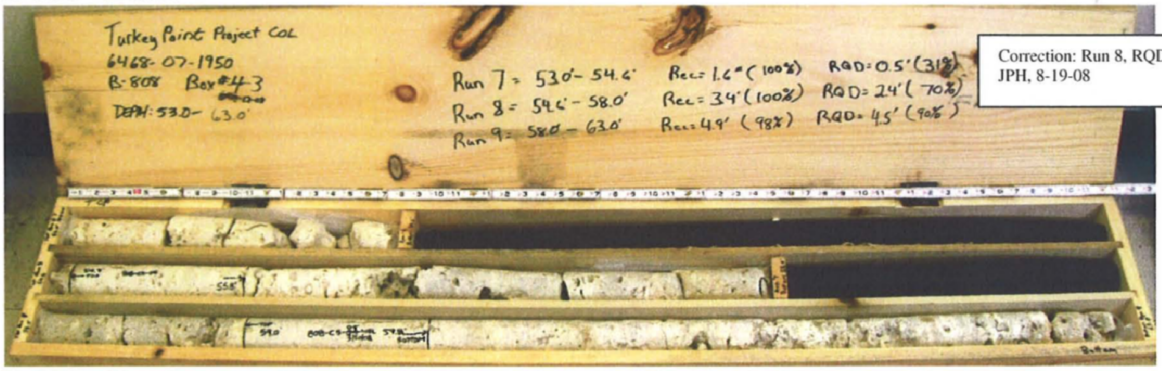
TURKEY POINT COL CORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 7/10/08



B-808 – Box 1



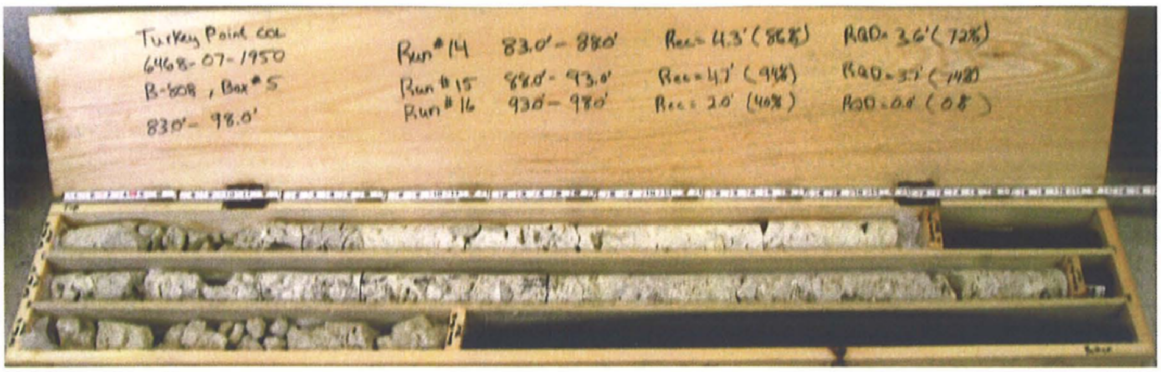
B-808 – Box 2



Correction: Run 8, RQD 2.4'(71%)
JPH, 8-19-08

B-808 - Box 3

B-808 - Box 4



B-808 – Box 5

B-808 – Box 6

MACTEC

GEOTECHNICAL BORING LOG

Prepared By _____ Date 7-10-08

Checked By _____ Date 7-10-08

SHEET 1 OF 2

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: B. Taylor
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 Marsh Buggy	DRILLER: D. White/ R. Hall	GROUND WATER (ft)
BORING NO.: B-809	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.3 ft (NAVD88)	NORTHING: 397,028 US ft (NAD83/90)	EASTING: 875,151 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 124.5 ft	BORING DIAMETER: 4" to 19.6', 3" to 124.5'	CASING DEPTH: 4" to 19.6', 3" to 119.0'	HAMMER (ID):140 lb. Auto (893)
DATE STARTED: 3/19/08	COMPLETED: 3/21/08	CORE SIZE: HQ3	BITS USED: 2 15/16" Tricone

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
-1.3					Ground Surface				
-1.3	0.0	WOH	WOH	WOH	WOH 0	B09-1			-1.3 0.0 MUCK, very dark gray (10YR3/1), very soft, moist, mostly organic, strong HCl reaction, trace shell fragments -4.3 3.0
-4.8	3.5	8	11	7	18	B09-2			LIMESTONE, boundstone, white (10YR8/1), very soft, wet, strong HCl reaction, fossiliferous, oolitic (Miami Formation)
-7.3	6.0	3	13	26	39	B09-3			6.0ft: very dark brown (10YR8/2), medium hard
-9.8	8.5	4	5	5	10	B09-4			6.0ft: some loss of circulation
-12.3	11.0	13	26	27	53	B09-5			8.5ft: white (10YR8/1), very soft, vugs
-14.8	13.5	48	26	29	55	B09-6			11.0ft: moderately hard, fossiliferous
-20.5	19.2								
-20.9	19.6	50/0.2			50/0.2	B09-7 RUN-1			19.2ft: hard 19.6ft: Switch sampling method to coring 19.6ft: indurated, trace vugs
-24.3	23.0					RUN-2			-26.3 25.0
-29.3	28.0					RUN-3			LIMESTONE, boundstone, white (10YR8/1), moderately hard, moderately indurated, fossiliferous, coralline, little vugs, strong HCl reaction (Upper Fort Thompson Formation) 30.0ft: loss of circulation
-34.3	33.0					RUN-4			33.0ft: locally interconnected vugs
-39.3	38.0					RUN-5			38.0ft: hard, indurated, recrystallized calcite
-44.3	43.0					RUN-6			43ft: light gray (10YR7/1) from 46.8ft to 48.4ft
-49.3	48.0					RUN-7			-49.7 48.4
-54.3	53.0					RUN-8			LIMESTONE, boundstone, white (10YR8/1), moderately hard, moderately indurated, fossiliferous, few vugs, trace shell molds, strong HCl reaction (Lower Fort Thompson Formation) 53.0ft: trace to few shell molds and casts
-59.3	58.0					RUN-9			
-64.3	63.0					RUN-10			63.0 to 68ft: possible interbedded sand layers; based on drilling rates and recovery
-69.3	68.0					RUN-11			68.0ft: some vugs
-74.3	73.0					RUN-12			73.0ft: little vugs

SEE LEGEND FOR ROCK HARDNESS CRITERIA BASED ON SPT DATA

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

MACTEC

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: B. Taylor	
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 Marsh Buggy	DRILLER: D. White/ R. Hall	GROUND WATER (ft)	
BORING NO.: B-809	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA	
GROUND ELEV.: -1.3 ft (NAVD88)	NORTHING: 397,028 US ft (NAD83/90)	EASTING: 875,151 US ft (NAD83/90)	24 HR. NA	
TOTAL DEPTH: 124.5 ft	BORING DIAMETER: 4" to 19.6', 3" to 124.5'	CASING DEPTH: 4" to 19.6', 3" to 119.0'	HAMMER (ID):140 lb. Auto (893)	
DATE STARTED: 3/19/08	COMPLETED: 3/21/08	CORE SIZE: HQ3	BITS USED: 2 15/16" Tricone	

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
-76.1					Continued from previous page				
-79.3	78.0					RUN-13			LIMESTONE, boundstone, white (10YR8/1), moderately hard, moderately indurated, fossiliferous, few vugs, trace shell molds, strong HCl reaction (Lower Fort Thompson Formation) *(continued)* 78.0ft: some vugs, little sand
-83.0	81.7								
-84.3	83.0					RUN-14			
						RUN-15			83.0ft: little vugs, trace to few shell molds and casts
-89.3	88.0					RUN-16			88.0ft: medium hard, friable, some vugs, little to some shell molds and casts
-94.3	93.0					RUN-17			93.0ft: moderately indurated, few vugs, little shell molds and casts
-99.3	98.0					RUN-18			98.0ft: some vugs, little to some shell molds and casts
-104.3	103.0					RUN-19			103.0ft: light gray (10YR7/2), moderately hard, moderately indurated, little vugs
-109.3	108.0					RUN-20			108.0ft: light greenish gray (10Y6/1) 109.6ft: possible interbedded sand layers
-114.3	113.0								-114.3 113.0
						RUN-21			Silty SAND (SM), light olive gray (5Y6/2), medium dense, wet, fine grained sand, strong HCl reaction, trace shell fragments (Tamiami Formation)
-124.3	123.0								123.0ft: Switch sampling method to SPT
		9	10	17	27	809-8			-125.8 124.5
									Boring Terminated at Elevation -125.8 ft

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

MACTEC

BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: B. Taylor
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 Marsh Buggy	DRILLER: D. White/ R. Hall	GROUND WATER (ft)
BORING NO.: B-809	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.3 ft (NAVD88)	NORTHING: 397,028 US ft (NAD83/90)	EASTING: 875,151 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 124.5 ft	CASING DEPTH: 4" to 19.6', 3" to 119.0'	HAMMER (ID): 140 lb. Auto (893)	
DATE STARTED: 3/19/08	COMPLETED: 3/21/08	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 @ 19.6 ft
-20.9	19.6	3.4	4:05 2:47 2:03 0:53/0.4	(3.4) 100%	(3.4) 100%	RUN-1	(5.4) 100%	(5.4) 100%		LIMESTONE, boundstone, white (10YR8/1), very soft, wet, strong HCl reaction, fossiliferous, oolitic (Miami Formation) *(continued)* 19.6ft: indurated, trace vugs
-24.3	23.0	5.0	2:16 1:57 1:05 1:13 0:55	(5.0) 100%	(4.9) 98%	RUN-2				-26.3 25.0
-29.3	28.0	5.0	1:27 1:35 1:36 1:09 1:41	(4.3) 86%	(2.4) 48%	RUN-3	(22.1) 94%	(19.1) 82%		LIMESTONE, boundstone, white (10YR8/1), moderately hard, moderately indurated, fossiliferous, coralline, little vugs, strong HCl reaction (Upper Fort Thompson Formation) 30.0ft: loss of circulation
-34.3	33.0	5.0	2:11 2:06 1:17 1:26 2:37	(4.8) 96%	(4.1) 82%	RUN-4				33.0ft: locally interconnected vugs
-39.3	38.0	5.0	1:57 1:42 2:40 3:26 3:54	(4.8) 96%	(4.6) 92%	RUN-5				38.0ft: hard, indurated, recrystallized calcite
-44.3	43.0	5.0	2:14 1:43 1:14 1:58 1:45	(4.8) 96%	(4.7) 94%	RUN -6				43ft: light gray (10YR7/1) from 46.8ft to 48.4ft
-49.3	48.0	5.0	1:18 1:09 0:57 0:41 0:44	(4.9) 98%	(4.7) 94%	RUN-7	(41.6) 64%	(26.7) 41%		-49.7 48.4 LIMESTONE, boundstone, white (10YR8/1), moderately hard, moderately indurated, fossiliferous, few vugs, trace shell molds, strong HCl reaction (Lower Fort Thompson Formation)
-54.3	53.0	5.0	0:44 1:02 1:19 0:41 0:33	(4.4) 88%	(3.6) 72%	RUN-8				53.0ft: trace to few shell molds and casts
-59.3	58.0	5.0	1:04 1:05 0:46 1:02 2:03	(3.4) 68%	(2.1) 42%	RUN-9				
-64.3	63.0	5.0	0:16 0:50 0:04 0:11 0:31	(0.6) 12%	(0.0) 0%	RUN-10				63.0 to 68ft: possible interbedded sand layers; based on drilling rates and recovery
-69.3	68.0	5.0	1:14 0:45 0:59 0:43 0:50	(2.8) 56%	(1.0) 20%	RUN-11				68.0ft: some vugs
-74.3	73.0	5.0	1:13 1:00 1:15 1:43 2:21	(3.0) 60%	(0.5) 10%	RUN-12				73.0ft: little vugs
-79.3	78.0	3.7	1:06 1:55 0:23 2:19/0.7	(2.3) 62%	(1.0) 27%	RUN-13				78.0ft: some vugs, little sand
-83.0	81.7	1.3	0:49	(1.0) 77%	(0.0) 0%	RUN-14				
-84.3	83.0	5.0	0:36/0.3 1:20 1:16 0:54 0:34	(3.8) 76%	(2.2) 44%	RUN-15				83.0ft: little vugs, trace to few shell molds and casts
-89.3	88.0	5.0	1:20 0:37 0:33 0:29 0:20	(3.1) 62%	(2.2) 44%	RUN-16				88.0ft: medium hard, friable, some vugs, little to some shell molds and casts
-94.3	93.0	5.0	0:19 0:24	(2.5)	(1.8)	RUN-17				93.0ft: moderately indurated, few vugs, little shell molds and casts

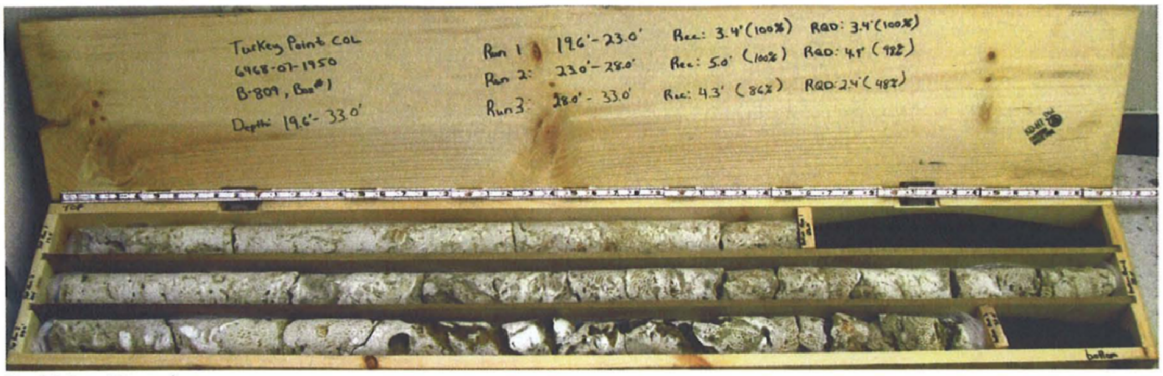
TURKEY POINT COL CORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 7/10/08

MACTEC

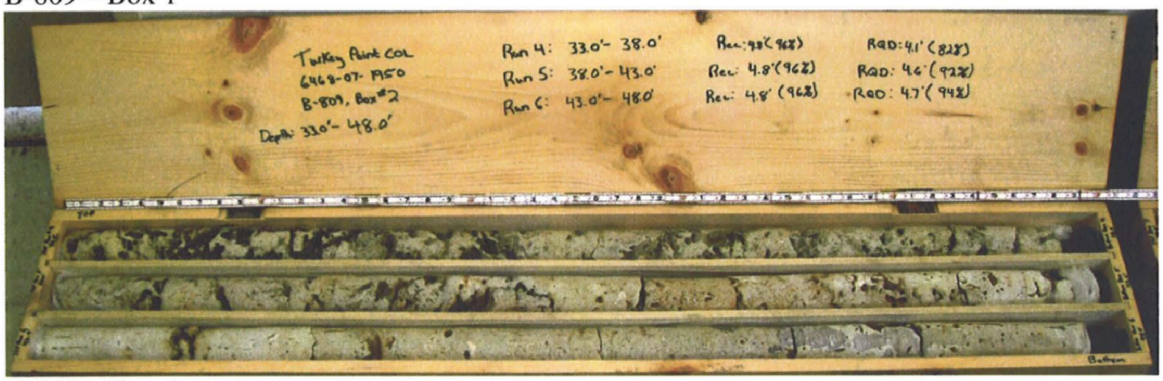
BECHTEL PROJECT NO.: 25409	MACTEC PROJECT NO.: 6468-07-1950	COUNTY: Miami-Dade	GEOLOGIST: B. Taylor
SITE DESCRIPTION: Turkey Point COL	DRILL MACHINE: CME-550 Marsh Buggy	DRILLER: D. White/ R. Hall	GROUND WATER (ft)
BORING NO.: B-809	DRILL METHOD: Mud Rotary/ Core	SAMPLE METHODS: SPT/Core	0 HR. NA
GROUND ELEV.: -1.3 ft (NAVD88)	NORTHING: 397,028 US ft (NAD83/90)	EASTING: 875,151 US ft (NAD83/90)	24 HR. NA
TOTAL DEPTH: 124.5 ft	CASING DEPTH: 4" to 19.6', 3" to 119.0'		HAMMER (ID): 140 lb. Auto (893)
DATE STARTED: 3/19/08	COMPLETED: 3/21/08	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
										Continued from previous page
			0:33	50%	36%					LIMESTONE, boundstone, white (10YR8/1), moderately hard, moderately
			0:31							indurated, fossiliferous, few vugs, trace shell molds, strong HCl reaction (Lower
			0:24							Fort Thompson Formation) *(continued)*
-99.3	98.0		0:29							
		5.0	0:50	(4.4)	(3.3)	RUN-18				98.0ft: some vugs, little to some shell molds and casts
			1:00	88%	66%					
			0:46							
			0:35							
-104.3	103.0		0:33							
		5.0	0:39	(3.3)	(2.5)	RUN-19				103.0ft: light gray (10YR7/2), moderately hard, moderately indurated, little vugs
			0:34	66%	50%					
			0:21							
			0:26							
-109.3	108.0		0:12							
		5.0	0:31	(2.5)	(2.2)	RUN-20				108.0ft: light greenish gray (10Y6/1)
			0:40	50%	44%					109.6ft: possible interbedded sand layers
			1:01							
			0:31							
-114.3	113.0		0:44							-114.3 113.0
		5.0	0:12	(2.3)	(NA)	RUN-21	(2.3)	(NA)		Silty SAND (SM), light olive gray (5Y6/2), medium dense, wet, fine grained
			0:21	46%			46%			sand, strong HCl reaction, trace shell fragments (Tamiami Formation)
			0:41							
			0:39							
-119.3	118.0		0:29							-119.3 118.0
										Coring Terminated at Elevation -119.3

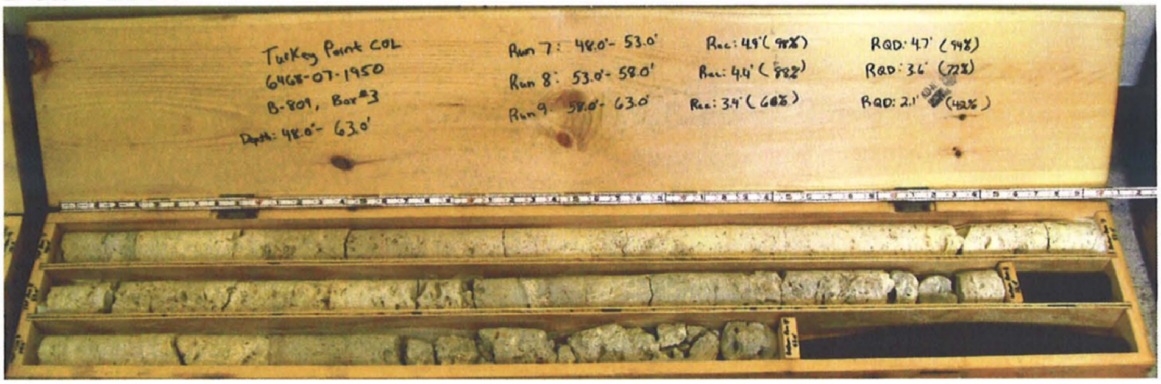
TURKEY POINT COL CORE TURKEY POINT.GPJ TURKEY POINT COL.GDT 7/10/08



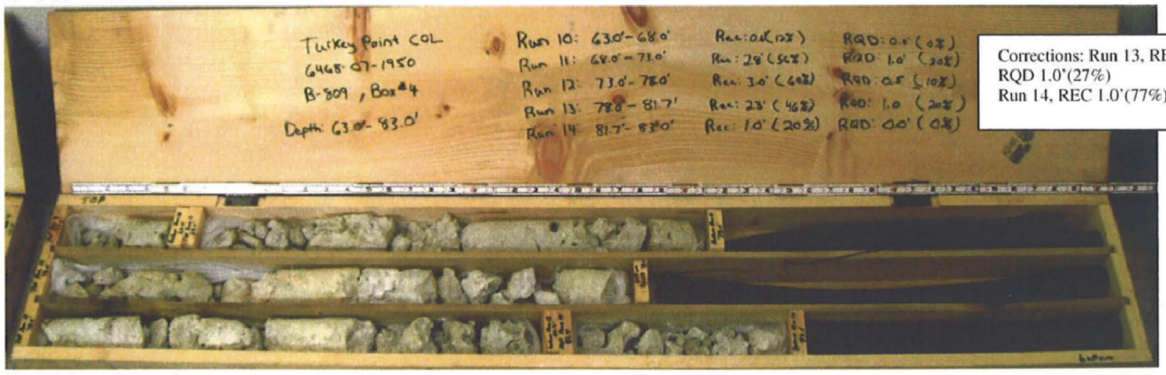
B-809 – Box 1



B-809 – Box 2

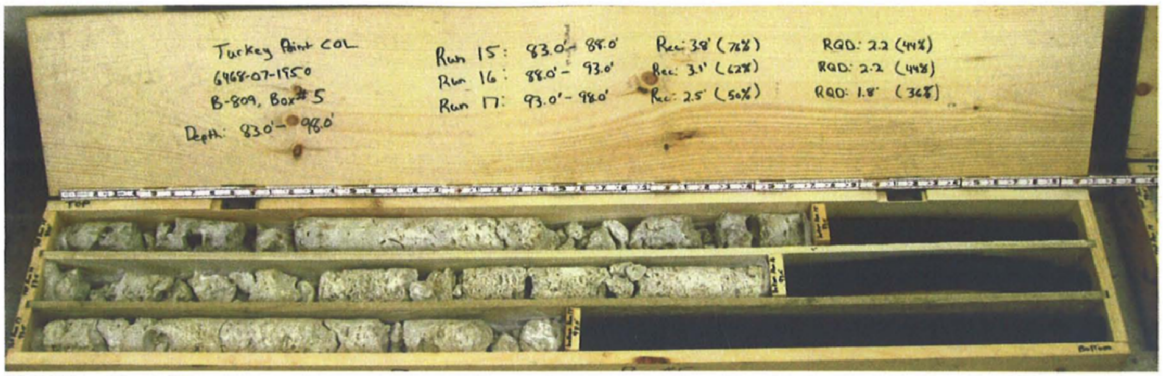


B-809 - Box 3

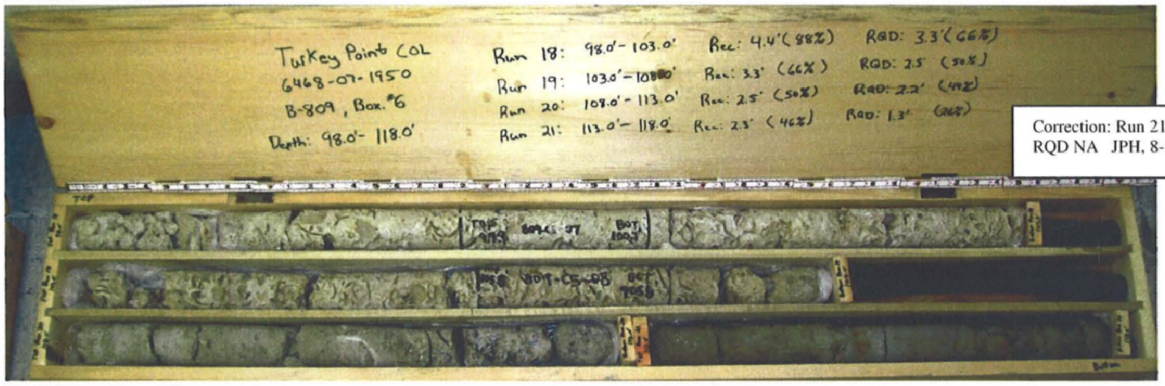


Corrections: Run 13, REC 2.3'(62%), RQD 1.0'(27%)
Run 14, REC 1.0'(77%) JPH, 8-19-08

B-809 - Box 4



B-809 – Box 5



B-809 – Box 6