

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



SHEET 2 OF 2

| MACTEC PROJECT NO.: 6468-06-1472 |               |                               |                    | COUNTY Louisa, VA |                              |                                             |    | GEOLOGIST S. Lehman/B. Deobald               |    |     |              |     |     |                                                                                                                                                            |       |                                                                                         |
|----------------------------------|---------------|-------------------------------|--------------------|-------------------|------------------------------|---------------------------------------------|----|----------------------------------------------|----|-----|--------------|-----|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----------------------------------------------------------------------------------------|
| SITE DESCRIPTION NORTH ANNA COL  |               |                               |                    |                   |                              |                                             |    | GROUND WATER (ft)<br>0 HR. ND<br>24 HR. 19.3 |    |     |              |     |     |                                                                                                                                                            |       |                                                                                         |
| BORING NO. B-934                 |               | DRILL METHOD: Mud Rotary/Core |                    |                   | SAMPLE METHODS: SPT/CORE     |                                             |    |                                              |    |     |              |     |     |                                                                                                                                                            |       |                                                                                         |
| COLLAR ELEV. 294.8 ft (NAVD88)   |               | NORTHING 3,909,860            |                    | US ft (NAD83)     |                              | EASTING 11,685,686                          |    | US ft (NAD83)                                |    |     |              |     |     |                                                                                                                                                            |       |                                                                                         |
| TOTAL DEPTH 101.6 ft             |               | DRILL MACHINE CME 55LC Track  |                    |                   | DRILLER: D. White            |                                             |    | HAMMER TYPE 140 lbs Auto                     |    |     |              |     |     |                                                                                                                                                            |       |                                                                                         |
| DATE STARTED 10/26/06            |               |                               | COMPLETED 10/30/06 |                   |                              | CORE BARREL TYPE: HQ 3 triple tube-wireline |    |                                              |    |     |              |     |     |                                                                                                                                                            |       |                                                                                         |
| ELEV.<br>(ft)                    | DEPTH<br>(ft) | BLOW COUNT                    |                    |                   | BLOWS PER FOOT               |                                             |    |                                              |    |     | SAMP.<br>NO. | MOI | LOG | SOIL AND ROCK DESCRIPTION                                                                                                                                  |       |                                                                                         |
|                                  |               | 0.5ft                         | 0.5ft              | 0.5ft             | 0                            | 20                                          | 40 | 60                                           | 80 | 100 |              |     |     |                                                                                                                                                            |       |                                                                                         |
| 220.0                            |               |                               |                    |                   | Continued from previous page |                                             |    |                                              |    |     |              |     |     |                                                                                                                                                            |       |                                                                                         |
|                                  |               |                               |                    |                   |                              |                                             |    |                                              |    |     |              |     |     | Hard Rock: Light gray with orange Fe staining, slightly weathered to fresh, close to wide fracturing, hard to very hard, QUARTZ-BIOTITE GNEISS (continued) |       |                                                                                         |
|                                  |               |                               |                    |                   |                              |                                             |    |                                              |    |     |              |     |     |                                                                                                                                                            |       |                                                                                         |
|                                  |               |                               |                    |                   |                              |                                             |    |                                              |    |     |              |     |     | 193.2                                                                                                                                                      | 101.6 | Boring and coring terminated at 101.6 ft in Hard Rock: Very hard, QUARTZ-BIOTITE 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. Lehman/B. Deobald                                                                                                                                                                                                                    |  |       |  |
| SITE DESCRIPTION NORTH ANNA COL  |               |             |                                             |                   |                  |              |                                             |                  |               |                         | GROUND WATER (ft)                                                                                                                                                                                                                                 |  |       |  |
| BORING NO. B-934                 |               |             | DRILL METHOD: Mud Rotary/Core               |                   |                  |              | SAMPLE METHODS: SPT/CORE                    |                  |               |                         | 0 HR. ND                                                                                                                                                                                                                                          |  |       |  |
| COLLAR ELEV. 294.8 ft (NAVD88)   |               |             | NORTHING 3,909,860                          |                   | US ft (NAD83)    |              | EASTING 11,685,686                          |                  | US ft (NAD83) |                         | 24 HR. 19.3                                                                                                                                                                                                                                       |  |       |  |
| TOTAL DEPTH 101.6 ft             |               |             | DRILL MACHINE CME 55LC Track                |                   |                  |              | DRILLER: D. White                           |                  |               |                         | HAMMER TYPE 140 lbs Auto                                                                                                                                                                                                                          |  |       |  |
| DATE STARTED 10/26/06            |               |             | COMPLETED 10/30/06                          |                   |                  |              | CORE BARREL TYPE: HQ 3 triple tube-wireline |                  |               |                         |                                                                                                                                                                                                                                                   |  |       |  |
| CORE SIZE HQ3                    |               |             | TOTAL RUN 57.5 ft                           |                   |                  |              |                                             |                  |               |                         |                                                                                                                                                                                                                                                   |  |       |  |
| ELEV.<br>(ft)                    | DEPTH<br>(ft) | RUN<br>(ft) | DRILL<br>RATE<br>(Min/ft)                   | REC.<br>(ft)<br>% | RQD<br>(ft)<br>% | SAMP.<br>NO. | REC.<br>(ft)<br>%                           | RQD<br>(ft)<br>% | L<br>O<br>G   | DESCRIPTION AND REMARKS |                                                                                                                                                                                                                                                   |  |       |  |
|                                  |               |             |                                             |                   |                  |              |                                             |                  |               | Begin Coring @ 44.1 ft  |                                                                                                                                                                                                                                                   |  |       |  |
| 250.7                            | 44.1          | 2.5         | 0:37                                        | (1.0)             | (0.9)            | 1            |                                             |                  |               | 249.2                   | Weathered Rock: No recovery-QUARTZ GNEISS with biotite (continued)                                                                                                                                                                                |  | 45.6  |  |
| 248.2                            | 46.6          |             | 1:02                                        | 40%               | 36%              |              |                                             |                  |               | 248.2                   | -No Joints                                                                                                                                                                                                                                        |  | 46.6  |  |
|                                  |               | 5.0         | 1:02/0.5                                    | (3.2)             | (2.7)            | 2            |                                             |                  |               | 246.4                   | Hard Rock: Light gray with orange Fe staining, moderately severe to moderately weathered, close fracturing, medium to moderately hard, QUARTZ GNEISS with biotite                                                                                 |  | 48.4  |  |
| 243.2                            | 51.6          |             | 1:24<br>0:46<br>2:30<br>5:09<br>4:33        | (3.2)<br>64%      | (2.7)<br>54%     |              |                                             |                  |               |                         | Weathered Rock: No recovery-QUARTZ GNEISS with biotite<br>(1 joint at 20° slightly weathered; Quartz vein at 60° at 49.1 ft)                                                                                                                      |  |       |  |
|                                  |               | 5.0         | 4:15<br>4:30<br>3:55<br>3:22<br>2:48        | (5.0)<br>100%     | (4.6)<br>92%     | 3            |                                             |                  |               |                         | Hard Rock: Light gray to gray, moderately weathered to fresh, moderately close to wide fracturing, moderately hard to hard, QUARTZ GNEISS with biotite<br>(1 joint at 45° with Fe stain; multiple fracture zone with Fe staining at 55.3-55.9 ft) |  |       |  |
| 238.2                            | 56.6          |             |                                             |                   |                  |              |                                             |                  |               |                         | (3 joints at 20-30° moderately to slightly weathered with Fe staining)                                                                                                                                                                            |  |       |  |
|                                  |               | 5.0         | 3:15<br>4:12<br>4:35<br>5:54<br>6:06        | (5.0)<br>100%     | (4.8)<br>96%     | 4            |                                             |                  |               |                         |                                                                                                                                                                                                                                                   |  |       |  |
| 233.2                            | 61.6          |             |                                             |                   |                  |              |                                             |                  |               |                         | (1 joint at 60°, 3 joints at 20-30°-all moderately weathered and Fe stained)                                                                                                                                                                      |  |       |  |
|                                  |               | 4.9         | 7:09<br>10:00<br>10:54<br>10:03<br>4:34/0.9 | (4.9)<br>100%     | (4.5)<br>92%     | 5            |                                             |                  |               | 228.3                   |                                                                                                                                                                                                                                                   |  | 66.5  |  |
| 228.3                            | 66.5          |             |                                             |                   |                  |              |                                             |                  |               |                         | Hard Rock: Light gray with orange Fe staining, slightly weathered to fresh, close to wide fracturing, hard to very hard, QUARTZ-BIOTITE GNEISS<br>(3 joints at 10°, 1 joint at 30°, 1 joint at 80°-all with Fe stain)                             |  |       |  |
|                                  |               | 5.1         | 3:05<br>3:45<br>3:40<br>3:30<br>4:50/1.1    | (5.1)<br>100%     | (4.8)<br>94%     | 6            |                                             |                  |               |                         | (1 joint at 5°, 1 joint at 20° both with Fe stain)                                                                                                                                                                                                |  |       |  |
| 223.2                            | 71.6          |             |                                             |                   |                  |              |                                             |                  |               |                         |                                                                                                                                                                                                                                                   |  |       |  |
|                                  |               | 5.0         | 5:20<br>8:55<br>14:34<br>2:30<br>1:55       | (5.0)<br>100%     | (5.0)<br>100%    | 7            |                                             |                  |               |                         | (1 joint at 40° and 3 joints at 60° with orange Fe stain)                                                                                                                                                                                         |  |       |  |
| 218.2                            | 76.6          |             |                                             |                   |                  |              |                                             |                  |               |                         |                                                                                                                                                                                                                                                   |  |       |  |
|                                  |               | 5.0         | 1:55<br>2:20<br>2:55<br>3:45<br>5:30        | (5.0)<br>100%     | (4.6)<br>92%     | 8            |                                             |                  |               |                         | (1 joint at 10° with Fe stain)                                                                                                                                                                                                                    |  |       |  |
| 213.2                            | 81.6          |             |                                             |                   |                  |              |                                             |                  |               |                         |                                                                                                                                                                                                                                                   |  |       |  |
|                                  |               | 5.0         | 2:50<br>3:51<br>3:25<br>4:20<br>5:25        | (5.0)<br>100%     | (4.8)<br>96%     | 9            |                                             |                  |               |                         | (1 joint at 10°)                                                                                                                                                                                                                                  |  |       |  |
| 208.2                            | 86.6          |             |                                             |                   |                  |              |                                             |                  |               |                         |                                                                                                                                                                                                                                                   |  |       |  |
|                                  |               | 5.0         | 7:50<br>10:10<br>2:30<br>3:00<br>3:35       | (5.0)<br>100%     | (5.0)<br>100%    | 10           |                                             |                  |               |                         | (1 joint at 0° slightly weathered and Fe stain)                                                                                                                                                                                                   |  |       |  |
| 203.2                            | 91.6          |             |                                             |                   |                  |              |                                             |                  |               |                         |                                                                                                                                                                                                                                                   |  |       |  |
|                                  |               | 5.0         | 3:50<br>5:25<br>6:10<br>8:10<br>10:40       | (5.0)<br>100%     | (5.0)<br>100%    | 11           |                                             |                  |               |                         | (1 joint at 45° slightly weathered and Fe stain)                                                                                                                                                                                                  |  |       |  |
| 198.2                            | 96.6          |             |                                             |                   |                  |              |                                             |                  |               |                         |                                                                                                                                                                                                                                                   |  |       |  |
|                                  |               | 5.0         | 1:15<br>3:00<br>2:45<br>3:35<br>5:00        | (5.0)<br>100%     | (5.0)<br>100%    | 12           |                                             |                  |               |                         |                                                                                                                                                                                                                                                   |  |       |  |
| 193.2                            | 101.6         |             |                                             |                   |                  |              |                                             |                  |               | 193.2                   | Coring terminated at 101.6 ft in Hard Rock: Very hard, QUARTZ-BIOTITE GNEISS                                                                                                                                                                      |  | 101.6 |  |

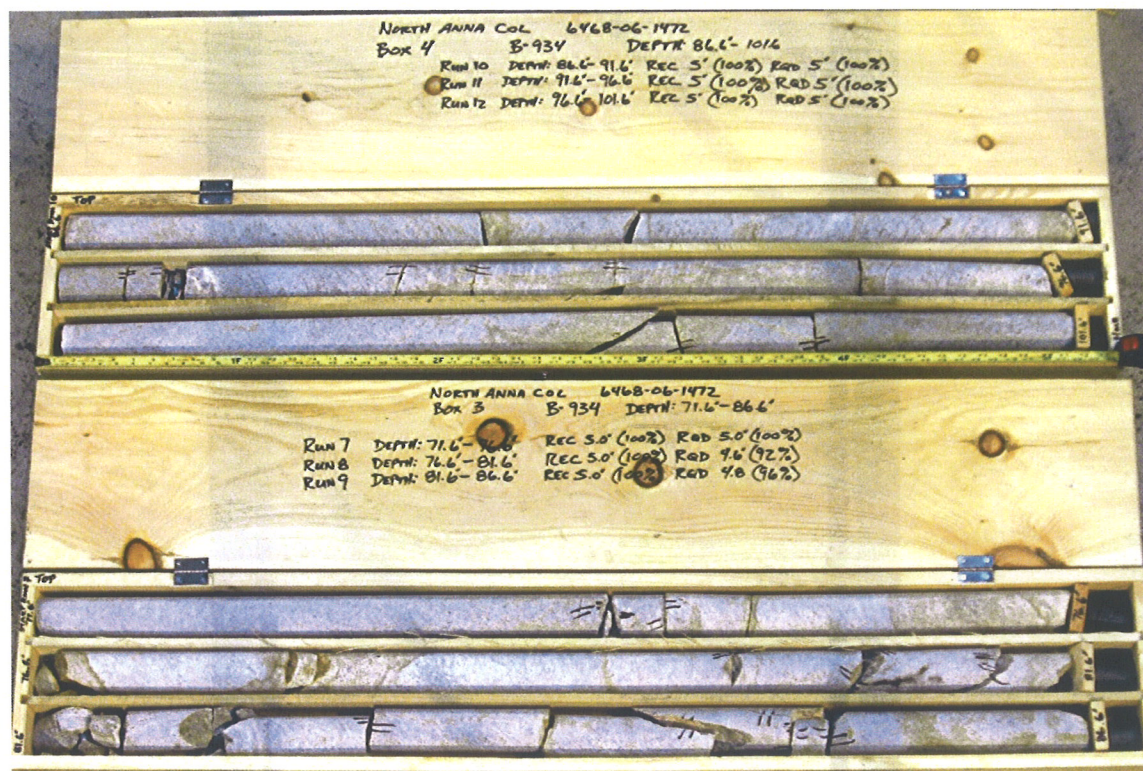
NORTH ANNA COL CORE NORTH ANNA COL DATA REPORT REV0.GPJ NORTH ANNA COL.GDT 1/19/07





B-934 – Box 1

B-934 – Box 2



B-934 – Box 4

B-934 – Box 3



[illegible]



| MACTEC PROJECT NO.: 6468-06-1472 |               |            |       |                               |                              |               |    |                                             |    | COUNTY Louisa, VA |              |                          | GEOLOGIST J. Wallen |                                                                                                                                                                                      |  |  |  |  |       |       |                                                                                                                             |
|----------------------------------|---------------|------------|-------|-------------------------------|------------------------------|---------------|----|---------------------------------------------|----|-------------------|--------------|--------------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|-------|-------|-----------------------------------------------------------------------------------------------------------------------------|
| SITE DESCRIPTION NORTH ANNA COL  |               |            |       |                               |                              |               |    |                                             |    |                   |              |                          | GROUND WATER (ft)   |                                                                                                                                                                                      |  |  |  |  |       |       |                                                                                                                             |
| BORING NO. B-936                 |               |            |       | DRILL METHOD: Mud Rotary/Core |                              |               |    | SAMPLE METHODS: SPT/CORE                    |    |                   |              | 0 HR. 28.0               |                     |                                                                                                                                                                                      |  |  |  |  |       |       |                                                                                                                             |
| COLLAR ELEV. 286.6 ft (NAVD88)   |               |            |       | NORTHING 3,910,746            |                              | US ft (NAD83) |    | EASTING 11,685,929                          |    | US ft (NAD83)     |              | 24 HR. 24.0              |                     |                                                                                                                                                                                      |  |  |  |  |       |       |                                                                                                                             |
| TOTAL DEPTH 100.7 ft             |               |            |       | DRILL MACHINE CME 550 ATV     |                              |               |    | DRILLER: G. Akins                           |    |                   |              | HAMMER TYPE 140 lbs Auto |                     |                                                                                                                                                                                      |  |  |  |  |       |       |                                                                                                                             |
| DATE STARTED 11/6/06             |               |            |       | COMPLETED 11/7/06             |                              |               |    | CORE BARREL TYPE: HQ 3 triple tube-wireline |    |                   |              |                          |                     |                                                                                                                                                                                      |  |  |  |  |       |       |                                                                                                                             |
| ELEV.<br>(ft)                    | DEPTH<br>(ft) | BLOW COUNT |       |                               | BLOWS PER FOOT               |               |    |                                             |    |                   | SAMP.<br>NO. | MOI                      | LOG                 | SOIL AND ROCK DESCRIPTION                                                                                                                                                            |  |  |  |  |       |       |                                                                                                                             |
|                                  |               | 0.5ft      | 0.5ft | 0.5ft                         | 0                            | 20            | 40 | 60                                          | 80 | 100               |              |                          |                     |                                                                                                                                                                                      |  |  |  |  |       |       |                                                                                                                             |
| 211.8                            |               |            |       |                               | Continued from previous page |               |    |                                             |    |                   |              |                          |                     |                                                                                                                                                                                      |  |  |  |  |       |       |                                                                                                                             |
|                                  |               |            |       |                               |                              |               |    |                                             |    |                   |              |                          |                     | Hard Rock: Dark gray to gray, moderately severe to slightly weathered, very close to close fracturing, soft to hard, BIOTITE-QUARTZ GNEISS with severely weathered zones (continued) |  |  |  |  |       |       |                                                                                                                             |
|                                  |               |            |       |                               |                              |               |    |                                             |    |                   |              |                          |                     |                                                                                                                                                                                      |  |  |  |  | 196.2 | 90.4  | Hard Rock: Gray, moderately to slightly weathered, very close to close fracturing, hard to very hard, BIOTITE-QUARTZ GNEISS |
|                                  |               |            |       |                               |                              |               |    |                                             |    |                   |              |                          |                     |                                                                                                                                                                                      |  |  |  |  | 185.9 | 100.7 | Boring and coring terminated at 100.7 ft in Hard Rock: Hard to very hard, BIOTITE-QUARTZ GNEISS                             |



SHEET 1 OF 1

|                                  |               |             |                               |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|----------------------------------|---------------|-------------|-------------------------------|--------------------------|---------------|--------------------------|---------------------------------------------|-----------------------------|---------------|---------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MACTEC PROJECT NO.: 6468-06-1472 |               |             |                               |                          |               |                          | COUNTY Louisa, VA                           |                             |               | GEOLOGIST J. Wallen |                          |                                                                                                                                                                                |
| SITE DESCRIPTION NORTH ANNA COL  |               |             |                               |                          |               |                          |                                             |                             |               | GROUND WATER (ft)   |                          |                                                                                                                                                                                |
| BORING NO. B-936                 |               |             | DRILL METHOD: Mud Rotary/Core |                          |               | SAMPLE METHODS: SPT/CORE |                                             |                             |               | 0 HR. 28.0          |                          |                                                                                                                                                                                |
| COLLAR ELEV. 286.6 ft (NAVD88)   |               |             | NORTHING 3,910,746            |                          | US ft (NAD83) |                          | EASTING 11,685,929                          |                             | US ft (NAD83) |                     | 24 HR. 24.0              |                                                                                                                                                                                |
| TOTAL DEPTH 100.7 ft             |               |             | DRILL MACHINE CME 550 ATV     |                          |               |                          | DRILLER: G. Akins                           |                             |               |                     | HAMMER TYPE 140 lbs Auto |                                                                                                                                                                                |
| DATE STARTED 11/6/06             |               |             | COMPLETED 11/7/06             |                          |               |                          | CORE BARREL TYPE: HQ 3 triple tube-wireline |                             |               |                     |                          |                                                                                                                                                                                |
| CORE SIZE HQ3                    |               |             | TOTAL RUN 66.9 ft             |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
| ELEV.<br>(ft)                    | DEPTH<br>(ft) | RUN<br>(ft) | DRILL<br>RATE<br>(Min/ft)     | RUN<br>REC.<br>(ft)<br>% |               | RQD<br>(ft)<br>%         | SAMP.<br>NO.                                | STRATA<br>REC.<br>(ft)<br>% |               | RQD<br>(ft)<br>%    | L<br>O<br>G              | DESCRIPTION AND REMARKS                                                                                                                                                        |
|                                  |               |             |                               |                          |               |                          |                                             |                             |               |                     |                          | Begin Coring @ 33.5 ft                                                                                                                                                         |
| 253.1                            | 33.5          | 2.6         | 1:25/0.6                      | (2.1)                    | (0.0)         | 1                        |                                             |                             |               |                     |                          | 253.1 Hard Rock: Gray, moderately severe to slightly weathered, very close to close fracturing, hard, BIOTITE-QUARTZ GNEISS                                                    |
| 250.5                            | 36.1          |             | 3:10                          | 81%                      | 0%            |                          |                                             |                             |               |                     |                          | -Highly fractured                                                                                                                                                              |
|                                  |               | 4.2         | 3:14                          | (4.0)                    | (0.5)         | 2                        |                                             |                             |               |                     |                          | -Highly fractured                                                                                                                                                              |
|                                  |               |             | 2:56                          | 95%                      | 12%           |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
| 246.3                            | 40.3          |             | 2:38                          |                          |               |                          |                                             |                             |               |                     |                          | -Highly fractured                                                                                                                                                              |
|                                  |               | 5.7         | 2:59                          |                          |               | 3                        |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               |             | 2:40/0.2                      | (4.7)                    | (0.5)         |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               |             | 2:14                          | 82%                      | 9%            |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
| 240.6                            | 46.0          |             | 1:45                          |                          |               |                          |                                             |                             |               |                     |                          | -Highly fractured                                                                                                                                                              |
|                                  |               | 5.0         | 1:51                          | (3.0)                    | (0.7)         | 4                        |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               |             | 0:59                          | 60%                      | 14%           |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               |             | 1:38                          |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
| 235.6                            | 51.0          |             | 1:05/0.7                      |                          |               |                          |                                             |                             |               |                     |                          | 237.6 Weathered Rock: No recovery-Very dark yellowish brown (10YR 3/4), moist, very dense, severely weathered, BIOTITE-QUARTZ GNEISS                                           |
|                                  |               | 5.1         | 5:40/2.0                      | (0.0)                    | (0.0)         | 5                        |                                             |                             |               |                     |                          | -No Recovery                                                                                                                                                                   |
|                                  |               |             | 3:44                          | 0%                       | 0%            |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
| 230.5                            | 56.1          |             | 2:23                          |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               |             | 3:12/1.1                      |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
| 230.2                            | 56.4          | 4.7         | N=50/0.3                      | (0.7)                    | (0.0)         | 936-9                    |                                             |                             |               |                     |                          | (1 joint at 80°)                                                                                                                                                               |
|                                  |               |             | 3:45/0.7                      | 15%                      | 0%            | 6                        |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               |             | 3:08                          |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
| 225.5                            | 61.1          |             | 1:41                          |                          |               |                          |                                             |                             |               |                     |                          | 226.2 Hard Rock: Dark gray to gray, moderately severe to slightly weathered, very close to close fracturing, soft to hard, BIOTITE-QUARTZ GNEISS with severely weathered zones |
|                                  |               | 5.0         | 1:52                          | (1.8)                    | (0.3)         | 7                        |                                             |                             |               |                     |                          | -Highly fractured                                                                                                                                                              |
|                                  |               |             | 1:19                          | 36%                      | 6%            |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
| 220.5                            | 66.1          |             | 2:19                          |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               | 5.1         | 2:42                          | (2.5)                    | (1.0)         | 8                        |                                             |                             |               |                     |                          | (5 joints at 60°)                                                                                                                                                              |
|                                  |               |             | 2:16/2.0                      | 49%                      | 20%           |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               |             | 1:06                          |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
| 215.4                            | 71.2          |             | 0:56                          |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               | 4.9         | 0:42                          | (1.8)                    | (0.4)         | 9                        |                                             |                             |               |                     |                          | -Highly fractured                                                                                                                                                              |
|                                  |               |             | 0:52                          | 37%                      | 8%            |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               |             | 1:08/1.1                      |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
| 210.5                            | 76.1          |             | 1:23                          |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               | 5.0         | 1:52                          | (3.3)                    | (0.7)         | 10                       |                                             |                             |               |                     |                          | (3 joints at 60°, 2 joints at 30°)                                                                                                                                             |
|                                  |               |             | 1:38/0.9                      | 66%                      | 14%           |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
| 205.5                            | 81.1          |             | 2:01                          | (5.0)                    | (1.5)         | 11                       |                                             |                             |               |                     |                          | (8 joints at 70°, 7 joints at 30°)                                                                                                                                             |
|                                  |               | 5.0         | 2:09                          | 100%                     | 30%           |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               |             | 0:45                          |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               |             | 0:58                          |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               |             | 1:37                          |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
| 200.5                            | 86.1          |             | 1:20                          |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               | 4.3         | 1:54                          | (1.7)                    | (0.0)         | 12                       |                                             |                             |               |                     |                          | -Highly fractured                                                                                                                                                              |
|                                  |               |             | 1:09                          | 40%                      | 0%            |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               |             | 1:06                          |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               |             | 1:29                          |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
| 196.2                            | 90.4          |             | 2:26                          |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               | 5.6         | 2:10/0.3                      | (5.6)                    | (2.1)         | 13                       |                                             |                             |               |                     |                          | 196.2 Hard Rock: Gray, moderately to slightly weathered, very close to close fracturing, hard to very hard, BIOTITE-QUARTZ GNEISS                                              |
|                                  |               |             | 1:23/0.7                      | 100%                     | 38%           |                          |                                             |                             |               |                     |                          | -Highly fractured                                                                                                                                                              |
|                                  |               |             | 2:38                          |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
| 190.6                            | 96.0          |             | 1:53                          |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               | 4.7         | 2:02                          | (4.7)                    | (2.7)         | 14                       |                                             |                             |               |                     |                          | (1 joint at 15°, 2 joints at 30°, 3 joints at 45°, 3 joints at 60°)                                                                                                            |
|                                  |               |             | 2:18                          | 100%                     | 57%           |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               |             | 4:32/0.9                      |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
| 185.9                            | 100.7         |             | 3:19                          |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               |             | 3:33                          |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               |             | 3:01                          |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               |             | 3:06                          |                          |               |                          |                                             |                             |               |                     |                          |                                                                                                                                                                                |
|                                  |               |             | 2:20/0.7                      |                          |               |                          |                                             |                             |               |                     |                          | Coring terminated at 100.7 ft in Hard Rock: Hard to very hard, BIOTITE-QUARTZ GNEISS                                                                                           |

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





B-936 - Box 1

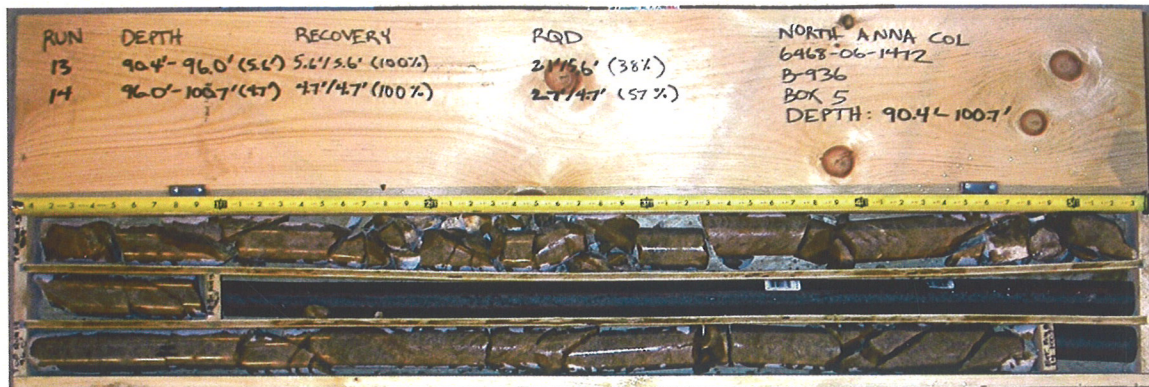
B-936 - Box 2



B-936 - Box 4

B-936 - Box 3





B-936 – Box 5



SHEET 1 OF 1

|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|----------------------------------|---------------|------------|-------------------------------|-------|-------------------|---------------------------------------------|--------------------|------------|--------------------------|--------------------------------------|-------------|------------|---------------------------|--|
| MACTEC PROJECT NO.: 6468-06-1472 |               |            |                               |       | COUNTY Louisa, VA |                                             |                    |            |                          | GEOLOGIST J. Lachewitz/Nicely/Wallen |             |            |                           |  |
| SITE DESCRIPTION NORTH ANNA COL  |               |            |                               |       |                   |                                             |                    |            |                          | GROUND WATER (ft)                    |             |            |                           |  |
| BORING NO. B-937                 |               |            | DRILL METHOD: Mud Rotary/Core |       |                   | SAMPLE METHODS: SPT/CORE                    |                    |            | 0 HR. 15.2               |                                      |             |            |                           |  |
| COLLAR ELEV. 270.3 ft (NAVD88)   |               |            | NORTHING 3,910,689            |       | US ft (NAD83)     |                                             | EASTING 11,686,672 |            | US ft (NAD83)            |                                      | 24 HR. 16.7 |            |                           |  |
| TOTAL DEPTH 55.3 ft              |               |            | DRILL MACHINE CME 45 Trailer  |       |                   | DRILLER: D. Rhodes                          |                    |            | HAMMER TYPE 140 lbs Auto |                                      |             |            |                           |  |
| DATE STARTED 9/18/06             |               |            | COMPLETED 9/19/06             |       |                   | CORE BARREL TYPE: HQ 3 triple tube-wireline |                    |            |                          |                                      |             |            |                           |  |
| ELEV.<br>(ft)                    | DEPTH<br>(ft) | BLOW COUNT |                               |       | BLOWS PER FOOT    |                                             |                    |            |                          | SAMP.<br>NO.                         | MOI         | LOG        | SOIL AND ROCK DESCRIPTION |  |
|                                  |               | 0.5ft      | 0.5ft                         | 0.5ft | 0                 | 20                                          | 40                 | 60         | 80                       | 100                                  |             |            |                           |  |
| 270.3                            |               |            |                               |       | Ground Surface    |                                             |                    |            |                          |                                      |             |            | 270.3 0.0                 |  |
| 268.8                            | 1.5           |            |                               |       |                   |                                             |                    |            |                          | 937-1                                |             |            | 270.3                     |  |
| 266.8                            | 3.5           | 12         | 14                            | 13    |                   |                                             |                    |            |                          | 937-2                                |             |            | 262.3 8.0                 |  |
| 264.3                            | 6.0           | 7          | 9                             | 8     |                   |                                             |                    |            |                          | 937-3                                |             |            |                           |  |
| 261.8                            | 8.5           | 3          | 3                             | 3     |                   |                                             |                    |            |                          | 937-4                                |             |            |                           |  |
| 259.3                            | 11.0          | 3          | 4                             | 6     | 937-5             |                                             |                    | 249.3 21.0 |                          |                                      |             |            |                           |  |
| 256.8                            | 13.5          | 7          | 7                             | 7     | 937-6             |                                             |                    |            |                          |                                      |             |            |                           |  |
| 251.8                            | 18.5          | 4          | 5                             | 6     | 937-7             |                                             |                    |            |                          | 240.8 29.5                           |             |            |                           |  |
| 246.8                            | 23.5          | 9          | 17                            | 26    | 937-8             |                                             |                    |            |                          |                                      |             |            |                           |  |
| 241.8                            | 28.5          | 11         | 20                            | 21    | 937-9             |                                             |                    |            |                          |                                      |             |            |                           |  |
| 238.0                            | 32.3          | 18         | 27                            | 50    | 937-10            |                                             |                    |            |                          |                                      |             |            |                           |  |
| 237.2                            | 33.1          | 50/0.2     |                               |       | 937-11            |                                             |                    |            |                          |                                      |             |            |                           |  |
| 235.0                            | 35.3          | 50/0.2     |                               |       | 937-12            |                                             |                    |            |                          |                                      |             |            |                           |  |
| 230.0                            | 40.3          | 50/0.3     |                               |       | 937-13            |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               | 14         | 23                            | 23    |                   |                                             |                    |            |                          |                                      |             | 231.3 39.0 |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             | 227.5 42.8 |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             | 226.8 43.9 |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             | 215.0 55.3 |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |
|                                  |               |            |                               |       |                   |                                             |                    |            |                          |                                      |             |            |                           |  |

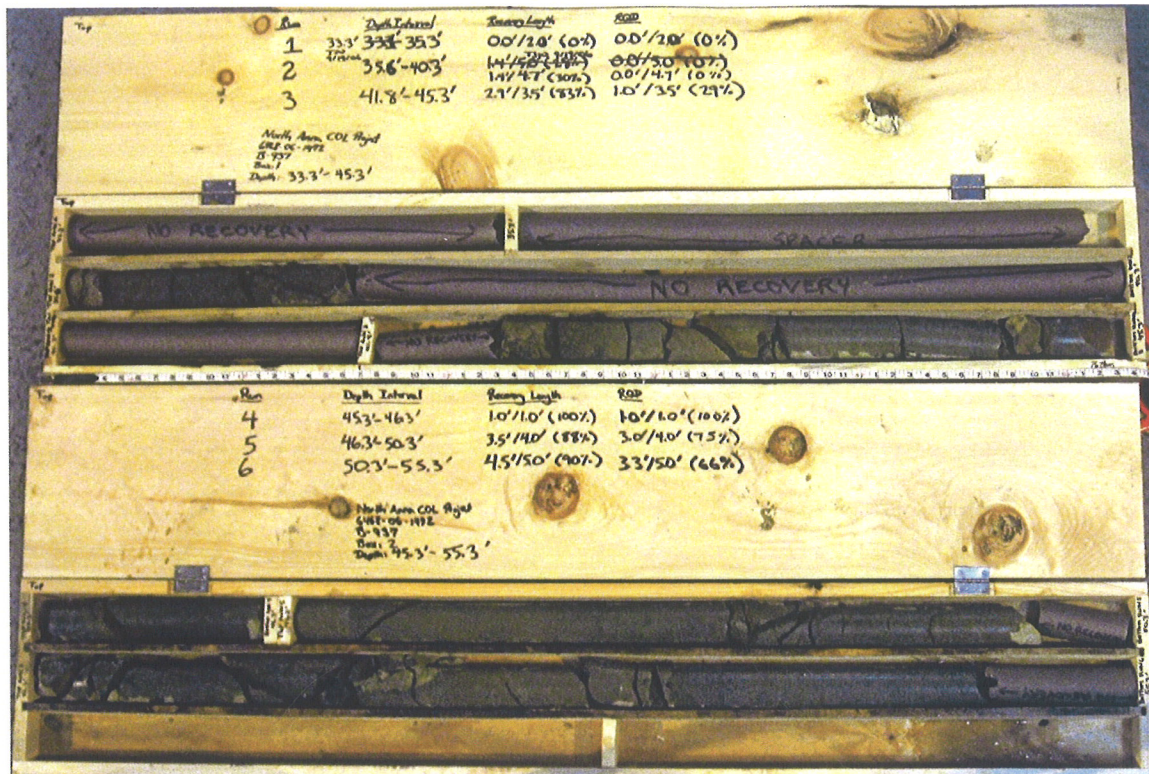
NORTH ANNA COL DATA REPORT REV0.GPJ NORTH ANNA COL GDT 1/19/07



SHEET 1 OF 1

| MACTEC PROJECT NO.: 6468-06-1472 |               |                               |                                                                |                          |                          |                                             | COUNTY Louisa, VA           |                          | GEOLOGIST J. Lachewitz/Nicely/Wallen |                                                                                                                                                                                                                      |
|----------------------------------|---------------|-------------------------------|----------------------------------------------------------------|--------------------------|--------------------------|---------------------------------------------|-----------------------------|--------------------------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SITE DESCRIPTION NORTH ANNA COL  |               |                               |                                                                |                          |                          |                                             |                             |                          | GROUND WATER (ft)                    |                                                                                                                                                                                                                      |
| BORING NO. B-937                 |               | DRILL METHOD: Mud Rotary/Core |                                                                |                          | SAMPLE METHODS: SPT/CORE |                                             |                             | 0 HR. 15.2               |                                      |                                                                                                                                                                                                                      |
| COLLAR ELEV. 270.3 ft (NAVD88)   |               | NORTHING 3,910,689            |                                                                | US ft (NAD83)            |                          | EASTING 11,686,672                          |                             | US ft (NAD83)            |                                      | 24 HR. 16.7                                                                                                                                                                                                          |
| TOTAL DEPTH 55.3 ft              |               | DRILL MACHINE CME 45 Trailer  |                                                                |                          | DRILLER: D. Rhodes       |                                             |                             | HAMMER TYPE 140 lbs Auto |                                      |                                                                                                                                                                                                                      |
| DATE STARTED 9/18/06             |               |                               | COMPLETED 9/19/06                                              |                          |                          | CORE BARREL TYPE: HQ 3 triple tube-wireline |                             |                          |                                      |                                                                                                                                                                                                                      |
| CORE SIZE HQ3                    |               |                               | TOTAL RUN 20.2 ft                                              |                          |                          |                                             |                             |                          |                                      |                                                                                                                                                                                                                      |
| ELEV.<br>(ft)                    | DEPTH<br>(ft) | RUN<br>(ft)                   | DRILL<br>RATE<br>(Min/ft)                                      | RUN<br>REC.<br>(ft)<br>% | RQD<br>(ft)<br>%         | SAMP.<br>NO.                                | STRATA<br>REC.<br>(ft)<br>% | RQD<br>(ft)<br>%         | LOG                                  | DESCRIPTION AND REMARKS                                                                                                                                                                                              |
|                                  |               |                               |                                                                |                          |                          |                                             |                             |                          |                                      | Begin Coring @ 33.3 ft                                                                                                                                                                                               |
| 237.0                            | 33.3          | 2.0                           | 7:43                                                           | (0.0)                    | (0.0)                    | 1                                           |                             |                          |                                      | Weathered Rock: Black (10YR 2/1), light yellowish brown (2.5YR 6/4), yellowish brown (10YR 5/6), and dark brown (10YR 2/2), moist to dry, very dense, severely weathered, BIOTITE GNEISS (continued)<br>-No Recovery |
| 235.0                            | 35.3          |                               | 4:59                                                           | 0%                       | 0%                       |                                             |                             |                          |                                      |                                                                                                                                                                                                                      |
| 234.7                            | 35.6          | 4.7                           | N=50/0.3<br>14:06/0.7<br>0:50<br>0:54<br>11:58<br>3:34<br>N=46 | (1.4)<br>30%             | (0.0)<br>0%              | 937-12<br>2                                 |                             |                          |                                      |                                                                                                                                                                                                                      |
| 230.0                            | 40.3          |                               |                                                                |                          |                          | 937-13                                      |                             |                          |                                      | Fine sandy SILT (ML) brown (7.5YR 4/4), moist, hard (Residual Soil)                                                                                                                                                  |
| 228.5                            | 41.8          | 3.5                           | 3:02/0.5<br>5:24<br>2:28<br>2:39                               | (2.9)<br>83%             | (1.0)<br>29%             | 3                                           |                             |                          |                                      | (1 joint at 45°, 1 joint at 60°)                                                                                                                                                                                     |
| 225.0                            | 45.3          |                               |                                                                |                          |                          |                                             |                             |                          |                                      | Weathered Rock: Brown (7.5YR 4/4), very dense, severely weathered, BIOTITE GNEISS                                                                                                                                    |
| 224.0                            | 46.3          | 1.0                           | 3:29                                                           | (1.0)                    | (1.0)                    | 4                                           |                             |                          |                                      | Hard Rock: Gray to dark gray, moderately to slightly weathered, close to moderately close fracturing, moderately hard to hard, BIOTITE GNEISS<br>(1 joint at 40°)<br>(2 joints at 70°, 1 joint at 80°)               |
|                                  |               | 4.0                           | 10:45<br>2:28<br>2:46<br>1:59                                  | 100%<br>(3.5)<br>88%     | 100%<br>(3.0)<br>75%     | 5                                           |                             |                          |                                      |                                                                                                                                                                                                                      |
| 220.0                            | 50.3          |                               |                                                                |                          |                          |                                             |                             |                          |                                      | (6 joints at 30°, 2 joints at 45°)                                                                                                                                                                                   |
|                                  |               | 5.0                           | 2:09<br>2:30<br>2:34<br>2:32<br>2:07                           | (4.5)<br>90%             | (3.3)<br>66%             | 6                                           |                             |                          |                                      |                                                                                                                                                                                                                      |
| 215.0                            | 55.3          |                               |                                                                |                          |                          |                                             |                             |                          |                                      | Coring terminated at 55.3 ft in Hard Rock: Moderately hard to hard, BIOTITE GNEISS                                                                                                                                   |

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



B-937 - Box 1

B-937 - Box 2