



SHEET 1 OF 2

MACTEC PROJECT NO.: 6468-06-1472					COUNTY Louisa, VA					GEOLOGIST J. Lachewitz/ S. Lehman				
SITE DESCRIPTION NORTH ANNA COL										GROUND WATER (ft)				
BORING NO. B-916			DRILL METHOD: Rotary Wash/Core			SAMPLE METHODS: SPT/CORE			0 HR. ND					
COLLAR ELEV. 276.2 ft (NAVD88)			NORTHING 3,910,050		US ft (NAD83)		EASTING 11,686,009		US ft (NAD83)		24 HR. ND			
TOTAL DEPTH 100.3 ft			DRILL MACHINE CME 45 Trailer			DRILLER: F. Cox/D. Rhodes			HAMMER TYPE 140 lbs Auto					
DATE STARTED 9/28/06			COMPLETED 10/4/06			CORE BARREL TYPE: HQ 3 triple tube-wireline								
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.	
276.2					Ground Surface							276.2	0.0	
274.7	1.5									916-1		SILT (ML) strong brown (7.5YR 4/6), moist, medium stiff to very stiff, sandy, micaceous (Residual Soil)		
272.7	3.5	1	2	3						916-2				
271.2	5.0	5	4	13						916-3			271.2	5.0
		40	50/0.5											
268.3	7.9									916-4		Fine to coarse SAND (SP) light brownish gray (2.5Y 6/2 and 10YR 6/2) and light yellowish brown (10YR 6/4), moist, very dense to dense, silty, micaceous, relict rock fabric (Residual Soil)		
265.7	10.5	13	12	33						916-5				
263.3	12.9	19	12	12						916-6				
		5	16	25										
258.3	17.9											Weathered Rock: BIOTITE-QUARTZ GNEISS Hard Rock: White, moderately weathered to fresh, close to wide fracturing, moderately hard to very hard, BIOTITE-QUARTZ GNEISS with trace magnetite		
		11	17	16						916-7				
253.3	22.9	12	16	12						916-8				
250.6	25.6									916-9			251.1	25.1
		50/0.0										250.6	25.0	
												Hard Rock: White, very slightly weathered to fresh, wide fracturing, hard to very hard, QUARTZ-BIOTITE GNEISS with trace magnetite		
													225.9	50.3

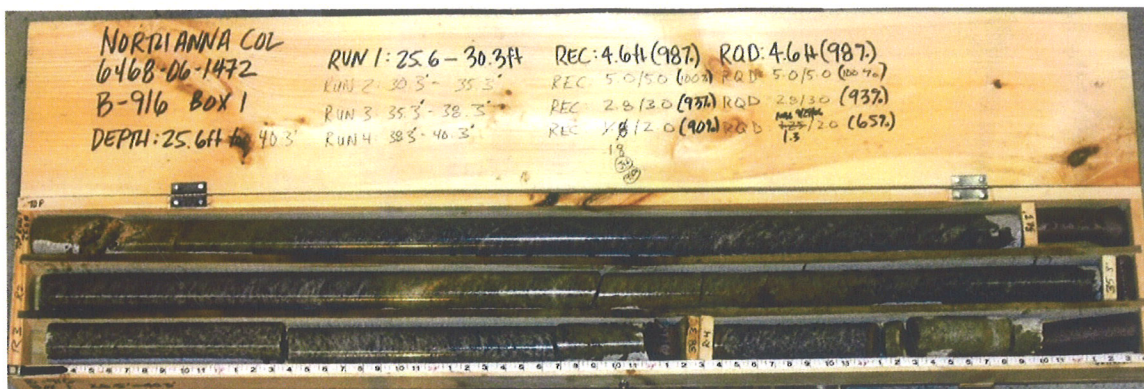


MACTEC PROJECT NO.: 6468-06-1472				COUNTY Louisa, VA				GEOLOGIST J. Lachewitz/ S. Lehman												
SITE DESCRIPTION NORTH ANNA COL										GROUND WATER (ft) 0 HR. ND 24 HR. ND										
BORING NO. B-916		DRILL METHOD: Rotary Wash/Core				SAMPLE METHODS: SPT/CORE														
COLLAR ELEV. 276.2 ft (NAVD88)		NORTHING 3,910,050		US ft (NAD83)		EASTING 11,686,009		US ft (NAD83)												
TOTAL DEPTH 100.3 ft		DRILL MACHINE CME 45 Trailer				DRILLER: F. Cox/D. Rhodes				HAMMER TYPE 140 lbs Auto										
DATE STARTED 9/28/06				COMPLETED 10/4/06				CORE BARREL TYPE: HQ 3 triple tube-wireline												
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										
201.4					Continued from previous page															
													Hard Rock: White, very slightly weathered to fresh, wide fracturing, hard to very hard, QUARTZ-BIOTITE GNEISS with trace magnetite (continued)							
																		192.4	83.8	Hard Rock: Light gray, fresh, close to wide fracturing, hard to very hard, QUARTZ GNEISS with biotite, trace magnetite and pyrite
																		175.9	100.3	Boring and coring terminated at 100.3 ft in Hard Rock: Hard, QUARTZ GNEISS with biotite

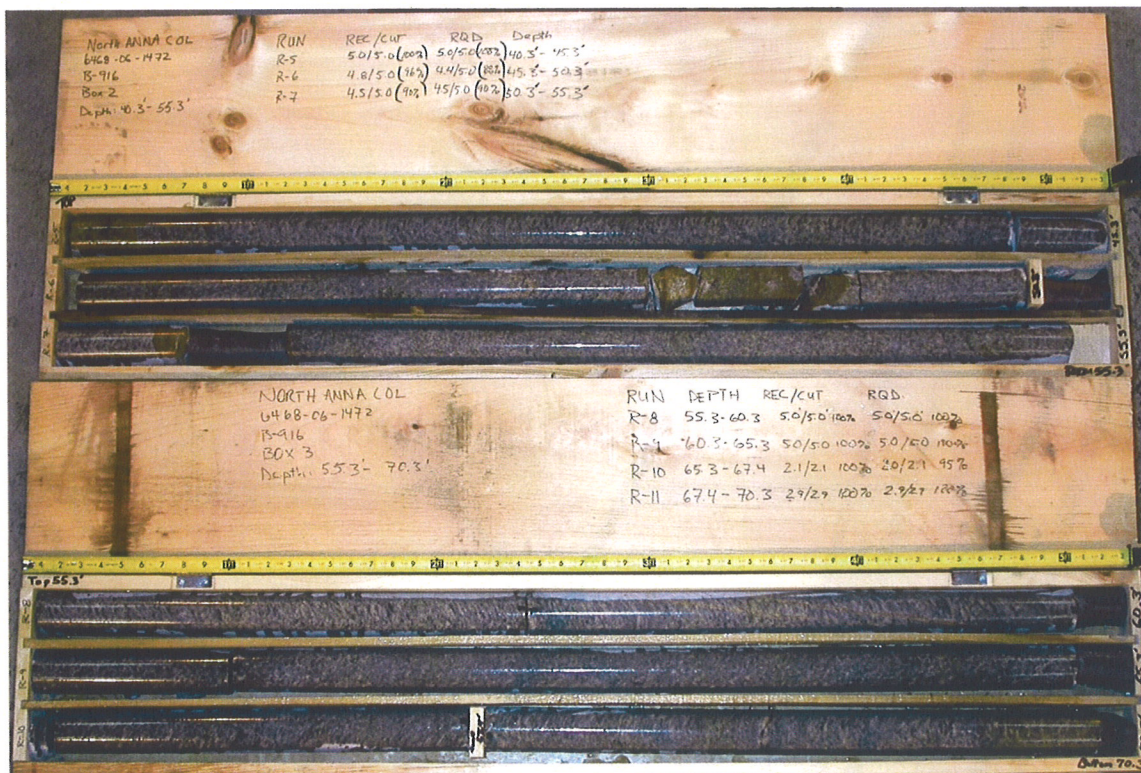


MACTEC PROJECT NO.: 6468-06-1472										COUNTY Louisa, VA				GEOLOGIST J. Lachewitz/ S. Lehman			
SITE DESCRIPTION NORTH ANNA COL														GROUND WATER (ft)			
BORING NO. B-916				DRILL METHOD: Rotary Wash/Core				SAMPLE METHODS: SPT/CORE				0 HR. ND					
COLLAR ELEV. 276.2 ft (NAVD88)				NORTHING 3,910,050 US ft (NAD83)				EASTING 11,686,009 US ft (NAD83)				24 HR. ND					
TOTAL DEPTH 100.3 ft				DRILL MACHINE CME 45 Trailer				DRILLER: F. Cox/D. Rhodes				HAMMER TYPE 140 lbs Auto					
DATE STARTED 9/28/06				COMPLETED 10/4/06				CORE BARREL TYPE: HQ 3 triple tube-wireline									
CORE SIZE HQ3				TOTAL RUN 74.7 ft													
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 @ 25.6 ft					
250.6	25.6	4.7	N=50/0.0 5:28 7:28 7:45 9:20	(4.6) 98%	(4.6) 98%	1						250.6	Hard Rock: White, moderately weathered to fresh, close to wide fracturing, moderately hard to very hard, BIOTITE-QUARTZ GNEISS with trace magnetite (1 joint at 50° weathered with Fe stain)		25.6		
245.9	30.3	5.0	10:27/0.7 7:39 7:23 4:58 4:56 8:23	(5.0) 100%	(5.0) 100%	2							(2 joints at 0-15° with Fe stain)				
240.9	35.3	3.0	12:30 9:36 3:10	(2.8) 93%	(2.8) 93%	3							(2 joints at 5° with slight Fe stain)				
237.9	38.3	2.0	3:29 2:43	(1.8) 90%	(1.3) 65%	4							(3 joints at 5-20° with Fe stain)				
235.9	40.3	5.0	4:43 4:49 5:27 8:16 11:41	(5.0) 100%	(5.0) 100%	5							-No Joints				
230.9	45.3	5.0	4:27 4:16 3:20 2:52 3:33	(4.8) 96%	(4.4) 88%	6							(4 joints at 0-45° weathered with Fe stain and trace clay)				
225.9	50.3	5.0	3:25 4:47 3:31 3:50 4:44	(4.5) 90%	(4.5) 90%	7						225.9	Hard Rock: White, very slightly weathered to fresh, wide fracturing, hard to very hard, QUARTZ-BIOTITE GNEISS with trace magnetite (2 joints at 25° with Fe stain)		50.3		
220.9	55.3	5.0	7:10 9:48 8:05 3:47 5:01	(5.0) 100%	(5.0) 100%	8							-No Joints				
215.9	60.3	5.0	10:12 5:34 3:54 4:17 4:31	(5.0) 100%	(5.0) 100%	9							-No Joints				
210.9	65.3	2.1	11:22 12:13/1.1	(2.1) 100%	(2.0) 95%	10							-No Joints				
208.8	67.4	2.9	5:05 2:56 2:37/0.9	(2.9) 100%	(2.9) 100%	11							-No Joints; 0.5 ft thick quartz vein+pyrite at 68.7 ft				
205.9	70.3	5.0	2:45 2:20 1:52 3:08 4:37	(5.0) 100%	(5.0) 100%	12							(2 joints at 20-25° slightly weathered)				
200.9	75.3	5.0	6:05 7:39 9:08 14:06 3:52	(5.0) 100%	(5.0) 100%	13							-No Joints				
195.9	80.3	3.5	4:55 6:02 7:26	(3.5) 100%	(3.5) 100%	14							-No Joints				
192.4	83.8	1.5	7:10/0.5 3:52	(1.4) 93%	(1.4) 93%	15						192.4	Hard Rock: Light gray, fresh, close to wide fracturing, hard to very hard, QUARTZ GNEISS with biotite, trace magnetite and pyrite		83.8		
190.9	85.3	5.0	7:32/0.5 3:49 3:43 3:53 5:35 9:18	(5.0) 100%	(5.0) 100%	16							-No Joints -No Joints				
185.9	90.3	5.0	4:20 4:50 5:40 8:12 12:42	(5.0) 100%	(5.0) 100%	17							-No Joints				
180.9	95.3	5.0	4:22 3:39 2:24 2:00 3:24	(5.0) 100%	(4.0) 80%	18							(8 joints at 45° weathered with Fe stain; 1 joint at 20° slightly weathered; moderately weathered fracture zone from 98.0-99.0 ft)				
175.9	100.3											175.9	Coring terminated at 100.3 ft in Hard Rock: Hard, QUARTZ GNEISS with biotite		100.3		

NORTH ANNA COL CORE NORTH ANNA COL DATA REPORT REV0.GPJ NORTH ANNA COL GDT 1/19/07

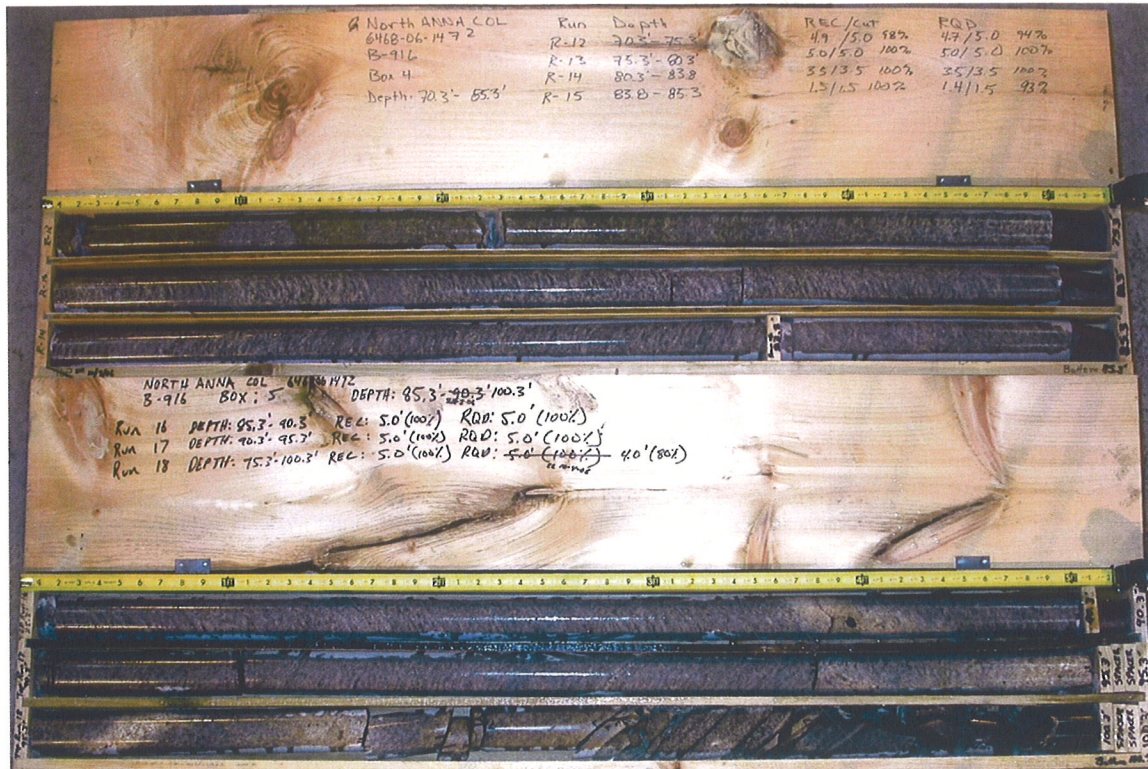


B-916 – Box 1



B-916 – Box 2

B-916 – Box 3



B-916 - Box 4

B-916 - Box 5