

Illinois Department of Transportation
Office of Highways
Reynolds Building Corp.

SOIL BORING LOG

Page 1 of 2
Date 4/19/12

ROUTE County Road 700 North DESCRIPTION Bridge Replacement Boring LOGGED BY MEF

SECTION 08-00265-00-BR LOCATION Big Spring Tship, SEC. 13, TWP. 10N, R10E, 6E, 3rd PM

COUNTY Shelby DRILLING METHOD Hollow Stem Auger HAMMER TYPE Hydraulic

STRUCT. NO. 087-3514 Station _____

BORING NO. B-1 Station 181+82

Offset 14.60ft ft

Ground Surface Elev. 803.04 ft

| DEPTH (ft) | DIAMETER (in) | UNIT WEIGHT (pcf) | WATER CONTENT (%) | LIQUID LIMIT (%) | PLASTICITY INDEX (%) | SOIL DESCRIPTION | REMARKS |
|------------|---------------|-------------------|-------------------|------------------|----------------------|--|---------|
| 0 | | | | | | MIXED CLAY FILL | |
| 5 | 5 | 120 | 24 | 16.0 | | SILTY CLAY LOAM, brown, moist, fine sand, A-3-6 | |
| 7 | 7 | 120 | | | | SILTY CLAY LOAM, brown, moist, fine sand, A-6 | |
| 11 | 11 | 120 | 1.0 | 20.2 | | | |
| 15 | 15 | 120 | 1.0 | 13.0 | | | |
| 19 | 19 | 120 | 1.0 | 22.9 | | Gray, trace organics, A-6 | |
| 23 | 23 | 120 | 1.0 | 24.3 | | SANDY LOAM, gray wet, fine sand, A-4 | |
| 27 | 27 | 120 | | 20.3 | | | |
| 31 | 31 | 120 | | 20.3 | | SAND, gray, wet, medium to coarse sand, A-1-a | |
| 35 | 35 | 120 | | 20.3 | | SHALE, dark gray to black, clayey, thinly bedded, fissile, moderately hard, dense, fine grain, slightly micaceous, flat bedded, weathered, at top, solid. Borehole continues with rock coring. | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Functionmeter)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
D83, form 137 (Rev. 8-99)

Illinois Department of Transportation
Office of Highways
Reynolds Building Corp.

ROCK CORE LOG

Page 2 of 2
Date 4/19/12

ROUTE County Road 700 North DESCRIPTION Bridge Replacement Boring LOGGED BY MEF

SECTION 08-00265-00-BR LOCATION Big Spring Tship, SEC. 13, TWP. 10N, R10E, 6E, 3rd PM

COUNTY Shelby CORING METHOD conventional

STRUCT. NO. 087-3514 CORING BARREL TYPE & SIZE NX

BORING NO. B-1 Core Diameter 3 in

Station 181+82 Top of Rock Elev. 804.64 ft

Offset 14.60ft ft Begin Core Elev. 804.64 ft

Ground Surface Elev. 809.04 ft

| DEPTH (ft) | DIAMETER (in) | UNIT WEIGHT (pcf) | WATER CONTENT (%) | LIQUID LIMIT (%) | PLASTICITY INDEX (%) | SOIL DESCRIPTION | REMARKS |
|---------------|---------------|-------------------|-------------------|------------------|----------------------|---|---------|
| 1 | 71 | 96 | 2 | 12.1 | | SHALE, dark gray to black, clayey, thinly bedded, fissile, moderately hard, dense, fine grain, slightly micaceous, flat bedded, weathered, at top, solid. | |
| 2 | 72 | 96 | 2 | 33.9 | | Limestone, gray, massive, hard, dense, fine grain, fossiliferous SHALE/CLAYSTONE, gray, massive, soft, blocky, solid. Limestone, gray, massive, coarse grain, hard, well cemented, dense, flat bedded with occasional horizontal fractures. | |
| End of boring | | | | | | | |

Color pictures of the cores No
Cores will be stored for examination until yes
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)
B95, form 138 (Rev. 8-89)

| | | | | | | | | | | |
|------------|---------------------------|------------------------------------|---|--|---------------------------|---------------------------|--------|--------------|-----------|--|
| DESIGNED - | EXAMINED | DATE - 4/19/2012 | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | SOIL BORING LOGS STRUCTURE NO. 087-3555 | F.A.S. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | |
| CHECKED - | ENGINEER OF BRIDGE DESIGN | REVISED | | | 856 | 08-00265-00-BR | SHELBY | 29 | 27 | |
| DRAWN - | PASSED | ENGINEER OF BRIDGES AND STRUCTURES | | | REVISED | CONTRACT NO. 45701 | | | | |
| CHECKED - | | | | | | ILLINOIS FED. AID PROJECT | | | | |
| | | | | | SHEET NO. 10 OF 12 SHEETS | | | | | |