# SB-123

## SOIL BORING LOG

PAGE 1 of 4
DATE 5/28-6/1/2009
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. 082-0329
Station: --
BORING NO. SB-123
Station: 1678+75
Offset: 46.5' Right
Ground Surface Elev. 417.0

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter 405.5
Upon Completion n/a
After 24 Hrs. n/a

| Description | Elev. | DEPTH (ft) | BLOWS (/6") | UCS Qu (tsf) | MOIST (%) |
|---|---|---|---|---|---|
| SILTY CLAY-brown (A-6) | 416.0 | | AS | - | 24 |
| CINDERS & STONE-black-dense (Fill) | 414.0 | | 14 / 18 | NP | 8 |
| SANDY LOAM with Gravel-black-medium dense (A-2-4) Fill | 411.5 | -5 | 8 / 5 | NP | 16 |
| CINDERS & SAND-black-very loose to loose (Fill) | 406.5 | -10 | 2 / 3 / 4 / 2 / 2 / 1 | NP | 21 |
| SILTY CINDERS with Organics-black-very loose to loose (Fill) Wet | 395.5 | -15 | 1 / 1 / 1 / 0 / 1 / 1 | NP | 57 |
| SILTY CLAY-dark gray (A-7) Wet | 394.0 | -20 | 1 / 2 / 3 / 1 / 2 | NP | 61 |
| SAND-brown & gray-medium dense (A-3) | 389.0 | -25 | 2 / 2 / 7 / 5 / 7 / 10 | NP | 26 |
| SANDY LOAM-brown & gray-dense (A-2) | | -30 | 18 / 20 / 27 | NP | 24 |
| | | -35 | 16 / 19 / 23 | NP | 24 |
| | | -40 | 18 / 24 / 28 | NP | 23 |
| | | -40 | 18 / 24 / 29 | NP | 25 |

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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After 24 Hrs. n/a

| Description | Elev. | DEPTH (ft) | BLOWS (/6") | UCS Qu (tsf) | MOIST (%) |
|---|---|---|---|---|---|
| SANDY LOAM-brown & gray-dense (A-2) | 374.0 | | 14 / 17 | NP | 25 |
| SAND-brown & gray-loose to dense (A-3) | | -45 | 3 / 2 / 5 | NP | 29 |
| | | -50 | 4 / 7 / 9 | NP | 25 |
| | | -50 | 4 / 7 / 6 | NP | 26 |
| | | -55 | 5 / 6 / 9 | NP | 27 |
| | | -60 | 8 / 8 / 9 | NP | 26 |
| | | -60 | 8 / 8 / 8 | NP | 26 |
| SAND-brown & gray-loose to dense (A-3) | | -65 | 8 / 10 / 19 | NP | 18 |
| | | -70 | 9 / 9 / 13 | NP | 26 |
| | | -70 | 13 / 9 / 13 | NP | 25 |
| | | -75 | 11 / 16 / 12 | NP | 22 |
| | | -75 | 10 / 15 / 11 | NP | 22 |
| | | -80 | 10 / 11 / 13 | NP | 24 |
| | | -80 | 9 / 20 / 20 | NP | 26 |

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Groundwater Elevation:
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Upon Completion n/a
After 24 Hrs. n/a

| Description | Elev. | DEPTH (ft) | BLOWS (/6") | UCS Qu (tsf) | MOIST (%) |
|---|---|---|---|---|---|
| SAND-brown & gray-loose to dense (A-3) | 331.5 | | 12 / 13 / 15 | NP | 16 |
| | | -85 | 11 / 9 / 9 | NP | 15 |
| SAND with Gravel-brown & gray-medium dense (A-1-b) | 329.0 | | 10 / 11 / 13 | NP | 15 |
| SAND-brown & gray-medium dense (A-3) | 324.0 | | 8 / 10 / 11 | NP | 18 |
| | | -90 | 11 / 16 / 8 | NP | 16 |
| SAND with Gravel-brown & gray-medium dense (A-1-b) | 319.0 | | 9 / 12 / 10 | NP | 15 |
| | | -95 | 13 / 13 / 12 | NP | 15 |
| SAND-brown & gray-dense (A-3) | | -100 | 12 / 13 / 20 | NP | 16 |
| SAND brown & gray-dense (A-3) | 316.5 | | 17 / 19 / 27 | NP | 14 |
| SAND with Gravel-brown & gray-dense (A-1-b) | 311.5 | -105 | 42 / 23 / 18 | NP | 15 |
| SAND-brown & gray-dense (A-3) | 310.0 | | 25 / 50/4" | NP | 13 |
| SAND & GRAVEL-brown & gray-very dense (A-1) | | -110 | 50/2" | NP | 19 |
| | | -115 | 27 / 50/6" | NP | 16 |
| | | -115 | 44 / 50/3" | NP | 15 |
| RUN 1 (-115.5' to -125.5') Mississippian System, Valmeyeran Series Limestone | 301.5 | -120 | RUN 1 | | |

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