

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



MACTEC PROJECT NO.: 6468-06-1472				COUNTY Louisa, VA				GEOLOGIST S. Nicely										
SITE DESCRIPTION NORTH ANNA COL										GROUND WATER (ft) 0 HR. 8.3 24 HR. 8.7								
BORING NO. B-917		DRILL METHOD: Mud Rotary/Core				SAMPLE METHODS: SPT/CORE												
COLLAR ELEV. 274.9 ft (NAVD88)		NORTHING 3,910,161		US ft (NAD83)		EASTING 11,686,029		US ft (NAD83)										
TOTAL DEPTH 150.8 ft		DRILL MACHINE CME 55 Truck				DRILLER: H. Meyerson				HAMMER TYPE 140 lbs Auto								
DATE STARTED 9/25/06				COMPLETED 9/29/06				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								
200.0					Continued from previous page													
196.4	78.5													Weathered Rock: Light olive brown (2.5Y 5/4), brown (10YR 4/3), olive yellow (2.5Y 6/6), light yellowish brown (2.5Y 6/4), and brownish yellow (10YR 6/8), moist, very dense, weathered, BIOTITE QUARTZ GNEISS (continued)				
191.4	83.5										50/0.2						917-19	
187.4	87.5										50/0.3						917-20	
											50/0.3						917-21	
														187.1	87.8	Hard Rock: Brownish gray, moderately weathered, very close to close fracturing, hard to very hard, BIOTITE-QUARTZ GNEISS		
														178.8	96.1		Hard Rock: Light gray, fresh, very close to very wide fracturing, very hard, BIOTITE-QUARTZ GNEISS	



MACTEC PROJECT NO.: 6468-06-1472					COUNTY Louisa, VA					GEOLOGIST S. Nicely						
SITE DESCRIPTION NORTH ANNA COL										GROUND WATER (ft)						
BORING NO. B-917			DRILL METHOD: Mud Rotary/Core				SAMPLE METHODS: SPT/CORE				0 HR. 8.3					
COLLAR ELEV. 274.9 ft (NAVD88)			NORTHING 3,910,161		US ft (NAD83)		EASTING 11,686,029		US ft (NAD83)		24 HR. 8.7					
TOTAL DEPTH 150.8 ft			DRILL MACHINE CME 55 Truck				DRILLER: H. Meyerson				HAMMER TYPE 140 lbs Auto					
DATE STARTED 9/25/06			COMPLETED 9/29/06				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						
125.2					Continued from previous page											
														124.1	150.8	Boring and coring terminated at 150.8 ft in Hard Rock: Very hard, BIOTITE-QUARTZ GNEISS

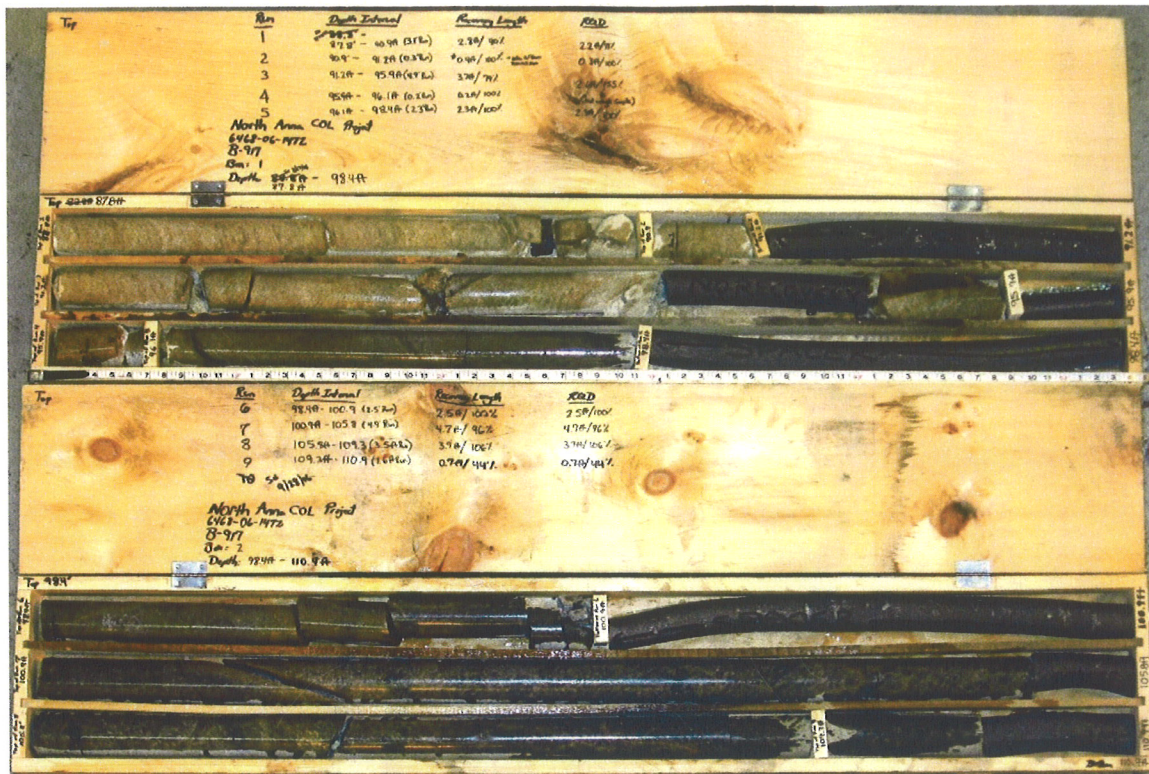
NORTH ANNA COL BORE NORTH ANNA COL DATA REPORT REV0.GPJ NORTH ANNA COL GDT 1/19/07



SHEET 1 OF 1

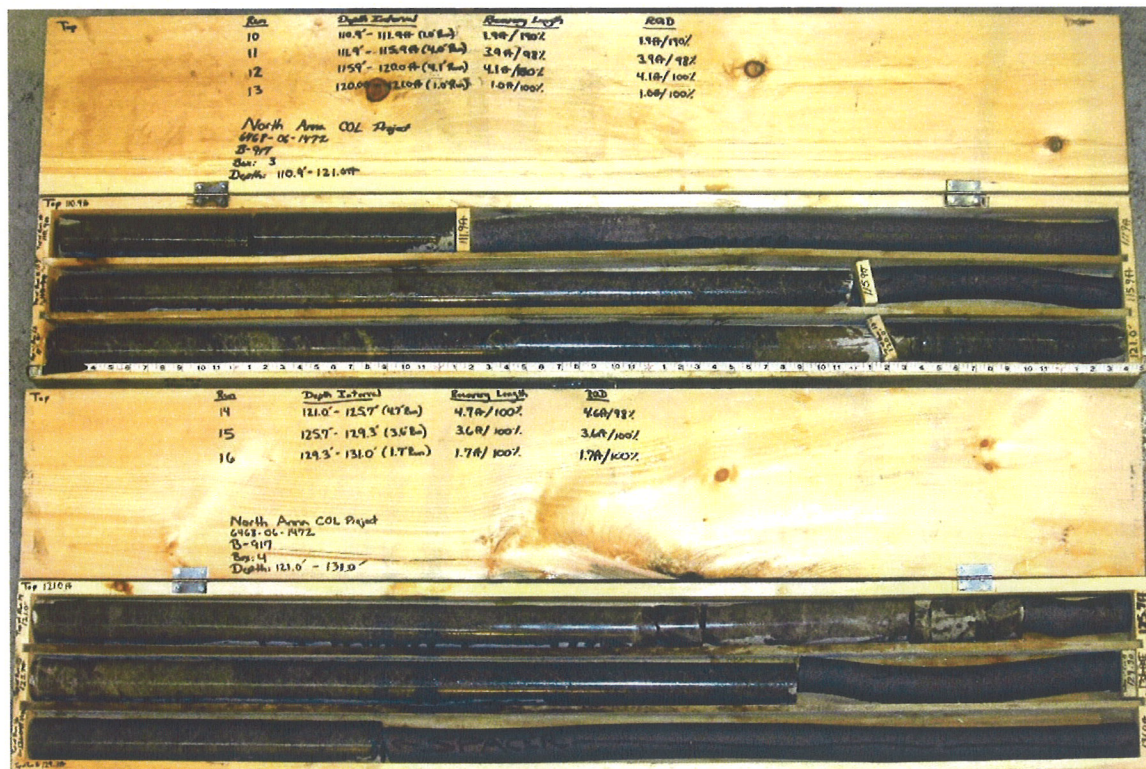
MACTEC PROJECT NO.: 6468-06-1472						COUNTY Louisa, VA			GEOLOGIST S. Nicely		
SITE DESCRIPTION NORTH ANNA COL									GROUND WATER (ft)		
BORING NO. B-917			DRILL METHOD: Mud Rotary/Core			SAMPLE METHODS: SPT/CORE			0 HR. 8.3		
COLLAR ELEV. 274.9 ft (NAVD88)			NORTHING 3,910,161		US ft (NAD83)		EASTING 11,686,029		US ft (NAD83) 24 HR. 8.7		
TOTAL DEPTH 150.8 ft			DRILL MACHINE CME 55 Truck			DRILLER: H. Meyerson			HAMMER TYPE 140 lbs Auto		
DATE STARTED 9/25/06			COMPLETED 9/29/06			CORE BARREL TYPE: HQ 3 triple tube-wireline					
CORE SIZE HQ3			TOTAL RUN 63.0 ft								
ELEV. (ft)	DEPTH (ft)	RUN (ft)	DRILL RATE (Min/ft)	REC. (ft) %	ROD (ft) %	SAMP. NO.	REC. (ft) %	ROD (ft) %	L O G	DESCRIPTION AND REMARKS	
										Begin Coring @ 87.8 ft	
187.1	87.8	3.1	2:53	(2.8)	(2.2)	1				Hard Rock: Brownish gray, moderately weathered, very close to close fracturing, hard to very hard, BIOTITE-QUARTZ GNEISS (1 joint at 20° with Fe and Mn stain; 1 joint at 45° with Fe stain) (1 joint at 90°) -Highly fractured zones from 91.3-91.9 ft, 93.0-93.2 ft, and 94.3-95.3 ft	
184.0	90.9		2:46	90%	71%						
183.7	91.2	0.3	2:50/0.1	(0.4)	(0.3)	2					
		4.7	0:12/0.3	133%	100%	3					
			2:15	(3.7)	(2.6)						
			1:43	79%	55%						
			0:57								
179.0	95.9		2:46/1.7	(NA)	(NA)	4					
178.8	96.1	0.2	0:29/0.2	(0.2)	(2.3)	5				Hard Rock: Light gray, fresh, very close to very wide fracturing, very hard, BIOTITE-QUARTZ GNEISS -No Joints -No Joints (1 joint at 65°)	
176.5	98.4	2.3	4:55	100%	100%	6					
		2.5	11:05	(2.3)	(2.5)						
			15:23/0.3	100%	100%	7					
174.0	100.9		0:37/0.5	(2.5)	(4.7)						
		4.9	8:03	100%	96%						
			10:48	(4.7)	96%						
			5:15	(4.7)	96%						
			5:43								
			5:22								
169.1	105.8		6:49								
		3.5	8:53/0.9	(3.7)	(3.7)	8				-No Joints	
			7:03	106%	106%						
			7:46								
165.6	109.3		13:35								
		1.6	16:31/0.5	(0.7)	(0.7)	9				-No Joints	
164.0	110.9		13:13/0.6	44%	44%						
163.0	111.9	1.0	17:48	(1.9)	(1.9)	10				-No Joints	
		4.0	3:49	190%	190%	11				-No Joints	
			3:21	(3.9)	(3.9)						
			4:34	98%	98%						
			4:57								
159.0	115.9		5:24	(4.1)	(4.1)	12				(1 joint at 25° with Fe stain)	
		4.1	5:14	100%	100%						
			6:04								
			7:44								
154.9	120.0		11:23/1.1								
153.9	121.0	1.0	4:26	(1.0)	(1.0)	13				-No Joints	
		4.7	4:47	100%	100%	14				(2 joints at 10-15°; Quartz vein from 123.9-125.7 ft)	
			4:25	(4.7)	(4.6)						
			4:43	100%	98%						
			8:23								
149.2	125.7		14:51/0.7	(3.6)	(3.6)	15				-No Joints; Quartz vein cont. from 125.7-126.0 ft	
		3.6	7:37	100%	100%						
			8:44								
145.6	129.3		11:05								
		1.7	11:39/0.6	(1.7)	(1.7)	16				-No Joints	
143.9	131.0		1:53/0.4	100%	100%						
		5.0	4:37	(5.0)	(4.5)	17				(2 joints at 70-75° with Fe staining; 5 joints at 20-30° with Fe stain, slightly weathered)	
			1:05/0.3	100%	90%						
			5:54								
			5:19								
			4:31								
138.9	136.0		4:47								
		2.8	6:06	(2.7)	(2.7)	18				-No Joints	
			6:17	96%	96%						
136.1	138.8		8:41								
		2.0	12:58/0.8	(2.1)	(2.1)	19				-No Joints	
134.1	140.8		0:25/0.2	105%	105%						
		5.1	8:56	(5.1)	(5.1)	20				-No Joints	
			11:37/0.8	100%	100%						
			4:19								
			4:22								
			4:36								
129.0	145.9		5:23								
		4.9	8:46	(4.9)	(4.9)	21				-No Joints	
			1:29/0.1	100%	100%						
			5:07								
			4:48								
			7:06								
124.1	150.8		6:21								
			9:07/0.9							Coring terminated at 150.8 ft in Hard Rock: Very hard, BIOTITE-QUARTZ GNEISS	

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



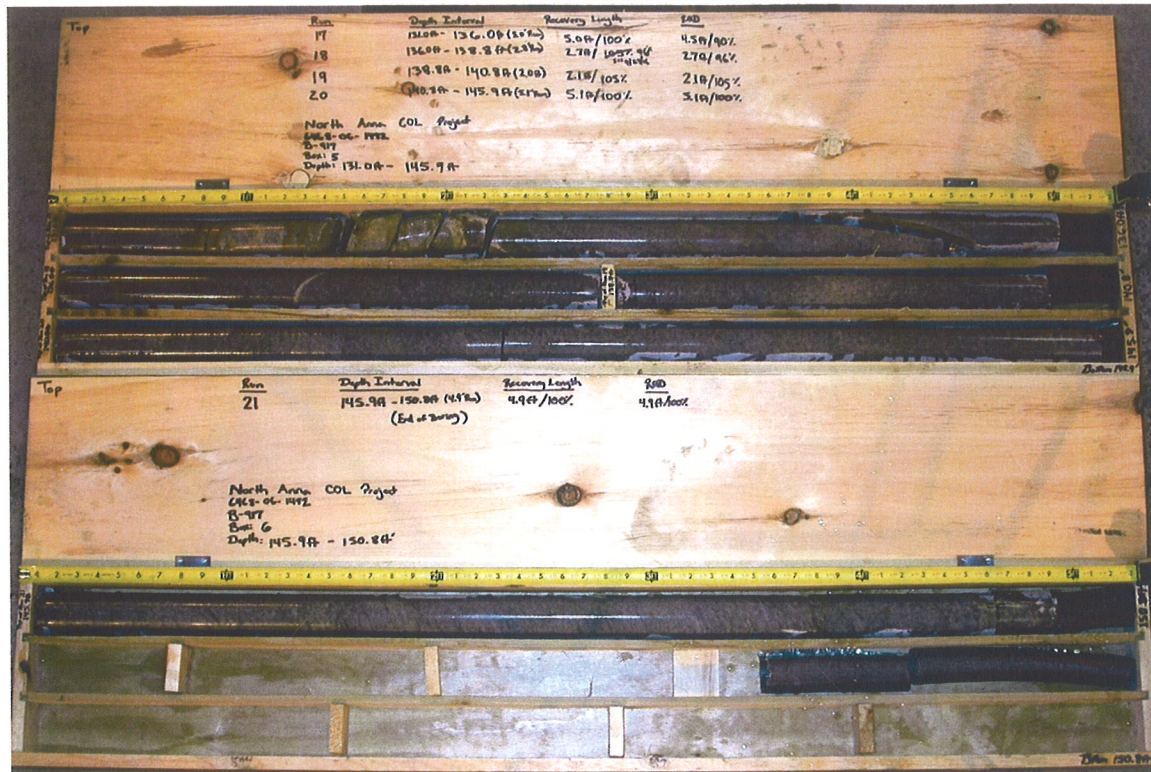
B-917 - Box 1

B-917 - Box 2



B-917 - Box 3

B-917 - Box 4



B-917 - Box 5
B-917 - Box 6