



BECHTEL PROJECT NO.: 25161				MACTEC PROJECT NO.: 6468-09-2473				COUNTY: Louisa, VA				GEOLOGIST: K. Lloyd			
SITE DESCRIPTION: North Anna 3 Project Supplement 2								DRILLER: D. White/O. Smith				FLUID LEVEL (ft)			
BORING NO.: M-14				DRILL METHOD: Mud Rotary				DRILL MACHINE: CME-55LC Track (RAL)				0 HR.		ND	
GROUND ELEV.: 323.8 ft (NAVD88)				NORTHING: 3,909,452 US ft (NAD83)				EASTING: 11,686,111 US ft (NAD83)				24 HR.		ND	
TOTAL DEPTH: 60.3 ft		SAMPLE METHODS: ASTM D 1586-08a; 2488-09a; 2113-08; 6032-08						ROD TYPE: AWJ		HAMMER (ID):140-lb. Auto (MEC-02)					
DATE STARTED: 9/24/09		COMPLETED: 9/24/09		HOLE DIA.: 3"		CASING DEPTH: 8.6 ft		CORE SIZE: NA		BITS USED: 2-7/8" Tri-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					
323.8					Ground Surface								323.8	0.0	
314.9	8.9												314.9	8.9	
312.5	11.3	5	5	5						SS-1			RESIDUAL SOIL: Silty SAND (SM), brownish yellow (10YR 6/8), loose, moist, fine to coarse grained sand, little mica, few quartz rock fragments, relict rock fabric 11.3 ft: Medium dense 13.9 ft: Light yellowish brown (10YR 6/4), loose		
309.9	13.9	4	5	6						SS-2					
		4	4	6						SS-3					
304.9	18.9														
		5	8	9						SS-4			18.9 ft: Brownish yellow (10YR 6/8), medium dense, few to little mica		
300.0	23.8														
		7	7	7						SS-5			23.8 ft: Brownish yellow (10YR 6/6), trace to few mica		
295.0	28.8														
		7	11	13						SS-6			28.8 ft: Brownish yellow (10YR 6/8)		
290.0	33.8														
		4	5	6						SS-7			33.8 ft: Light brownish gray (10YR 6/2), fine grained sand		
285.0	38.8														
		6	8	7						SS-8			38.8 ft: Light brownish gray (10YR 6/2) and grayish brown (10YR 5/2), little to some mica		
280.0	43.8														
		4	6	7						SS-9			43.8 ft: Grayish brown (10YR 5/2)		
275.0	48.8														
		5	6	9						SS-10			48.8 ft: Yellowish brown (10YR 5/6)		
270.0	53.8														
		3	6	18						SS-11			53.8 ft: Brownish yellow (10YR 6/8), fine to coarse grained sand		
265.0	58.8														
		13	40	50						SS-12			58.8 ft: Grayish brown (10YR 5/2), very dense, some mica, little quartz rock fragments Boring terminated at 60.3 feet.		
													263.5	60.3	

NORTH ANNA 3 BORE NORTH ANNA 3 PROJECT.GPJ NORTH ANNA 3.GDT 12/4/09



GEOTECHNICAL BORING LOG

Prepared By JJJ Date 12/16/09Checked By NRL Date 12/16/09

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25161		MACTEC PROJECT NO.: 6468-09-2473		COUNTY: Louisa, VA		GEOLOGIST: B. Mabie							
SITE DESCRIPTION: North Anna 3 Project Supplement 2				DRILLER: D. Rhodes/K. Guy		FLUID LEVEL (ft)							
BORING NO.: M-15		DRILL METHOD: Mud Rotary		DRILL MACHINE: CME-45C Track (RAL)		0 HR. 13.4							
GROUND ELEV.: 311.3 ft (NAVD88)		NORTHING: 3,909,531 US ft (NAD83)		EASTING: 11,686,166 US ft (NAD83)		24 HR. NA							
TOTAL DEPTH: 60.0 ft		SAMPLE METHODS: ASTM D 1586-08a; 2488-09a; 2113-08; 6032-08		ROD TYPE: AWJ		HAMMER (ID): 140-lb. Auto (MEC-12)							
DATE STARTED: 9/28/09		COMPLETED: 9/28/09		HOLE DIA.: 3"		CASING DEPTH: 9.0 ft							
CORE SIZE: NA		BITS USED: 2-7/8" Tri-Cone											
ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft 0.5ft 0.5ft			BLOWS PER FOOT 0 20 40 60 80 100					SAMP. NO.	LOG MOI	SOIL AND ROCK DESCRIPTION	
311.3					Ground Surface							311.3	0.0
													No sampling from 0.0 to 8.5 feet due to soft dig utility clearance by Dominion Personnel
302.8	8.5	2	2	3						SS-1		302.8	8.5
300.7	10.6	2	3	3						SS-2			RESIDUAL SOIL: Silty SAND (SM), pale brown (10YR 6/3), loose, moist, fine to coarse grained sand, few mica, relict rock fabric
298.6	12.7	2	3	4						SS-3			
296.1	15.2	3	3	3						SS-4			
292.8	18.5	5	4	7						SS-5		18.5 ft: Medium dense	
287.8	23.5	8	7	8						SS-6		23.5 ft: Very pale brown (10YR 7/4), trace mica	
282.8	28.5	7	8	10						SS-7			
277.8	33.5	13	10	12						SS-8		33.5 ft: Light yellowish brown (10YR 6/4)	
272.8	38.5	13	16	13						SS-9		38.5 ft: Yellowish brown (10YR 5/6)	
267.8	43.5	31	35	30						SS-10		43.5 ft: Very dense	
262.8	48.5	48	52/0.4							SS-11		264.3	47.0
													WEATHERED ROCK: Severely weathered BIOTITE QUARTZ GNEISS (Sampled as Well Graded SAND with Silt (SW-SM), yellowish brown (10YR 5/6), very dense, moist, fine to coarse grained sand, trace mica)
257.8	53.5	38	44	45						SS-12		259.3	52.0
													RESIDUAL SOIL: Silty SAND (SM), yellowish brown (10YR 5/6), very dense, moist, fine to coarse grained sand, trace mica, relict rock fabric
252.8	58.5	23	24	36						SS-13		251.3	60.0
													Boring terminated at 60.0 feet.
													Boring closed by tremie method with cement-bentonite grout.
													No 24 HR fluid level because boring grouted same day boring drilled.

NORTH ANNA 3 BORE NORTH ANNA 3 PROJECT.GPJ NORTH ANNA 3.GDT 12/4/09



GEOTECHNICAL BORING LOG

Prepared By JJS Date 12/16/09Checked By NAL Date 12/16/09

SHEET 1 OF 1

BECHTEL PROJECT NO.: 25161		MACTEC PROJECT NO.: 6468-09-2473		COUNTY: Louisa, VA		GEOLOGIST: C. Baldwin						
SITE DESCRIPTION: North Anna 3 Project Supplement 2				DRILLER: P. Pitts/J. Tucker		FLUID LEVEL (ft)						
BORING NO.: M-16		DRILL METHOD: Mud Rotary/Rock Core		DRILL MACHINE: CME-55 Track (RAL)		0 HR. 18.0						
GROUND ELEV.: 284.6 ft (NAVD88)		NORTHING: 3,909,990 US ft (NAD83)		EASTING: 11,685,802 US ft (NAD83)		24 HR. NA						
TOTAL DEPTH: 61.9 ft		SAMPLE METHODS: ASTM D 1586-08a; 2488-09a; 2113-08; 6032-08		ROD TYPE: AWJ		HAMMER (ID): 140-lb. Auto (MEC-21)						
DATE STARTED: 9/29/09		COMPLETED: 9/30/09		HOLE DIA.: 3"		CASING DEPTH: 8.9 ft						
CORE SIZE: NQ3		BITS USED: 2-7/8" Tri-Cone										
ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft 0.5ft 0.5ft			BLOWS PER FOOT 0 20 40 60 80 100					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION
284.3					Ground Surface							
												284.3 283.8
												ASPHALT (Roadway) to 0.5 ft. No sampling from 0.0 to 8.9 feet due to soft dig utility clearance by Dominion Personnel
275.4	8.9	4	5	4						SS-1		275.4
272.7	11.6	3	3	5						SS-2		
270.3	14.0	4	3	3						SS-3		
265.3	19.0	4	4	7						SS-4		19.0 ft: Pinkish gray (7.5YR 6/2), medium dense, fine to medium grained sand
260.3	24.0	5	5	7						SS-5		24.0 ft: Light brown (7.5YR 6/4)
255.3	29.0	5	6	6						SS-6		
250.3	34.0	5	5	5						SS-7		34.0 ft: Yellowish red (5YR 5/8), loose, fine grained sand, some mica
245.3	39.0	9	12	13						SS-8		39.0 ft: Light brown (7.5YR 6/4), medium dense, fine to medium grained sand, little mica
240.3	44.0	12	19	21						SS-9		44.0 ft: Very pale brown (10YR 7/4), dense
235.3	49.0	17	24	27						SS-10		
230.3	54.0	50/0.4								SS-11		232.3
225.3	59.0									SS-12		WEATHERED ROCK: Severely weathered BIOTITE QUARTZ GNEISS (Sampled as Silty SAND (SM), reddish yellow (7.5YR 7/8), very dense, moist, fine to coarse grained sand, little mica)
224.3	59.8	50/0.1								SS-13		224.5
		100/0.1										222.4
												HARD ROCK: Brown and gray with trace orange staining, moderately weathered, moderately close fracturing, moderately hard, BIOTITE QUARTZ GNEISS Boring and coring terminated at 61.9 feet.
												Boring closed by tremie method with cement-bentonite grout.
												No 24 HR fluid level because boring grouted same day boring drilled.

NORTH ANNA 3 BORE NORTH ANNA 3 PROJECT GPJ NORTH ANNA 3.GDT 12/3/09

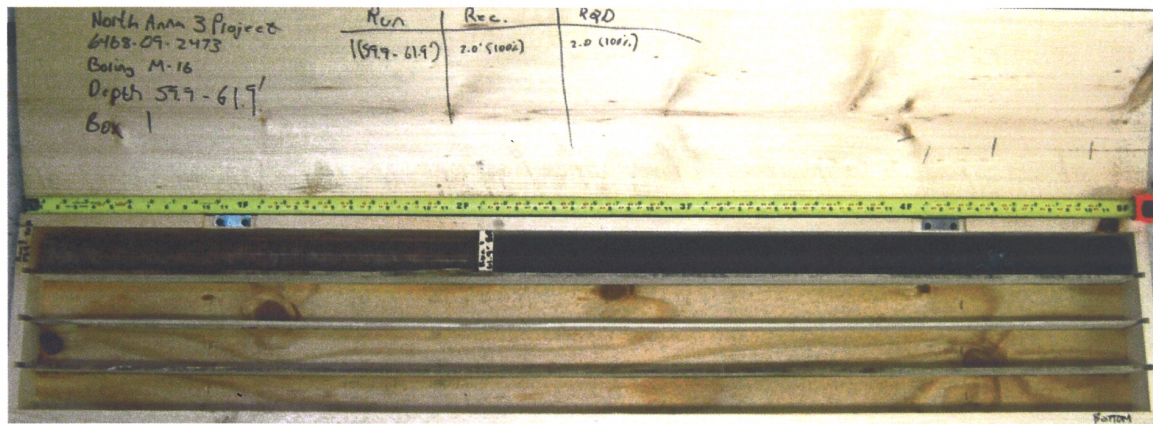


SHEET 1 OF 1

BECHTEL PROJECT NO.: 25161		MACTEC PROJECT NO.: 6468-09-2473		COUNTY: Louisa, VA		GEOLOGIST: C. Baldwin	
SITE DESCRIPTION: North Anna 3 Project Supplement 2				DRILLER: P. Pitts/J. Tucker		FLUID LEVEL (ft)	
BORING NO.: M-16		DRILL METHOD: Mud Rotary/Rock Core		DRILL MACHINE: CME-55 Track (RAL)		0 HR. 18.0	
GROUND ELEV.: 284.6 ft (NAVD88)		NORTHING: 3,909,990 US ft (NAD83)		EASTING: 11,685,802 US ft (NAD83)		24 HR. NA	
TOTAL DEPTH: 61.9 ft		SAMPLE METHODS: ASTM D 1586-08a; 2488-09a; 2113-08; 6032-08				HAMMER (ID): 140-lb. Auto (MEC-21)	
DATE STARTED: 9/29/09		COMPLETED: 9/30/09		CASING DEPTH: 8.9 ft		CORE BARREL TYPE: Wireline NQ3 Triple Tube, series 6 bit	

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) %		
										Begin Coring @ 59.9 ft
224.4 222.4	59.9 61.9	2.0	3:00 3:05	(2.0) 100%	(2.0) 100%	RUN 1	(2.0) 100%	(2.0) 100%		HARD ROCK: Brown and gray with trace orange staining, moderately weathered, moderately close fracturing, moderately hard, BIOTITE QUARTZ GNEISS (<i>continued</i>) (1 joint at 90°, tight with trace clay) Boring and coring terminated at 61.9 feet. Boring closed by tremie method with cement-bentonite grout. No 24 HR fluid level because boring grouted same day boring drilled.

NORTH ANNA 3 CORE NORTH ANNA 3 PROJECT.GPJ NORTH ANNA 3.GDT 12/3/09



M-16 - Box 1



BECHTEL PROJECT NO.: 25161				MACTEC PROJECT NO.: 6468-09-2473				COUNTY: Louisa, VA				GEOLOGIST: C. Baldwin					
SITE DESCRIPTION: North Anna 3 Project Supplement 2								DRILLER: P. Pitts/J. Tucker				FLUID LEVEL (ft)					
BORING NO.: M-17				DRILL METHOD: Mud Rotary/Rock Core				DRILL MACHINE: CME-55 Trailer (RAL)				0 HR.		NA			
GROUND ELEV.: 306.2 ft (NAVD88)				NORTHING: 3,909,775 US ft (NAD83)				EASTING: 11,686,214 US ft (NAD83)				24 HR.		22.0			
TOTAL DEPTH: 151.9 ft		SAMPLE METHODS: ASTM D 1586-08a; 2488-09a; 2113-08; 6032-08						ROD TYPE: AWJ		HAMMER (ID):140-lb. Auto (MEC-425)							
DATE STARTED: 9/21/09		COMPLETED: 9/24/09		HOLE DIA.: 3"		CASING DEPTH: 82.1 ft		CORE SIZE: NQ3		BITS USED: 2-7/8" Tri-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							
306.2					Ground Surface												
														306.2		0.0	
														305.7		0.5	
														ASPHALT (Roadway) to 0.5 ft.			
														No sampling from 0.0 to 9.3 feet due to soft dig utility clearance by Dominion Personnel			
296.9	9.3													296.9		9.3	
		2	3	3													
292.2	14.0													294.2		12.0	
		2	3	4													
287.1	19.1													289.2		17.0	
		9	13	16													
282.1	24.1																
		8	11	15													
277.1	29.1																
		18	22	25													
272.1	34.1																
		15	18	38													
267.1	39.1																
		7	10	15													
262.1	44.1																
		7	11	24													
257.1	49.1																
		15	28	20													
252.1	54.1	50/0.3															
247.1	59.1	50/0.4															
242.1	64.1	50/0.2															
237.1	69.1	15	28	72/0.3													
232.1	74.1																

NORTH ANNA 3 BORE NORTH ANNA 3 PROJECT.GPJ NORTH ANNA 3.GDT 12/4/09



SHEET 2 OF 3

BECHTEL PROJECT NO.: 25161		MACTEC PROJECT NO.: 6468-09-2473		COUNTY: Louisa, VA		GEOLOGIST: C. Baldwin							
SITE DESCRIPTION: North Anna 3 Project Supplement 2				DRILLER: P. Pitts/J. Tucker		FLUID LEVEL (ft)							
BORING NO.: M-17		DRILL METHOD: Mud Rotary/Rock Core		DRILL MACHINE: CME-55 Trailer (RAL)		0 HR. NA							
GROUND ELEV.: 306.2 ft (NAVD88)		NORTHING: 3,909,775 US ft (NAD83)		EASTING: 11,686,214 US ft (NAD83)		24 HR. 22.0							
TOTAL DEPTH: 151.9 ft		SAMPLE METHODS: ASTM D 1586-08a; 2488-09a; 2113-08; 6032-08		ROD TYPE: AWJ		HAMMER (ID): 140-lb. Auto (MEC-425)							
DATE STARTED: 9/21/09		COMPLETED: 9/24/09		HOLE DIA.: 3"		CASING DEPTH: 82.1 ft							
				CORE SIZE: NQ3		BITS USED: 2-7/8" Tri-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			
231.4					Continued from previous page								
		38	62/0.3							100/0.8	SS-14		WEATHERED ROCK: Severely weathered QUARTZ BIOTITE GNEISS (Sampled as Silty SAND (SM), reddish yellow (7.5YR 6/6) to light yellowish brown (2.5Y 6/3), very dense, moist, fine to medium grained sand, little mica, trace quartz rock fragments) (continued)
227.1	79.1									50/0.2	SS-15		
		50/0.2											
222.1	84.1									50/0.2	SS-16		221.9 84.3
		50/0.2											HARD ROCK: Dark gray with orange staining, moderately severe to moderately weathered, very close to close fracturing, medium hard to hard, QUARTZ BIOTITE GNEISS
													214.3 91.9
													HARD ROCK: Light to dark gray with orange staining, moderately weathered, very close to moderately close fracturing, moderately hard, QUARTZ BIOTITE GNEISS
													199.3 106.9
													HARD ROCK: Dark gray, moderately to very slightly weathered, very close to moderately close fracturing, hard, QUARTZ BIOTITE GNEISS
													169.3 136.9
													HARD ROCK: Dark gray, moderately severe to slightly weathered, very close to close fracturing, medium hard to hard, QUARTZ BIOTITE GNEISS
													164.3 141.9
													HARD ROCK: Dark gray, very slightly weathered, close to wide fracturing, hard, QUARTZ BIOTITE GNEISS

NORTH ANNA 3 BORE NORTH ANNA 3 PROJECT.GPJ NORTH ANNA 3.GDT 12/4/09



SHEET 3 OF 3

BECHTEL PROJECT NO.: 25161			MACTEC PROJECT NO.: 6468-09-2473			COUNTY: Louisa, VA			GEOLOGIST: C. Baldwin				
SITE DESCRIPTION: North Anna 3 Project Supplement 2						DRILLER: P. Pitts/J. Tucker			FLUID LEVEL (ft)				
BORING NO.: M-17			DRILL METHOD: Mud Rotary/Rock Core			DRILL MACHINE: CME-55 Trailer (RAL)			0 HR. NA				
GROUND ELEV.: 306.2 ft (NAVD88)			NORTHING: 3,909,775 US ft (NAD83)			EASTING: 11,686,214 US ft (NAD83)			24 HR. 22.0				
TOTAL DEPTH: 151.9 ft			SAMPLE METHODS: ASTM D 1586-08a; 2488-09a; 2113-08; 6032-08			ROD TYPE: AWJ			HAMMER (ID): 140-lb. Auto (MEC-425)				
DATE STARTED: 9/21/09			COMPLETED: 9/24/09			HOLE DIA.: 3"			CASING DEPTH: 82.1 ft				
						CORE SIZE: NQ3			BITS USED: 2-7/8" Tri-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		
156.6					Continued from previous page								
												154.3	151.9
												Boring and coring terminated at 151.9 feet.	
												Boring closed by tremie method with cement-bentonite grout.	

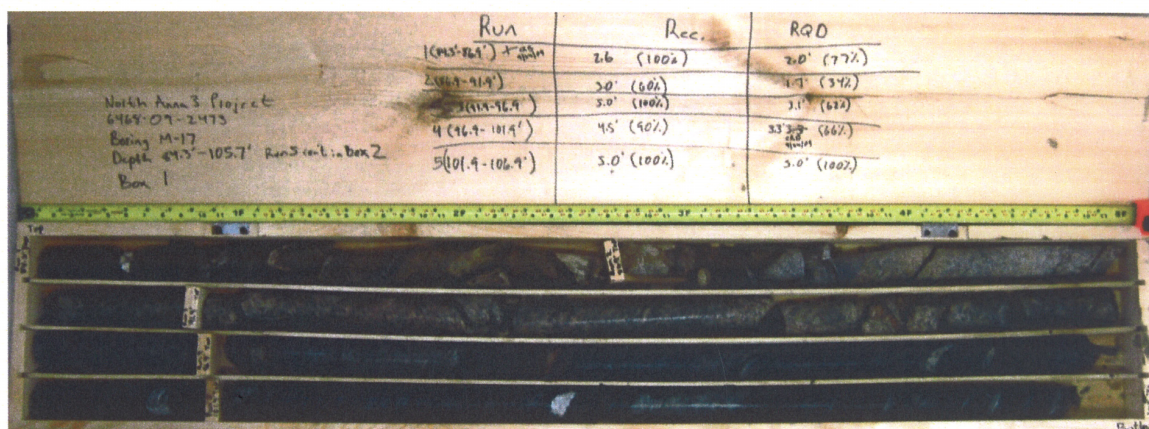
NORTH ANNA 3 BORE NORTH ANNA 3 PROJECT.GPJ NORTH ANNA 3.GDT 12/4/09



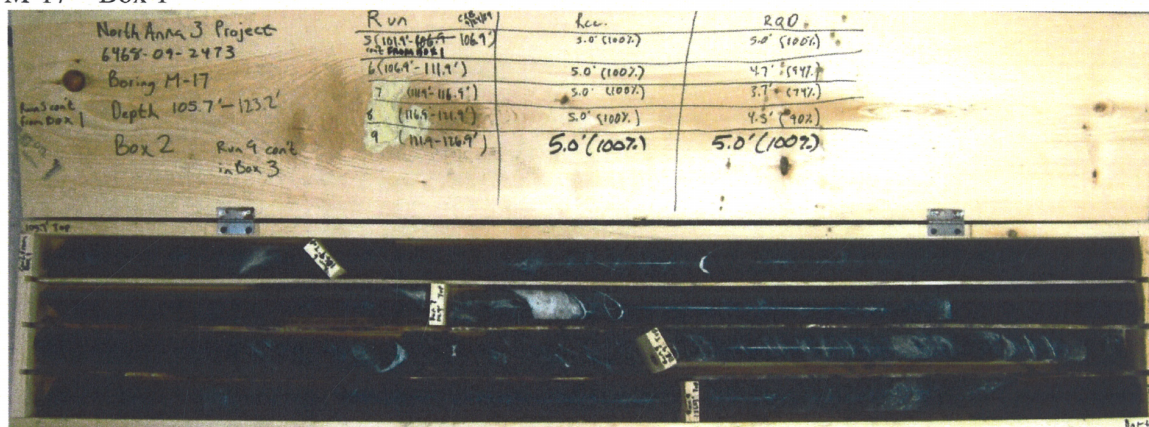
SHEET 1 OF 1

BECHTEL PROJECT NO.: 25161				MACTEC PROJECT NO.: 6468-09-2473				COUNTY: Louisa, VA		GEOLOGIST: C. Baldwin		
SITE DESCRIPTION: North Anna 3 Project Supplement 2								DRILLER: P. Pitts/J. Tucker			FLUID LEVEL (ft)	
BORING NO.: M-17				DRILL METHOD: Mud Rotary/Rock Core				DRILL MACHINE: CME-55 Trailer (RAL)			0 HR.	NA
GROUND ELEV.: 306.2 ft (NAVD88)				NORTHING: 3,909,775 US ft (NAD83)				EASTING: 11,686,214 US ft (NAD83)			24 HR.	22.0
TOTAL DEPTH: 151.9 ft			SAMPLE METHODS: ASTM D 1586-08a; 2488-09a; 2113-08; 6032-08						HAMMER (ID): 140-lb. Auto (MEC-425)			
DATE STARTED: 9/21/09			COMPLETED: 9/24/09		CASING DEPTH: 82.1 ft		CORE BARREL TYPE: Wireline NQ3 Triple Tube, series 6 bit					
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) %				
										Begin Coring @ 84.3 ft		
221.9	84.3	2.6	3:45/0.6 5:30 12:53	(2.6) 100%	(2.0) 77%	RUN 1	(5.6) 74%	(3.7) 49%		221.9	HARD ROCK: Dark gray with orange staining, moderately severe to moderately weathered, very close to close fracturing, medium hard to hard, QUARTZ BIOTITE GNEISS (2 joints at 0°, open with clay; 2 joints at 50°, tight with trace clay) (2 joints at 0°, tight; 3 joints at 30°, tight)	84.3
219.3	86.9	5.0	5:00 3:57 6:20 10:20 5:11	(3.0) 60%	(1.7) 34%	RUN 2				214.3		91.9
214.3	91.9	5.0	5:45 3:42 3:30 3:13 5:15	(5.0) 100%	(3.1) 62%	RUN 3	(14.5) 97%	(11.4) 76%			HARD ROCK: Light to dark gray with orange staining, moderately weathered, very close to moderately close fracturing, moderately hard, QUARTZ BIOTITE GNEISS (3 joints at 10°, tight to open; 7 joints at 30-40°, tight; 1 joint at 60°, tight) (3 joints at 30-40°, tight; 6 joints at 60-70°, tight to open)	
209.3	96.9	5.0	4:09 3:20 3:43 2:40 3:22	(4.5) 90%	(3.3) 66%	RUN 4						
204.3	101.9	5.0	3:20 3:05 3:29 2:55 3:40	(5.0) 100%	(5.0) 100%	RUN 5					(1 joint at 20°, tight; 2 joints at 40°, tight)	
199.3	106.9	5.0	3:32 3:05 2:48 2:46 2:38	(5.0) 100%	(4.7) 94%	RUN 6	(30.0) 100%	(27.9) 93%		199.3	HARD ROCK: Dark gray, moderately to very slightly weathered, very close to moderately close fracturing, hard, QUARTZ BIOTITE GNEISS (2 joints at 20°, tight; 1 joint at 40°, tight)	106.9
194.3	111.9	5.0	3:30 3:23 3:50 3:35 4:00	(5.0) 100%	(3.7) 74%	RUN 7					(1 joint at 0°, tight; 1 joint at 20°, tight; 8 joints at 40-50°, tight)	
189.3	116.9	5.0	3:55 3:15 3:57 3:05 2:30	(5.0) 100%	(4.5) 90%	RUN 8					(4 joints at 30°, tight)	
184.3	121.9	5.0	3:12 3:57 2:40 2:54 3:12	(5.0) 100%	(5.0) 100%	RUN 9					(1 joint at 60°, tight)	
179.3	126.9	5.0	3:00 3:04 2:55 2:52 2:31	(5.0) 100%	(5.0) 100%	RUN 10					(1 joint at 40°, tight)	
174.3	131.9	5.0	2:40 3:00 3:08 3:17 2:56	(5.0) 100%	(5.0) 100%	RUN 11					(2 joints at 50°, tight)	
169.3	136.9	5.0	3:18 2:32 1:00 2:39 3:33	(3.5) 70%	(2.0) 40%	RUN 12	(3.5) 70%	(2.0) 40%		169.3	HARD ROCK: Dark gray, moderately severe to slightly weathered, very close to close fracturing, medium hard to hard, QUARTZ BIOTITE GNEISS (2 joints at 30°, tight; 2 joints at 50°, tight)	136.9
164.3	141.9	5.0	3:42 3:41 3:20 3:00 2:05	(5.0) 100%	(5.0) 100%	RUN 13	(10.0) 100%	(10.0) 100%		164.3	HARD ROCK: Dark gray, very slightly weathered, close to wide fracturing, hard, QUARTZ BIOTITE GNEISS (1 joint at 30°, tight; 1 joint at 70°, tight)	141.9
159.3	146.9	5.0	2:57 3:20 2:53 2:50 2:24	(5.0) 100%	(5.0) 100%	RUN 14					(No Joints)	
154.3	151.9									154.3	Boring and coring terminated at 151.9 feet. Boring closed by tremie method with cement-bentonite grout.	151.9

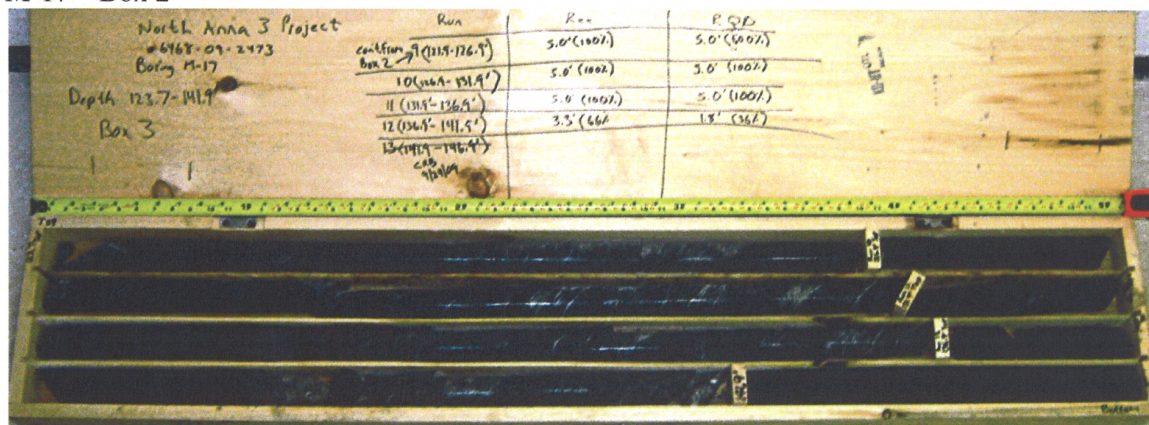
NORTH ANNA 3 CORE NORTH ANNA 3 PROJECT.GPJ NORTH ANNA 3.GDT 12/4/09



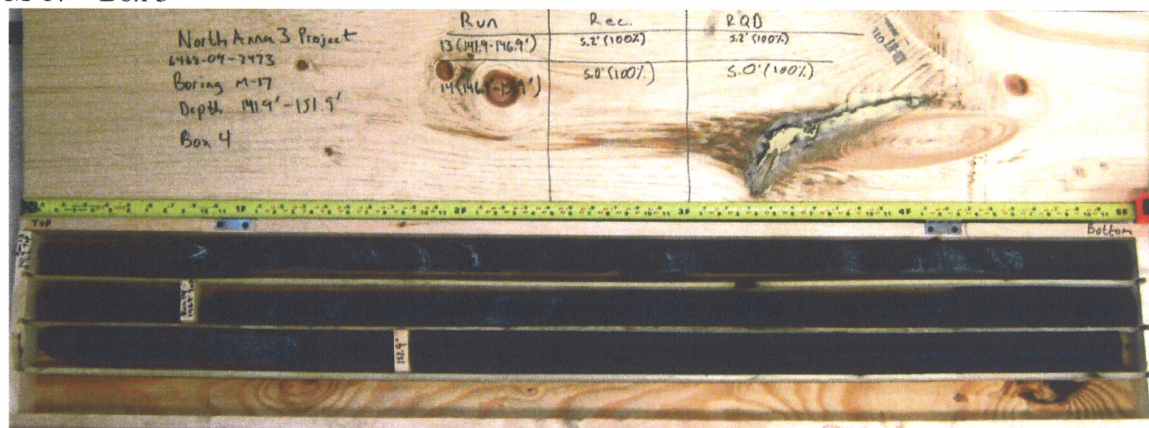
M-17 - Box 1



M-17 - Box 2



M-17 - Box 3



M-17 - Box 4



BECHTEL PROJECT NO.: 25161				MACTEC PROJECT NO.: 6468-09-2473				COUNTY: Louisa, VA				GEOLOGIST: B. Mabie				
SITE DESCRIPTION: North Anna 3 Project Supplement 2								DRILLER: D. Rhodes/K. Guy				FLUID LEVEL (ft)				
BORING NO.: M-18				DRILL METHOD: Mud Rotary				DRILL MACHINE: CME-45C Track (RAL)				0 HR.		16.0		
GROUND ELEV.: 304.2 ft (NAVD88)				NORTHING: 3,909,608 US ft (NAD83)				EASTING: 11,686,214 US ft (NAD83)				24 HR.		NA		
TOTAL DEPTH: 60.4 ft		SAMPLE METHODS: ASTM D 1586-08a; 2488-09a; 2113-08; 6032-08						ROD TYPE: AWJ		HAMMER (ID):140-lb. Auto (MEC-12)						
DATE STARTED: 9/29/09		COMPLETED: 9/29/09		HOLE DIA.: 3"		CASING DEPTH: 9.0 ft		CORE SIZE: NA		BITS USED: 2-7/8" Tri-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						
304.2					Ground Surface								304.2	0.0		
														No sampling from 0.0 to 8.7 feet due to soft dig utility clearance by Dominion Personnel		
295.5	8.7												295.5	8.7		
293.5	10.7	2	2	2						SS-1				RESIDUAL SOIL: SILT (ML), strong brown (7.5YR 4/6), soft, moist, few mica, dark brown and black staining, relict rock fabric		
291.4	12.8	2	1	3						SS-2						
		2	2	2						SS-3						
288.9	15.3	1	2	3						SS-4				15.3 ft: Medium stiff		
285.7	18.5	2	2	3						SS-5				18.5 ft: Pale Yellow (2.5Y 7/4)		
		2	3	4						SS-6			283.2	21.0		
280.7	23.5													RESIDUAL SOIL: Elastic SILT (MH), yellow (2.5Y 7/6), medium stiff, moist, trace mica, orange and brown staining, relict rock fabric		
		2	3	3						SS-7				28.5 ft: Olive yellow (2.5Y 6/6)		
275.7	28.5															
		2	3	4						SS-8				33.5 ft: Light yellowish brown (2.5Y 6/4), little mica		
270.7	33.5															
		2	1	2						SS-9				38.5 ft: Soft		
265.7	38.5												262.2	42.0		
260.7	43.5	3	6	6						SS-10				RESIDUAL SOIL: Silty SAND (SM), strong brown (7.5YR 5/6), medium dense, moist, fine to coarse grained sand, trace mica, relict rock fabric		
		5	3	4						SS-11				48.5 ft: Brownish yellow (10YR 6/4), loose		
255.7	48.5												252.2	52.0		
250.7	53.5	4	5	6						SS-12				RESIDUAL SOIL: Sandy SILT (ML), strong brown (7.5YR 5/6), stiff, moist, trace mica, relict rock fabric		
245.7	58.5	78	22/0.1							SS-13			247.2	57.0		
244.0	60.2									SS-14			243.8	60.4		
		50/0.2												Boring terminated at 60.4 feet.		
														Boring closed by tremie method with cement-bentonite grout.		
														No 24 HR fluid level because boring grouted same day boring drilled.		

NORTH ANNA 3 BORE NORTH ANNA 3 PROJECT.GPJ NORTH ANNA 3.GDT 12/4/09