



N.C.D.O.T. GEOTECHNICAL UNIT  
BORING LOG

SHEET 1 OF 1

| PROJECT NO. 8.T311002   |           | ID. R-2552AB               |         | COUNTY Johnston                   |                 | GEOLOGIST M. Lear          |                  |    |    |           |     |                           |   |
|---|-----------|----------------------------|---------|-----------------------------------|-----------------|----------------------------|------------------|----|----|-----------|-----|---------------------------|---|
| SITE DESCRIPTION Site 1: Dual Structures on Clayton bypass (-L-) over White Oak Creek (Austin pond) |           |                            |         |                                   |                 |                            | GROUND WATER (m) |    |    |           |     |                           |   |
| BORING NO. B6-A RL  |           | BORING LOCATION 41+44.2    |         | OFFSET 8.8m RT                    | ALIGNMENT -L-   |                            | 0 HR. 0.02       |    |    |           |     |                           |   |
| COLLAR ELEV. 58.45 m  |           | NORTHING 208,421.1         |         | EASTING 652,970.5                 |                 | 24 HR. 0.00                |                  |    |    |           |     |                           |   |
| TOTAL DEPTH 14.60 m   |           | DRILL MACHINE CME-45/buggy |         | DRILL METHOD Rotary Wash/Mud/Core |                 | HAMMER TYPE 63.5 kg manual |                  |    |    |           |     |                           |   |
| DATE STARTED 8/13/01  |           | COMPLETED 8/13/01          |         | SURFACE WATER DEPTH N/A           |                 |                            |                  |    |    |           |     |                           |   |
| ELEV. (m)   | DEPTH (m) | BLOW COUNT                 |         |                                   | BLOWS PER 30 CM |                            |                  |    |    | SAMP. NO. | LOG | SOIL AND ROCK DESCRIPTION |   |
|   |           | 15cm                       | 15cm    | 15cm                              | 0               | 20                         | 40               | 60 | 80 |           |     |                           | 100   |
| 58.45   |           |                            |         |                                   |                 |                            |                  |    |    |           |     |                           |   |
| 58.45   | 0.00      | WOH                        | 1       | 1                                 |                 |                            |                  |    |    |           |     | Sat.                      | Alluvium: Gray, sandy, CLAY (A-7-5) with roots  |
| 57.18   | 1.27      |                            | 2       | 4                                 |                 |                            |                  |    |    |           |     | Sat.                      |   |
| 55.63   | 2.82      |                            | 3       | 4                                 |                 |                            |                  |    |    |           |     | Sat.                      | Alluvium: White, fine to coarse SAND (A-3)  |
| 54.17   | 4.28      |                            | 7       | 9                                 |                 |                            |                  |    |    |           |     | W                         | Residual: Tan, orange, white, and brown, micaceous, slightly sandy, clayey SILT (A-4) with relict rock fabric |
| 52.64   | 5.81      |                            | 9       | 13                                |                 |                            |                  |    |    |           |     | W                         |   |
| 51.12   | 7.33      |                            | 19      | 19                                |                 |                            |                  |    |    |           |     | W                         |   |
| 49.58   | 8.87      |                            | 17      | 29                                |                 |                            |                  |    |    |           |     | W                         |   |
| 48.07   | 10.38     |                            | 32      | 58/14cm                           |                 |                            |                  |    |    |           |     |                           | Soft Weathered Rock: Granite  |
| 46.62   | 11.83     |                            | 100/7cm |                                   |                 |                            |                  |    |    |           |     |                           | Hard Weathered Rock: Granite  |
|   |           |                            |         |                                   |                 |                            |                  |    |    |           |     |                           | No Recovery-Interpreted as Soft Weathered Rock: Granite   |
|   |           |                            |         |                                   |                 |                            |                  |    |    |           |     |                           | Hard Weathered Rock: Granite  |
|   |           |                            |         |                                   |                 |                            |                  |    |    |           |     |                           | Boring terminated at 14.60m (Elev: 43.85m) in Hard Weathered Rock: Granite                                    |
|   |           |                            |         |                                   |                 |                            |                  |    |    |           |     |                           | Bit used: 7.6cm roller cone and NQ core bit   |
|   |           |                            |         |                                   |                 |                            |                  |    |    |           |     |                           | Drilling Fluid: Water and 1.02g/cm <sup>3</sup>   |

NCDOT BORE SINGLE BORELOG2.GPJ NC DOT.GDT 10/16/01



N.C.D.O.T. GEOTECHNICAL UNIT  
CORE BORING REPORT

| SHEET NO. | TOTAL SHEETS |
|-----------|--------------|
| 82        | 107          |

SHEET 1 OF 1

| PROJECT NO. 8.T311002   |           | ID. R-2552AB               |                       | COUNTY Johnston                   |               | GEOLOGIST M. Lear          |                  |         |     |  |
|---|-----------|----------------------------|-----------------------|-----------------------------------|---------------|----------------------------|------------------|---------|-----|--|
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| TOTAL DEPTH 14.60 m   |           | DRILL MACHINE CME-45/buggy |                       | DRILL METHOD Rotary Wash/Mud/Core |               | HAMMER TYPE 63.5 kg manual |                  |         |     |  |
| DATE STARTED 8/13/01  |           | COMPLETED 8/13/01          |                       | SURFACE WATER DEPTH N/A           |               |                            |                  |         |     |  |
| CORE SIZE NQ  |           | TOTAL RUN 2.70 m           |                       | DRILLER D. White                  |               |                            |                  |         |     |  |
| ELEV. (m)   | DEPTH (m) | RUN (m)                    | DRILL RATE (Min/0.3m) | RUN                               |               | SAMP. NO.                  | STRATA           |         | LOG | DESCRIPTION AND REMARKS  |
|   |           |                            |                       | REC. (%)                          | RQD (%)       |                            | REC. (%)         | RQD (%) |     |  |
|   |           |                            |                       |                                   |               |                            |                  |         |     | Begin Coring @ 11.90 m   |
| 46.55   | 11.90     | 0.60                       | 5:20                  | (0.60)                            | (N/A)         |                            | (0.67)           | (N/A)   |     | Hard Weathered Rock: Granite   |
| 45.95   | 12.50     |                            | 2:43                  | 100%                              |               |                            | 100%             |         |     | 11.90  |
|   |           | 1.50                       | 2:46                  | (0.60)                            | (N/A)         |                            | (0.00)           | (N/A)   |     | No Recovery-Interpreted as Soft Weathered Rock: Granite                    |
|   |           |                            | 1:19                  | 40%                               |               |                            | 0%               |         |     | 12.57  |
|   |           |                            | 1:00                  |                                   |               |                            |                  |         |     | 13:47  |
| 44.45   | 14.00     |                            | 1:06                  |                                   |               |                            | (1.13)           | (N/A)   |     | Hard Weathered Rock: Granite   |
|   |           |                            | 3:36                  |                                   |               |                            | 100%             |         |     | 14.60  |
| 43.85   | 14.60     | 0.60                       | 3:45                  | (0.60)                            | (N/A)         |                            |                  |         |     | Coring terminated at 14.60m (Elev: 43.85m) in Hard Weathered Rock: Granite |
|   |           |                            | 4:12                  | 100%                              |               |                            |                  |         |     |  |

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