



| PROJECT NO. 8.2451201 | | ID. B-4139 | | COUNTY Harnett | | GEOLOGIST S. JOHNSON/P.BYRD | | | | | | | |
|---|------------|---------------------------|--------|---|----------------|-----------------------------|----|----|----|-----------|------|---------------------------|--|
| SITE DESCRIPTION BRIDGE 106 OVER BLACK RIVER ON S.R. 1780 | | | | | | GROUND WATER (ft) | | | | | | | |
| BORING NO. B2-A | | BORING LOCATION 17+78 | | OFFSET 8.0 ft LT | | ALIGNMENT -L- | | | | | | | |
| COLLAR ELEV. 145.0 ft | | NORTHING 558,238.9 | | EASTING 2,108,222.7 | | 0 HR. N/A | | | | | | | |
| TOTAL DEPTH 63.4 ft | | DRILL MACHINE MOBILE B-57 | | DRILL METHOD ROTARY WASH W2-15/16" DRAG BIT | | HAMMER TYPE MANUAL | | | | | | | |
| DATE STARTED 5/6/03 | | COMPLETED 5/6/03 | | SURFACE WATER DEPTH 5.2 ft | | | | | | | | | |
| ELEV. (ft) | DEPTH (ft) | BLOW COUNT | | | BLOWS PER FOOT | | | | | SAMP. NO. | LOG | SOIL AND ROCK DESCRIPTION | |
| | | 0.5ft | 0.5ft | 0.5ft | 0 | 20 | 40 | 60 | 80 | | | | 100 |
| 150.2 | | | | | | | | | | | | | RIVER LEVEL |
| 145.0 | 0.0 | | | | | | | | | | | | RIVER BOTTOM |
| 143.1 | 1.9 | 2 | 1 | 2 | | | | | | | SS-7 | Sat. | ALLUVIUM: VERY LOOSE TAN FINE TO COARSE SAND (A-1-b) WITH TRACE OF CLAY AND GRAVEL |
| 138.1 | 6.9 | 5 | 6 | 6 | | | | | | | | W | MIDDENDORF FORMATION: MEDIUM STIFF TO VERY STIFF GRAY SILTY CLAY (A-7-6) WITH TRACE OF FINE SAND |
| 133.1 | 11.9 | 7 | 7 | 12 | | | | | | | | W | |
| 128.1 | 16.9 | 8 | 11 | 16 | | | | | | | SS-8 | 27.4% | VERY STIFF GRAY AND RED FINE SANDY CLAY (A-6) WITH LITTLE SILT AND TRACE OF COARSE SAND |
| 123.1 | 21.9 | 19 | 23 | 25 | | | | | | | | W | HARD GRAY-GREEN SILTY CLAY (A-7-6) WITH TRACE TO LITTLE FINE SAND |
| 118.1 | 26.9 | 16 | 16 | 28 | | | | | | | | W | |
| 113.1 | 31.9 | 18 | 20 | 36 | | | | | | | SS-9 | 24.5% | HARD GRAY FINE SANDY CLAY (A-7-6) WITH LITTLE SILT AND TRACE OF COARSE SAND |
| 108.1 | 36.9 | 15 | 23 | 40 | | | | | | | | Sat. | VERY DENSE TO MEDIUM DENSE GRAY FINE TO COARSE SAND (A-2-4) WITH LITTLE TO TRACE OF SILT AND CLAY |
| 103.1 | 41.9 | 17 | 13 | 16 | | | | | | | | Sat. | |
| 98.1 | 46.9 | 12 | 13 | 17 | | | | | | | | Sat. | |
| 93.1 | 51.9 | 15 | 16 | 30 | | | | | | | | Sat. | DENSE GRAY FINE TO COARSE SAND (A-1-b) WITH TRACE OF CLAY AND SILT |
| 88.1 | 56.9 | 39 | 61/0.5 | | | | | | | | | Sat. | |
| 83.1 | 61.9 | 29 | 34 | 41 | | | | | | | | M | HARD GREEN-GRAY SILTY CLAY (A-7-5) WITH TRACE OF FINE SAND |
| | | | | | | | | | | | | | |

NCDOT BORE SI 51-074.GPJ NCDOT.GDT 5/28/03

BORING TERMINATED AT ELEV. 81.6 FEET IN HARD SILTY CLAY.

- 1) ADVANCED 2-15/16" DRAG BIT TO 61.9 FEET.
- 2) SET 4 FEET OF NW CASING (11.5 FEET TEMPORARY CASING).
- 3) RIVER WATER USED AS DRILLING FLUID WITH SUPER MUD ADDED.
- 4) DRILLING FLUID DENSITY APPROXIMATELY 62.4 PCF.
- 5) SOME LOSS OF DRILLING FLUID OBSERVED BETWEEN 41.9 TO 51.9 FEET.



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|---|------------|---------------------------|-------|---|----------------|-----------------------------|----|----|----|-----------|-----|---------------------------|------|--|
| SITE DESCRIPTION BRIDGE 106 OVER BLACK RIVER ON S.R. 1780 | | | | | | GROUND WATER (ft) | | | | | | | | |
| BORING NO. B3-B | | BORING LOCATION 18+18 | | OFFSET 8.0 ft RT | | ALIGNMENT -L- | | | | | | | | |
| COLLAR ELEV. 149.7 ft | | NORTHING 558,214.7 | | EASTING 2,108,258.4 | | 0 HR. N/A | | | | | | | | |
| TOTAL DEPTH 58.2 ft | | DRILL MACHINE MOBILE B-57 | | DRILL METHOD ROTARY WASH W2-15/16" DRAG BIT | | HAMMER TYPE MANUAL | | | | | | | | |
| DATE STARTED 5/5/03 | | COMPLETED 5/5/03 | | SURFACE WATER DEPTH N/A | | | | | | | | | | |
| ELEV. (ft) | DEPTH (ft) | BLOW COUNT | | | BLOWS PER FOOT | | | | | SAMP. NO. | LOG | SOIL AND ROCK DESCRIPTION | | |
| | | 0.5ft | 0.5ft | 0.5ft | 0 | 20 | 40 | 60 | 80 | | | | 100 | |
| 149.7 | | | | | | | | | | | | | | |
| 149.7 | 0.0 | 1 | 1 | WOH | | | | | | | | SS-11 | Sat. | GROUND SURFACE |
| 146.9 | 2.8 | 1 | 3 | 3 | | | | | | | | | Sat. | ALLUVIUM: VERY LOOSE TO LOOSE TAN FINE TO COARSE SAND (A-3) WITH TRACE OF CLAY AND ORGANIC MATTER |
| 143.0 | 6.7 | 2 | 3 | 6 | | | | | | | | | W | MIDDENDORF FORMATION: STIFF TO HARD GRAY, GRAY AND RED AND GRAY-GREEN SILTY CLAY (A-7-6) WITH TRACE OF FINE SAND |
| 138.0 | 11.7 | 5 | 7 | 7 | | | | | | | | | W | |
| 133.0 | 16.7 | 7 | 8 | 13 | | | | | | | | | W | |
| 128.0 | 21.7 | 10 | 13 | 17 | | | | | | | | | W | |
| 123.0 | 26.7 | 13 | 14 | 19 | | | | | | | | | W | |
| 118.0 | 31.7 | 23 | 22 | 21 | | | | | | | | | W | |
| 113.0 | 36.7 | 22 | 30 | 32 | | | | | | | | | W | |
| 108.0 | 41.7 | 13 | 14 | 12 | | | | | | | | | W | |
| 103.0 | 46.7 | 9 | 13 | 18 | | | | | | | | | W | |
| 98.0 | 51.7 | 15 | 18 | 32 | | | | | | | | | Sat. | MEDIUM DENSE TO DENSE GRAY FINE TO COARSE SAND (A-2-4) WITH LITTLE TO TRACE OF CLAY AND SILT |
| 93.0 | 56.7 | 18 | 34 | 39 | | | | | | | | | Sat. | DENSE TO VERY DENSE GRAY FINE TO COARSE SAND (A-1-b) WITH TRACE OF SILT AND CLAY |
| | | | | | | | | | | | | | Sat. | |
| | | | | | | | | | | | | | | |

NCDOT BORE SINGLE 51-074.GPJ NCDOT.GDT 5/28/03

BORING TERMINATED AT ELEV. 91.5 FEET IN VERY DENSE FINE TO COARSE SAND.

- 1) ADVANCED 2-15/16" DRAG BIT TO 56.7 FEET.
- 2) SET 6.8 FEET OF NW CASING (6.8 FEET TEMPORARY CASING).
- 3) RIVER WATER USED AS DRILLING FLUID.
- 4) DRILLING FLUID DENSITY APPROXIMATELY 62.4 PCF.
- 5) NO LOSS OF DRILLING FLUID OBSERVED.