# STATE OF ILLINOIS
# DEPARTMENT OF TRANSPORTATION

Illinois Department of Transportation
Division of Highways
SCI Engineering

## ROCK CORE LOG



Date 2/19, 27/2008

ROUTE FAP Route 10 DESCRIPTION IL Route 267 Bridge Replacement over Taylor Creek LOGGED BY Terra Drill/SCI

SECTION 410BR-1 LOCATION Rockbridge Township, SEC. 28, TWP. 10N, RNG. 10W

COUNTY Greene CORING METHOD Rotary, surface set diamond bit

STRUCT. NO. Existing 031-0018 CORING BARREL TYPE & SIZE NW conv dbl bbl split inner
Station

BORING NO. B-1 Core Diameter 1.9 in
Station 85+04 Top of Rock Elev. 406.2 ft
Offset 35 ft Lt. Begin Core Elev. 406.2 ft
Ground Surface Elev. 492.2 ft

| DEPTH (ft) | CORE (*) | RECOVERY (%) | R.Q.D. (%) | CORE TIME (min/ft) | STRENGTH (tsf) |
|---|---|---|---|---|---|
| CLAYEY SHALE: Gray 406.2 | 1 | 90 | 45 | | |
| Moisture content - 10 percent<br>Hand Penetrometer strength test - 4.5 tsf 403.3 | | | | | |
| Boring terminated at 89 feet. | | | | | |

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

BBS, form 138 (Rev. 8-99)

Illinois Department of Transportation
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## SOIL BORING LOG



Date 02/18/08

ROUTE FAP Route 10 DESCRIPTION IL Route 267 Bridge Replacement over Taylor Creek LOGGED BY Terra Drill/SCI

SECTION 410BR-1 LOCATION Rockbridge Township, SEC. 28, TWP. 10N, RNG. 10W

COUNTY Greene DRILLING METHOD CME 550 w/HSA HAMMER TYPE Automatic

STRUCT. NO. Existing 031-0018
Station

BORING NO. B-2
Station 86+29
Offset 58 ft Rt.
Ground Surface Elev. 508.2 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 485.7 ft ▼
Upon Completion 493.2 ft ▽
After 24 Hrs. 507.7 ft ▽

| DEPTH (ft) | BLOWS (/6") | UCS Qu (tsf) | MOIST (%) |
|---|---|---|---|
| TOPSOIL - 6 Inches 507.7 ▽ | | | |
| FILL: Brown high plastic clay, some sand (A-7) | 0<br>2<br>4 | 1.8<br>P | 18 |
| 505.2 | | | |
| FILL: Brown, low plastic silty clay (A-6) and Brown, high plastic clay, some sand, trace brick (A-7) | 1<br>1<br>2 | <0.25<br>P | 22 |
| -5 502.7 | | | |
| FILL: Brown, low plastic silty clay (A-7) and Brown, high plastic clay, some sand, trace gravel (A-7) | 1<br>1<br>2 | 0.8<br>P | 20 |
| 500.2 | | | |
| CLAY: Brown, high plastic, trace sand and gravel (A-7) | 1<br>1<br>2 | 0.8<br>P | 20 |
| -10 497.7 | | | |
| SILTY CLAY: Brown, low plastic, some sand, trace gravel and organics (A-6) | 1<br>2<br>4 | 1.5<br>P | 18 |
| 495.2 | | | |
| SANDY CLAY: Brown and gray, low plastic, trace gravel (A-6) | 1<br>3<br>3 | 0.8<br>B | 14 |
| ▽ -15 492.7 | | | |
| CLAY: Brown, high plastic, some sand, trace gravel (A-7) | 0<br>1<br>2 | 0.5<br>B | 22 |
| | 2<br>3<br>4 | 3.3<br>B | 14 |
| -20 | | | |

| DEPTH (ft) | BLOWS (/6") | UCS Qu (tsf) | MOIST (%) |
|---|---|---|---|
| CLAY: Brown, high plastic, some sand, trace gravel (A-7) (continued) | | | |
| ▼ | 3<br>7<br>11 | 2.9<br>B | 15 |
| | 3<br>6<br>9 | 2.2<br>B | 17 |
| -25 | | | |
| | 4<br>9<br>11 | 2.2<br>B | 17 |
| | 5<br>7<br>12 | 2.7<br>B | 16 |
| -30 | | | |
| | 5<br>8<br>10 | 1.9<br>B | 17 |
| -35 | | | |
| Becomes brownish gray | 4<br>10<br>13 | 1.4<br>B | 17 |
| -40 | | | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

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## SOIL BORING LOG



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Station 86+29
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Ground Surface Elev. 508.2 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 485.7 ft ▼
Upon Completion 493.2 ft ▽
After 24 Hrs. 507.7 ft ▽

| DEPTH (ft) | BLOWS (/6") | UCS Qu (tsf) | MOIST (%) |
|---|---|---|---|
| CLAY: Brown, high plastic, some sand, trace gravel (A-7) (continued) | | | |
| Grades to trace sand and gravel | 5<br>12<br>13 | 1.2<br>B | 20 |
| -45 | | | |
| | 6<br>11<br>10 | 1.2<br>B | 19 |
| -50 | | | |
| | 5<br>13<br>13 | 1.1<br>B | 23 |
| -55 | | | |
| No recovery 449.7 | | | |
| Boring terminated at 58.5 feet. | 50/1" | - | |
| -60 | | | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

Johnson, Depp & Quisenberry
CONSULTING ENGINEERS
Springfield, Illinois

| | | | |
|---|---|---|---|
| DESIGNED: | K-E-G | DRAWN: | SJS |
| CHECKED: | DCD | CHECKED: | DCD |

## SOIL BORINGS (2 OF 3)
## ILLINOIS 267 OVER TAYLOR CREEK
## STRUCTURE NO. 031-0043

SHEET 18 OF 19

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 10 | 410BR-1 | GREENE | 37 | 30 |
| | STA. 85+20.50 | CONTRACT NO. 76B58 | | |
| FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT | | |

FILE: J:\JDQ\10163 IL-DBVV*8 IL 267 Taylor Creek-FINAL\1-Taylor Creek-FINAL\1-Borings.dgn
USER: DCD
DATE: 10/07/2008 15:06:35