# SB-106

## SOIL BORING LOG

PAGE 1 of 4
DATE 5/15-19/2009
LOGGED BY DR
GSI JOB No. 08201

ROUTE 170/IL3 DESCRIPTION I-70/Relocated IL 3 Interchange IDOT Job No. D-98-059-08
SECTION 82-2-1HVB-1 LOCATION I-70 & Illinois Route 3
COUNTY St. Clair DRILLING METHOD 3.25" Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 082-W309
Station: --
BORING NO. SB-106
Station: 21+47
Offset: 34.0' Left
Ground Surface Elev. 415.8

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After 24 Hrs. 396.8

| Description | Elev. | DEPTH (ft) | BLOWS (/6") | UCS Qu (tsf) | MOIST (%) |
|---|---|---|---|---|---|
| CRUSHED BRICK | 414.8 | | AS | NP | 13 |
| CINDERS-black-medium dense (Fill) | | | 7 | | |
| | | | 9 | | |
| | | | 8 | NP | 25 |
| | | | 2 | | |
| | | | 2 | | |
| | | -5 | 3 | NP | 37 |
| CLAYEY TOPSOIL-black-very loose (A-7) | 410.3 | | 1 | | |
| | | | 1 | | |
| | | | 1 | – | 28 |
| SILTY CLAY-brown & gray-medium stiff to stiff (A-6) Wet | 407.8 | | 4 | | *90* |
| | | | 5 | | |
| | | -10 | 7 | 1.2B | 29 |
| | | | 2 | | |
| | | | 3 | | |
| | | | 3 | 0.5P | 34 |
| SILTY CLAY LOAM-brown & gray-loose to medium dense (A-7) | 402.8 | | 1 | | |
| | | | 2 | | |
| | | -15 | 2 | – | 31 |
| | | | 6 | | |
| | | | 4 | | |
| | | | 5 | – | 31 |
| ▽ | | | 3 | | |
| | | | 6 | | |
| | 395.8 | -20 | 6 | – | 30 |
| SILTY LOAM-brown & gray-loose to medium dense (A-4) | | | 6 | | |
| | | | 3 | | |
| | | | 6 | – | 34 |
| SAND-brown-medium dense (A-3) | 392.8 | | 5 | | |
| | | | 6 | | |
| | | -25 | 9 | NP | 24 |
| SILTY CLAY-gray-very soft (A-7) Wet | 390.3 | | 3 | | |
| | | | 2 | | |
| | | | 2 | <0.25P | 57 |
| SANDY LOAM-gray-medium dense (A-2) | 387.8 | | 7 | | |
| | | | 11 | | |
| | | -30 | 12 | NP | 18 |
| SAND-brown & gray-medium dense to dense (A-3) | 385.3 | | 11 | | |
| | | | 10 | | |
| | | | 11 | NP | 17 |
| | | | 15 | | |
| | | | 17 | | |
| | | -35 | 11 | NP | 16 |
| | | | 12 | | |
| | | | 16 | | |
| | | | 12 | NP | 13 |
| | | | 8 | | |
| | | | 8 | | |
| | | -40 | 7 | NP | 15 |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)
NR-No Recovery

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Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After 24 Hrs. 396.8

| Description | DEPTH (ft) | BLOWS (/6") | UCS Qu (tsf) | MOIST (%) |
|---|---|---|---|---|
| SAND-brown & gray-medium dense to dense (A-3) | | 16 | | |
| | | 13 | | |
| | | 13 | NP | 13 |
| | | 12 | | |
| | | 20 | | |
| | -45 | 24 | NP | 16 |
| | | 10 | | |
| | | 5 | | |
| | | 10 | NP | 19 |
| | | 13 | | |
| | | 13 | | |
| | -50 | 16 | NP | 21 |
| | | 20 | | |
| | | 29 | | |
| | | 29 | NP | 19 |
| | | 11 | | |
| | | 14 | | |
| | -55 | 17 | NP | 19 |
| | | 9 | | |
| | | 12 | | |
| | | 16 | NP | 17 |
| | | 11 | | |
| | | 14 | | |
| | -60 | 16 | NP | 17 |
| SAND-brown & gray-medium dense to dense (A-3) | | 10 | | |
| | | 8 | | |
| | | 15 | NP | 14 |
| | | 22 | | |
| | | 15 | | |
| | -65 | 13 | NP | 20 |
| | | 15 | | |
| | | 21 | | |
| | | 20 | NP | 17 |
| | | 17 | | |
| | | 14 | | |
| | -70 | 17 | NP | 20 |
| | | 13 | | |
| | | 18 | | |
| | | 18 | NP | 20 |
| | | 18 | | |
| | | 19 | | |
| | -75 | 19 | NP | 18 |
| | | 9 | | |
| | | 10 | | |
| | | 21 | NP | 19 |
| | | 14 | | |
| | | 10 | | |
| | -80 | 15 | NP | 20 |

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Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After 24 Hrs. 396.8

| Description | Elev. | DEPTH (ft) | BLOWS (/6") | UCS Qu (tsf) | MOIST (%) |
|---|---|---|---|---|---|
| SAND-brown & gray-medium dense to dense (A-3) | | | 12 | | |
| | | | 11 | | |
| | | | 15 | NP | 14 |
| | | | 11 | | |
| | | | 14 | | |
| | | -85 | 14 | NP | 13 |
| | | | 10 | | |
| | | | 12 | | |
| | | | 23 | NP | 16 |
| SAND with Gravel-brown & gray-medium dense (A-1-b) | 327.8 | | 16 | | |
| | | | 11 | | |
| | | -90 | 12 | NP | 12 |
| SAND-brown & gray-medium dense to dense (A-3) | 325.3 | | 11 | | |
| | | | 11 | | |
| | | | 11 | NP | 13 |
| | | | 11 | | |
| | | | 13 | | |
| | | -95 | 17 | NP | 18 |
| | | | 11 | | |
| | | | 11 | | |
| | | | 12 | NP | 17 |
| | | | 9 | | |
| | | -100 | 8 | NP | 18 |
| SAND-brown & gray-medium dense to dense (A-3) | | | 8 | | |
| | | | 10 | | |
| | | | 10 | NP | 15 |
| SAND with Gravel-brown & gray-medium dense (A-1-b) | 312.8 | | 12 | | |
| | | | 9 | | |
| | | -105 | 8 | NP | 12 |
| SAND & GRAVEL-brown & gray-very dense (A-1) | 310.3 | | 50/4" | | |
| | | | | NP | 10 |
| | | | 36 | | |
| | | | 45 | | |
| | | -110 | 49 | NP | 9 |
| | | | 40 | | |
| | | | 45 | | |
| | | | 50/3" | NP | 9 |
| | | | 50/1" | | |
| | | -115 | | | NR |
| RUN 1 (-115.0' to -125.0') Mississippian System, Valmeyeran Series Limestone. Light gray to gray & fine grained with horizontal bedding. Horizontal fractures @ -115.1', -115.4', -116.0', -117.3', -118.8', -119.3', -120.5', -121.9' & -122.5'. ¼" clay parting @ -113.0'. Horizontal fractures @ -113.3' & -134.6'. | 300.8 | | | | RUN 1 |
| | | -120 | | | |

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