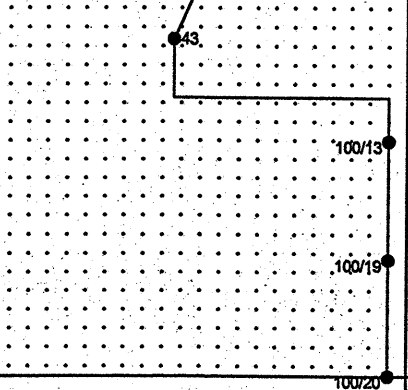




| WBS ELEMENT NO.8.1811201                                       |              |                         |      | ID No.            |                          | U-2408            |                        | COUNTY Gaston |                            | GEOLOGIST P. Alton/P. Weaver |              |     |                           |                                                                                                    |
|----------------------------------------------------------------|--------------|-------------------------|------|-------------------|--------------------------|-------------------|------------------------|---------------|----------------------------|------------------------------|--------------|-----|---------------------------|----------------------------------------------------------------------------------------------------|
| SITE DESCRIPTION Widening of Bridge No. 57 Over NSRR on NC 274 |              |                         |      |                   |                          |                   |                        |               |                            | GROUND WATER (m)             |              |     |                           |                                                                                                    |
| BORING NO. B1-B                                                |              | BORING LOCATION 20+28.3 |      |                   |                          | OFFSET 8.1m RT    |                        | ALIGNMENT -L- |                            | 0 HR. NM                     |              |     |                           |                                                                                                    |
| COLLAR ELEV. 257.87 m                                          |              | NORTHING 172473.38      |      |                   |                          | EASTING 405925.08 |                        |               |                            | 24 HR. 8.84                  |              |     |                           |                                                                                                    |
| TOTAL DEPTH 24.13 m                                            |              | DRILL MACHINE CME-55    |      |                   | DRILL METHOD Wash Rotary |                   |                        |               | HAMMER TYPE 63.5 kg Manual |                              |              |     |                           |                                                                                                    |
| DATE STARTED 4/28/04                                           |              |                         |      | COMPLETED 4/28/04 |                          |                   | SURFACE WATER DEPTH NA |               |                            |                              |              |     |                           |                                                                                                    |
| ELEV.<br>(m)                                                   | DEPTH<br>(m) | BLOW COUNT              |      |                   | BLOWS PER 30 CM          |                   |                        |               |                            |                              | SAMP.<br>NO. | LOG | SOIL AND ROCK DESCRIPTION |                                                                                                    |
|                                                                |              | 15cm                    | 15cm | 15cm              | 0                        | 20                | 40                     | 60            | 80                         | 100                          |              |     |                           |                                                                                                    |
| 257.87                                                         |              |                         |      |                   |                          |                   |                        |               |                            |                              |              |     |                           | 257.87 0.00                                                                                        |
| 257.57                                                         | 0.30         |                         |      |                   |                          |                   |                        |               |                            |                              |              |     |                           | RESIDUAL: Loose to Medium Dense, Black and Brown, Silty, Fine to Coarse SAND 0.80                  |
| 256.80                                                         | 1.07         | 3                       | 4    | 6                 |                          |                   |                        |               |                            |                              |              |     |                           | Stiff to Very Stiff, Red-Brown, Coarse to Fine Sandy, Silty CLAY 2.20                              |
| 256.04                                                         | 1.83         | 3                       | 6    | 9                 |                          |                   |                        |               |                            |                              |              |     |                           |                                                                                                    |
| 255.28                                                         | 2.59         | 5                       | 7    | 10                |                          |                   |                        |               |                            |                              |              |     |                           |                                                                                                    |
| 253.76                                                         | 4.11         | 4                       | 6    | 8                 |                          |                   |                        |               |                            |                              |              |     |                           | Medium Dense to Dense; Red, Yellow, Grey, and Brown; Silty; Coarse to Fine SAND with a Little Mica |
| 252.23                                                         | 5.64         | 6                       | 9    | 10                |                          |                   |                        |               |                            |                              |              |     |                           |                                                                                                    |
| 250.71                                                         | 7.16         | 7                       | 10   | 18                |                          |                   |                        |               |                            |                              |              |     |                           |                                                                                                    |
| 249.18                                                         | 8.69         | 7                       | 8    | 10                |                          |                   |                        |               |                            |                              |              |     |                           |                                                                                                    |
| 247.66                                                         | 10.21        | 13                      | 20   | 17                |                          |                   |                        |               |                            |                              |              |     |                           |                                                                                                    |
| 246.13                                                         | 11.74        | 6                       | 10   | 13                |                          |                   |                        |               |                            |                              |              |     |                           |                                                                                                    |
| 244.61                                                         | 13.26        | 7                       | 12   | 15                |                          |                   |                        |               |                            |                              |              |     |                           |                                                                                                    |
| 243.09                                                         | 14.78        | 5                       | 7    | 11                |                          |                   |                        |               |                            |                              |              |     |                           |                                                                                                    |
| 241.56                                                         | 16.31        | 8                       | 6    | 10                |                          |                   |                        |               |                            |                              |              |     |                           |                                                                                                    |
| 240.04                                                         | 17.83        | 10                      | 8    | 13                |                          |                   |                        |               |                            |                              |              |     |                           |                                                                                                    |
|                                                                |              | 19                      | 19   | 38                |                          |                   |                        |               |                            |                              |              |     |                           |                                                                                                    |



|                                                                |              |            |                         |                   |                                                                                     |                          |                        |               |               |                              |                                                                                     |                                                                                                                      |                                                                   |       |
|----------------------------------------------------------------|--------------|------------|-------------------------|-------------------|-------------------------------------------------------------------------------------|--------------------------|------------------------|---------------|---------------|------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------|
| WBS ELEMENT NO.8.1811201                                       |              |            |                         | ID No.            |                                                                                     | U-2408                   |                        | COUNTY Gaston |               | GEOLOGIST P. Alton/P. Weaver |                                                                                     |                                                                                                                      |                                                                   |       |
| SITE DESCRIPTION Widening of Bridge No. 57 Over NSRR on NC 274 |              |            |                         |                   |                                                                                     |                          |                        |               |               | GROUND WATER (m)             |                                                                                     |                                                                                                                      |                                                                   |       |
| BORING NO. B1-B                                                |              |            | BORING LOCATION 20+28.3 |                   |                                                                                     |                          | OFFSET 8.1m RT         |               | ALIGNMENT -L- |                              | 0 HR. NM                                                                            |                                                                                                                      |                                                                   |       |
| COLLAR ELEV. 257.87 m                                          |              |            | NORTHING 172473.38      |                   |                                                                                     |                          | EASTING 405925.08      |               |               |                              | 24 HR. 8.84                                                                         |                                                                                                                      |                                                                   |       |
| TOTAL DEPTH 24.13 m                                            |              |            | DRILL MACHINE CME-55    |                   |                                                                                     | DRILL METHOD Wash Rotary |                        |               |               | HAMMER TYPE 63.5 kg Manual   |                                                                                     |                                                                                                                      |                                                                   |       |
| DATE STARTED 4/28/04                                           |              |            |                         | COMPLETED 4/28/04 |                                                                                     |                          | SURFACE WATER DEPTH NA |               |               |                              |                                                                                     |                                                                                                                      |                                                                   |       |
| ELEV.<br>(m)                                                   | DEPTH<br>(m) | BLOW COUNT |                         |                   | BLOWS PER 30 CM                                                                     |                          |                        |               |               | SAMP.<br>NO.                 | LOG                                                                                 | SOIL AND ROCK DESCRIPTION                                                                                            |                                                                   |       |
|                                                                |              | 15cm       | 15cm                    | 15cm              | 0                                                                                   | 20                       | 40                     | 60            | 80            | 100                          |                                                                                     |                                                                                                                      |                                                                   |       |
| 238.87                                                         |              |            |                         |                   | Continued from previous page                                                        |                          |                        |               |               |                              |                                                                                     |                                                                                                                      |                                                                   |       |
| 238.51                                                         | 19.36        | 12         | 13                      | 30                |  |                          |                        |               |               | M                            |  | Medium Dense to Very Dense; Grey, White, Brown, and Black; Silty; Coarse to Fine SAND with a Little Mica (continued) |                                                                   |       |
| 236.99                                                         | 20.88        | 100/13     |                         |                   |                                                                                     |                          |                        |               |               |                              |                                                                                     | 237.44                                                                                                               | WEATHERED ROCK: Brown, Yellow, and Grey Granite                   | 20.43 |
| 235.47                                                         | 22.40        | 70         | 30/4                    |                   |                                                                                     |                          |                        |               |               |                              |                                                                                     |                                                                                                                      |                                                                   |       |
| 233.94                                                         | 23.93        | 60         | 40/5                    |                   |                                                                                     |                          |                        |               |               |                              |                                                                                     | 233.74                                                                                                               | Boring Terminated at Elevation 233.74m in Weathered Rock: Granite | 24.13 |
|                                                                |              |            |                         |                   |                                                                                     |                          |                        |               |               |                              |                                                                                     | Note: Bentonite and city water used as drilling fluid; Density = 64.0 lbs./cu. ft.                                   |                                                                   |       |

NCDOT BORE SINGLE 07104005.GPJ NC DOT.GDT 8/18/04