STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| FAP 314 | 108BR-1 | MADISON | 123 | 57 |
| FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT- | | |

SHEET NO. 29
29 SHEETS

Contract #76454

## Illinois Department of Transportation — SOIL BORING LOG

Division of Highways, Illinois Department of Transportation

Page 1 of 4

Date 4/14/05

ROUTE FAP 314 DESCRIPTION IL 4 over Silver Creek LOGGED BY Mark Schraeder

SECTION 108BR-1 LOCATION SW 14, SW 14, SEC. 20, TWP. 5N, RNG. 6W, 3 PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 060-0106
Station 264+00

BORING NO. 6 Pier 4
Station 264+79
Offset 55.00ft Right
Ground Surface Elev. 497.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 468.5 ft
Upon Completion ft
After Hrs. ft

| DEPTH (ft) | BLOWS (6") | UCS Qu (tsf) | MOIST (%) |
|---|---|---|---|
| Brown Silty LOAM | | | |
| | 3 | | |
| | 3 | 2.0 | 25 |
| | 4 | P | |
| -5 | 1 | | |
| | 3 | 0.8 | 24 |
| | 4 | S/20 | |
| | 1 | | |
| | 3 | 1.3 | 24 |
| | 3 | S/20 | |
| -10 | 0 | | |
| | 2 | 0.9 | 26 |
| | 3 | S/20 | |
| 485.0 | | | |
| Gray Clay LOAM | 1 | | |
| | 1 | 1.6 | 29 |
| | 3 | S/20 | |
| -15 | 1 | | |
| | 3 | 1.9 | 31 |
| | 4 | S/20 | |
| | 3 | | |
| | 4 | 1.9 | 26 |
| | 5 | B | |
| 477.5 | | | |
| Gray Silty CLAY | 2 | | |
| -20 | | | |

| DEPTH (ft) | BLOWS (6") | UCS Qu (tsf) | MOIST (%) |
|---|---|---|---|
| Gray Silty CLAY (continued) | | | |
| | 3 | 0.9 | 25 |
| | 4 | S/20 | |
| -25 | 0 | | |
| | 2 | 1.3 | 23 |
| | 3 | B | |
| 470.0 | 2 | | |
| Gray Clay LOAM | 3 | 1.2 | 25 |
| | 7 | S/20 | |
| -30 | 4 | | |
| | 8 | 3.3 | 14 |
| | 8 | | |
| 462.5 | | | |
| Gray Silty SAND | 24 | | |
| See Gradation @ 35 ft | 50 | | 12 |
| -35 | - | NC | |
| 457.5 | | | |
| Gray Clay LOAM | 4 | | |
| -40 | | | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

## Illinois Department of Transportation — SOIL BORING LOG

Division of Highways, Illinois Department of Transportation

Page 2 of 4

Date 4/14/05

ROUTE FAP 314 DESCRIPTION IL 4 over Silver Creek LOGGED BY Mark Schraeder

SECTION 108BR-1 LOCATION SW 14, SW 14, SEC. 20, TWP. 5N, RNG. 6W, 3 PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 060-0106
Station 264+00

BORING NO. 6 Pier 4
Station 264+79
Offset 55.00ft Right
Ground Surface Elev. 497.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 466.5 ft
Upon Completion ft
After Hrs. ft

| DEPTH (ft) | BLOWS (6") | UCS Qu (tsf) | MOIST (%) |
|---|---|---|---|
| Gray Clay LOAM (continued) | | | |
| | 8 | 3.1 | 16 |
| | 14 | B | |
| -45 | 4 | | |
| | 9 | 2.7 | 17 |
| | 12 | B | |
| -50 | 4 | | |
| | 8 | 2.4 | 18 |
| | 13 | B | |
| -55 | 2 | | |
| | 2 | 2.4 | 18 |
| | 9 | S/20 | |
| 437.5 | | | |
| Gray Coarse to Fine SAND | 0 | | |
| -60 | | | |

| DEPTH (ft) | BLOWS (6") | UCS Qu (tsf) | MOIST (%) |
|---|---|---|---|
| Gray Coarse to Fine SAND (continued) | | | |
| See Gradation @ 65 ft | | | |
| | 5 | | 16 |
| | 7 | NC | |
| -65 | 4 | | |
| | 10 | | 17 |
| | 15 | NC | |
| 427.5 | | | |
| Sandy Gravel | 12 | | |
| -70 | 11 | | |
| | 20 | NC | |
| 422.5 | | | |
| Gray Silty SAND | 7 | | |
| See Gradation @ 75 ft | 15 | | 22 |
| -75 | 18 | NC | |
| -80 | 4 | | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

## Illinois Department of Transportation — SOIL BORING LOG

Division of Highways, Illinois Department of Transportation

Page 3 of 4

Date 4/14/05

ROUTE FAP 314 DESCRIPTION IL 4 over Silver Creek LOGGED BY Mark Schraeder

SECTION 108BR-1 LOCATION SW 14, SW 14, SEC. 20, TWP. 5N, RNG. 6W, 3 PM

COUNTY Madison DRILLING METHOD Hollow Stem Auger HAMMER TYPE 140# Automatic

STRUCT. NO. 060-0106
Station 264+00

BORING NO. 6 Pier 4
Station 264+79
Offset 55.00ft Right
Ground Surface Elev. 497.0 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 488.5 ft
Upon Completion ft
After Hrs. ft

| DEPTH (ft) | BLOWS (6") | UCS Qu (tsf) | MOIST (%) |
|---|---|---|---|
| Gray Silty SAND | 14 | | |
| See Gradation @ 75 ft | 28 | NR | |
| (continued) | | | |
| 412.5 | | | |
| Gray Coarse to Fine SAND | 4 | | |
| See Gradation @ 85 ft | 7 | NC | 26 |
| -90 | 12 | | |
| 407.5 | 22 | | |
| Gray SHALE | 50/2" | NC | 13 |
| -95 | - | | |
| 405.0 | | | |
| Borehole continued with rock coring. | | | |
| -100 | | | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

## Illinois Department of Transportation — ROCK BORING LOG

Division of Highways, Illinois Department of Transportation

Page 4 of 4

Date 4/14/05

ROUTE FAP 314 DESCRIPTION IL 4 over Silver Creek LOGGED BY Mark Schraeder

SECTION 108BR-1 LOCATION SW 14, SW 14, SEC. 20, TWP. 5N, RNG. 6W, 3 PM

COUNTY Madison CORING METHOD

STRUCT. NO. 060-0106
Station 264+00

CORING BARREL TYPE & SIZE

BORING NO. 6 Pier 4
Station 264+79
Offset 55.00ft Right
Ground Surface Elev. 497.0 ft

Core Diameter 2 in
Top of Rock Elev. 405.00 ft
Begin Core Elev. 405.00 ft

| DEPTH (ft) | CORE (#) | RECOVERY (%) | R.Q.D. (%) | CORE TIME (min/ft) | STRENGTH (tsf) |
|---|---|---|---|---|---|
| 405.00 | | | | | |
| LIMESTONE | 1 | 90 | 30 | 10 | |
| | 1 | 90 | 30 | 10 | |
| | 1 | 90 | 30 | 8.5 | |
| -95 Limestone/Shale Lenses | | | | | |
| | 1 | 90 | 30 | 9.5 | |
| | 1 | 90 | 30 | 7 | |
| 400.00 | | | | | |
| End of Boring and Rock Core | | | | | |
| -100 | | | | | |
| -105 | | | | | |
| -110 | | | | | |

Color pictures of the cores
Cores will be stored for examination until
The "Strength" column represents the unixial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

BORING LOGS
F.A.P. RTE. 314 - SEC. 108BR-I
MADISON COUNTY
STATION 263+51
STRUCTURE NO. 060-0334

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