# WB-01

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
865 Meridian Court, Suite 204
Naperville, Illinois 60563
630-355-1888

## SOIL BORING LOG

PAGE 1 of 2
DATE 7/20/2009
LOGGED BY DR
GSI JOB No. 08201

ROUTE I-70
DESCRIPTION I-70 Tri-Level Connection IDOT Job No. D-98-059-08
SECTION XX
LOCATION I-70 Curved Approach Structure-Retaining Wall
COUNTY St. Clair
DRILLING METHOD Straight Flight Auger/Rotary
HAMMER TYPE Diedrich Automatic

STRUCT. NO. XX
Station: 140+70 to 147+35
BORING NO. WB-01
Station: 140+23
Offset: 34.5' Left
Ground Surface Elev. 406.0

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter 397.5 ▼
Upon Completion n/a ▽
After 24 Hrs. n/a ▽

| Description | Elev. | DEPTH (ft) | BLOWS (/6") | UCS Qu (tsf) | MOIST (%) |
|---|---|---|---|---|---|
| TOPSOIL-black | | | AS | - | 31 |
| | XX | | 1 | | 85 |
| | | | 2 | | |
| | | | 3 | 1.3B | 33 |
| SILTY CLAY-brown-medium stiff to stiff (A-6) Wet | | | 1 | | |
| | | | 2 | | |
| | | -5 | 2 | 1.26P | 33 |
| | | | 1 | | 82 |
| | | | 2 | | |
| | | | 3 | 0.7B | 34 |
| | | | 0 | | 77 |
| | | | 1 | | |
| | | -10 | 1 | 0.15B | 43 |
| | XX | | | | |
| SILTY CLAY-brown-very soft (A-7) Wet | | | 0 | | |
| | | | 1 | | |
| | | | 2 | NP | 37 |
| | XX | | | | |
| SAND-brown-loose (A-2) | | | 0 | | |
| | | | 2 | | |
| | | -15 | 3 | NP | 29 |
| | XX | | | | |
| SAND-brown-medium dense to dense (A-3) | | | 5 | | |
| | | | 7 | | |
| | | | 7 | NP | 19 |
| | | | 3 | | |
| | | | 8 | | |
| | | -20 | 11 | NP | 18 |
| SAND-brown-medium dense to dense (A-3) | | -25 | 9 | NP | 23 |
| SAND-gray-medium dense to dense (A-3) | | | 5 | | |
| | | | 7 | | |
| | | | 7 | NP | 22 |
| | | | 10 | | |
| | | | 12 | | |
| | | -40 | 13 | NP | 19 |

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

# WB-01

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
865 Meridian Court, Suite 204
Naperville, Illinois 60563
630-355-1888

## SOIL BORING LOG

PAGE 2 of 2
DATE 7/20/2009
LOGGED BY DR
GSI JOB No. 08201

ROUTE I-70
DESCRIPTION I-70 Tri-Level Connection IDOT Job No. D-98-059-08
SECTION XX
LOCATION I-70 Curved Approach Structure-Retaining Wall
COUNTY St. Clair
DRILLING METHOD Straight Flight Auger/Rotary
HAMMER TYPE Diedrich Automatic

STRUCT. NO. XX
Station: 140+70 to 147+35
BORING NO. WB-01
Station: 140+23
Offset: 34.5' Left
Ground Surface Elev. 406.0

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter 397.5 ▼
Upon Completion n/a ▽
After 24 Hrs. n/a ▽

| Description | Elev. | DEPTH (ft) | BLOWS (/6") | UCS Qu (tsf) | MOIST (%) |
|---|---|---|---|---|---|
| | | | 12 | | |
| | | | 16 | | |
| | | | 19 | NP | 23 |
| SAND-gray-medium dense to dense (A-3) | | | 8 | | |
| | | | 9 | | |
| | | -45 | 11 | NP | 22 |
| | | | 9 | | |
| | | | 9 | | |
| | | | 10 | NP | 22 |
| | | | 16 | | |
| | | | 19 | | |
| | | -50 | 21 | NP | 22 |
| | | | 12 | | |
| | | | 9 | | |
| | | | 8 | NP | 23 |
| | XX | | | | |
| SAND with Gravel-gray-loose (A-1-b) | | | 5 | | |
| | | | 4 | | |
| | | -55 | 3 | NP | 16 |
| | XX | | | | |
| SAND-gray-loose to dense (A-3) | | | 10 | | |
| | | | 6 | | |
| | | | 3 | NP | 22 |
| | | | 7 | | |
| | | | 7 | | |
| | | -60 | 7 | NP | 22 |
| SAND-gray-medium dense to dense (A-3) | | | 9 | | |
| | | | 16 | | |
| | | | 17 | NP | 23 |
| SAND-gray-loose to dense (A-3) | | | 13 | | |
| | | | 15 | NP | 24 |
| | | | 11 | | |
| | | | 12 | | |
| | | -70 | 16 | NP | 25 |
| | | | 14 | | |
| | | | 16 | | |
| | | | 15 | NP | 24 |
| | | | 13 | | |
| | | | 14 | | |
| | | -75 | 11 | NP | 22 |
| | XX | | | | |
| SAND with Gravel-gray-medium dense (A-1-b) | | | 9 | | |
| | | | 19 | | |
| | | | 8 | NP | 12 |
| End Of Boring @ -80.0' | | | 10 | | |
| Straight Flight Augers To -10.0' | | | | | |
| Rotary Drilling To Completion | | | 12 | | |
| 10.0' of 4.0"* Casing Used | XX | -80 | 16 | NP | 10 |

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

# WB-02

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
865 Meridian Court, Suite 204
Naperville, Illinois 60563
630-355-1888

## SOIL BORING LOG

PAGE 1 of 2
DATE 7/20-21/2009
LOGGED BY DR
GSI JOB No. 08201

ROUTE I-70
DESCRIPTION I-70 Tri-Level Connection IDOT Job No. D-98-059-08
SECTION XX
LOCATION I-70 Curved Approach Structure-Retaining Wall
COUNTY St. Clair
DRILLING METHOD Straight Flight Auger/Rotary
HAMMER TYPE Diedrich Automatic

STRUCT. NO. XX
Station: 140+70 to 147+35
BORING NO. WB-02
Station: 140+72
Offset: 34.5' Left
Ground Surface Elev. 406.0

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter 397.5 ▼
Upon Completion n/a ▽
After 24 Hrs. n/a ▽

| Description | Elev. | DEPTH (ft) | BLOWS (/6") | UCS Qu (tsf) | MOIST (%) |
|---|---|---|---|---|---|
| TOPSOIL-black | | | AS | - | 31 |
| | XX | | 1 | | 87 |
| | | | 2 | | |
| | | | 3 | 1.4B | 33 |
| SILTY CLAY-brown-stiff (A-6) Wet | | | 1 | | |
| | | | 2 | | |
| | | -5 | 2 | 1.1B | 33 |
| | XX | | | | |
| | | | 1 | | 86 |
| | | | 1 | | |
| | | | 1 | 0.3B | 34 |
| SILTY CLAY-brown-soft (A-6/A-7) Wet | | | 1 | | 88 |
| | | | 1 | | |
| | | -10 | 1 | 0.3B | 34 |
| | XX | | | | |
| SANDY LOAM-brown & gray-loose (A-2) | | | 1 | | |
| | | | 1 | | |
| | | | 4 | NP | 26 |
| | XX | | | | |
| SAND-brown-medium dense to dense (A-3) | | | 5 | | |
| | | | 6 | | |
| | | -15 | 5 | NP | 21 |
| | | | 4 | | |
| | | | 7 | | |
| | | | 6 | NP | 20 |
| | | | 5 | | |
| | | | 6 | | |
| | | -20 | 10 | NP | 18 |
| SAND-brown-medium dense to dense (A-3) | | -25 | 8 | NP | 21 |
| | | | 8 | | |
| | | | 11 | | |
| | | | 21 | NP | 19 |
| | | | 10 | | |
| | | | 12 | | |
| | | -30 | 14 | NP | 19 |
| | | | 10 | | |
| | | | 13 | | |
| | | | 12 | NP | 19 |
| | XX | | | | |
| | | | 6 | | |
| | | | 7 | | |
| | | -35 | 10 | NP | 19 |
| | XX | | | | |
| SAND-gray-medium dense to dense (A-3) | | | 9 | | |
| | | | 9 | | |
| | | | 8 | NP | 23 |
| | | | 9 | | |
| | | | 13 | | |
| | | -40 | 13 | NP | 26 |

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