| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| FAP 42 (IL 127) | 106 (B-1) | Montgomery | 61 | 52 |
| FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT- | | |

SHEET NO. 19

20 SHEETS

Contract #72150

Illinois Department of Transportation
Bureau of Bridges and Structures
SOIL BORING LOG

Page 1 of 3

Date 12/2/06

ROUTE FAP 42 (IL 127) DESCRIPTION IL 127 over Bearcat Creek LOGGED BY M. Tanner

SECTION 106 (B-1) LOCATION SW 14, SEC. 12, TWP. 7N, RNG. 4W, 3 PM

COUNTY Montgomery DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. 068-0023 Rt. / 068-0506 Fr.
Station 126+58

BORING NO. 1 S ABUT
Station 126+59
Offset 37.62 LT
Ground Surface Elev. 597.0 ft

Surface Water Elev. 540.9 ft
Stream Bed Elev. 540.9 ft

Groundwater Elev.:
First Encounter 545.5 ft
Upon Completion Washed ft
After 42 Hrs. 550.0 ft

| Description | Elev. | Depth (ft) | Blows /6" | Qu (tsf) | MC (%) |
|---|---|---|---|---|---|
| Graylish Brown Moist LOAM | | | | | |
| | | 0 | | | |
| | | 1 | 0.4 | 19 | |
| | | -5 | 2 | B | |
| Brown and Gray V. Moist SILTY CLAY LOAM | 551.50 | | | | |
| | | 0 | | | |
| | | 1 | 0.3 | 26 | |
| | | | 1 | B | |
| Gray and Brown Wet SILTY CLAY LOAM | 548.00 | | | | |
| | | 0 | | | |
| WOH | | 0 | 0.1 | 26 | |
| | | -10 | 0 | B | |
| | | 0 | | | |
| Brown Fine Wet SAND Free Water | 545.50 | 0 | | | |
| | | 3 | | | |
| | | 0 | | | |
| Gray Coarse SAND w/Some Fine Gravel | | 2 | | | |
| | | -15 | 3 | | |
| Gray Wet SILTY CLAY LOAM w/Interbedded Fine Sand Seams | 541.50 | 0 | | | |
| | | 0 | 0 | 30 | |
| WOH | | 0 | Slump | | |
| Gray Med. SAND | 526.50 | | | | |
| | | 0 | | | |
| WOP | | 0 | | | |
| | | -20 | 0 | | |

| Description | Elev. | Depth (ft) | Blows /6" | Qu (tsf) | MC (%) |
|---|---|---|---|---|---|
| Gray Med. SAND (continued) | | | | | |
| | | | 1 | | |
| Gray Med. Sandy GRAVEL Washed | | | 2 | | |
| | | | 3 | | |
| | | | 2 | | |
| | | | 5 | | |
| | | -25 | 6 | | |
| | | | 1 | | |
| | | | 2 | | |
| | | -30 | 3 | | |
| Gray Fine SAND Washed | 516.50 | | | | |
| | | | 1 | | |
| | | | 2 | | |
| | | -35 | 3 | | |
| Gray Moist CLAY LOAM (TIS) | | | | | |
| | | | 1 | | |
| | | | 5 | 4.1 | 13 |
| | | -40 | 9 | B | |
| | | | 1 | | |
| | | | 5 | 4.1 | 13 |
| | | -45 | 9 | B | |
| | | | 1 | | |
| | | | 7 | 4.5 | 12 |
| | | -50 | 13 | P | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H. - Sampler Advanced By Weight of Hammer, W.O.P. - Advanced by Weight of Pipe, B.S. - Before Seating
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) ISBS, form 137 (Rev. 5-86)

Illinois Department of Transportation
Bureau of Bridges and Structures
SOIL BORING LOG

Page 2 of 3

Date 12/2/06

ROUTE FAP 42 (IL 127) DESCRIPTION IL 127 over Bearcat Creek LOGGED BY M. Tanner

SECTION 106 (B-1) LOCATION SW 14, SEC. 12, TWP. 7N, RNG. 4W, 3 PM

COUNTY Montgomery DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. 068-0023 Rt. / 068-0506 Fr.
Station 126+58

BORING NO. 1 S ABUT
Station 126+59
Offset 37.62 LT
Ground Surface Elev. 597.0 ft

Surface Water Elev. 540.9 ft
Stream Bed Elev. 540.9 ft

Groundwater Elev.:
First Encounter 545.5 ft
Upon Completion Washed ft
After 42 Hrs. 550.0 ft

| Description | Elev. | Depth (ft) | Blows /6" | Qu (tsf) | MC (%) |
|---|---|---|---|---|---|
| Gray Moist CLAY LOAM (TIS) (continued) | | | | | |
| | | 2 | | | |
| Gray Moist CLAY LOAM (TIS) | | | 5 | 4.3 | 12 |
| | | -55 | 9 | B | |
| | | | 1 | | |
| | | | 7 | 4.9 | 12 |
| | | -60 | 12 | B | |
| | | | 1 | | |
| | | | 7 | 4.9 | 13 |
| | | -65 | 11 | B | |
| | | 2 | | | |
| | | | 6 | 2.9 | 16 |
| | | -70 | 7 | B | |
| Gray Moist CLAY LOAM (TIS) (continued) | | | | | |
| | | 2 | | | |
| | | | 5 | 4.0 | 13 |
| | | -75 | 8 | B | |
| Blue Gray Weathered Clayey SHALE Bedrock | 492.50 | | | | |
| | | | 26 | | |
| | | | 35 | +10 | 29 |
| | | -80 | 47 | H | |
| | | | 1 | | |
| | | | 25 | | |
| Blue Gray and Olive Brown | | | 30 | 6 | 17 |
| | | -85 | 37 | H | |
| Olive Brown and Blue Gray Moist Weathered Clayey Shale Interbedded w/Argillaceous L.S. | | | | | |
| | | 2 | | | |
| | | | 43 | +10 | 15 |
| | | -90 | 7 | B | |
| Boring Completed | 477.00 | | 500/4" | H | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
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Bureau of Bridges and Structures
SOIL BORING LOG

Page 1 of 3

Date 12/2/06

ROUTE FAP 42 (IL 127) DESCRIPTION IL 127 over Bearcat Creek LOGGED BY M. Tanner

SECTION 106 (B-1) LOCATION SW 14, SEC. 12, TWP. 7N, RNG. 4W, 3 PM

COUNTY Montgomery DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. 068-0023 Rt. / 068-0506 Fr.
Station 126+58

BORING NO. 2 FIRL 3
Station 126+63
Offset 35.62 LT
Ground Surface Elev. 558.5 ft

Surface Water Elev. 540.9 ft
Stream Bed Elev. 540.9 ft

Groundwater Elev.:
First Encounter 545.5 ft
Upon Completion Washed ft
After 24 Hrs. 551.0 ft

| Description | Elev. | Depth (ft) | Blows /6" | Qu (tsf) | MC (%) |
|---|---|---|---|---|---|
| Tan Dry Fine SAND w/Sand Lean Seams | | | | | |
| | | 0 | | | |
| | | 1 | | | |
| | | 2 | | | |
| Gray Wet SAND LOAM | 551.50 | -5 | | | |
| | | 0 | | | |
| | | 0 | 0.2 | 15 | |
| | | 0 | B | | |
| Gray V. Moist SILTY CLAY LOAM w/Brown Med. Sandy Gravel | 548.00 | | | | |
| | | 0 | | | |
| | | 0 | 0.4 | 15 | |
| | | 1 | B | | |
| Brown Med. to Coarse Sandy GRAVEL Free Water | 547.50 | | | | |
| | | -10 | | | |
| | | 2 | | | |
| | | 2 | | | |
| | | 2 | | | |
| | | 2 | | | |
| Brown to Gray Med. Dirty SAND Washed | | 2 | | | |
| | | 2 | | | |
| | | -15 | | | |
| | | 1 | | | |
| Gray Med. Dirty Sand w/Med. Sandy Gravel Seams Washed | | 1 | | | |
| | | 2 | | | |
| | | 2 | | | |
| Brown Med. Sandy GRAVEL Washed | | 2 | | | |
| | | 2 | | | |
| | | -20 | | | |

| Description | Elev. | Depth (ft) | Blows /6" | Qu (tsf) | MC (%) |
|---|---|---|---|---|---|
| Brown Med. to Coarse Sandy GRAVEL Free Water (continued) Poor Recovery Washed | | | | | |
| | | | 1 | | |
| | | | 2 | | |
| | | | 2 | | |
| Gray Coarse SAND w/some Coarse Gravel Washed | | | 2 | | |
| | | | 2 | | |
| | | -25 | | | |
| | 526.50 | | | | |
| Gray Moist CLAY LOAM (TIS) Washed | | | | | |
| | | | 2 | | |
| | | | 7 | 4.3 | 12 |
| | | -30 | 12 | B | |
| | | | 2 | | |
| | | | 7 | 5.5 | 12 |
| | | -35 | 10 | B | |
| | | | 1 | | |
| | | | 8 | 4.9 | 11 |
| | | -40 | 10 | B | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
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Illinois Department of Transportation
Bureau of Bridges and Structures
SOIL BORING LOG

Page 2 of 3

Date 12/2/06

ROUTE FAP 42 (IL 127) DESCRIPTION IL 127 over Bearcat Creek LOGGED BY M. Tanner

SECTION 106 (B-1) LOCATION SW 14, SEC. 12, TWP. 7N, RNG. 4W, 3 PM

COUNTY Montgomery DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. 068-0023 Rt. / 068-0506 Fr.
Station 126+58

BORING NO. 2 FIRL 3
Station 126+63
Offset 35.62 LT
Ground Surface Elev. 558.5 ft

Surface Water Elev. 540.9 ft
Stream Bed Elev. 540.9 ft

Groundwater Elev.:
First Encounter 545.5 ft
Upon Completion Washed ft
After 24 Hrs. 551.0 ft

| Description | Elev. | Depth (ft) | Blows /6" | Qu (tsf) | MC (%) |
|---|---|---|---|---|---|
| Gray Moist CLAY LOAM (TIS) (continued) | | | | | |
| | | 2 | | | |
| | | | 7 | 5.3 | 11 |
| | | -45 | 11 | B | |
| Gray Moist CLAY LOAM (TIS) | | | | | |
| | | 2 | | | |
| | | | 4 | 5.1 | 13 |
| | | -50 | 6 | B | |
| | | | 1 | | |
| | | | 3 | 1.5 | 16 |
| | | -55 | 4 | B | |
| Gray Moist CLAY LOAM (TIS) (continued) | | | | | |
| | | 1 | | | |
| | | | 4 | 5.3 | 15 |
| | | -60 | 7 | B | |
| Olive Brown and Blue Gray Shaley CLAY Bedrock | 496.50 | | | | |
| | | 7 | | | |
| | | | 22 | 9 | 19 |
| | | -65 | 30 | H | |
| | | | 5 | | |
| | | | 23 | 6 | 16 |
| | | -70 | 30 | H | |
| Gray Dry Fissile Clayey SHALE | 481.50 | | | | |
| | | | 21 | | |
| | | | 100 | +10 | 12 |
| | | -75 | 5" | H | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H. - Sampler Advanced By Weight of Hammer, W.O.P. - Advanced by Weight of Pipe, B.S. - Before Seating
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LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

Designed By: RKM | Checked By: MTH | Drawn By: AJF
Date: 04/2007 | File: 068-0506.DGN

| REVISIONS | |
|---|---|
| NAME | DATE |

ILLINOIS DEPARTMENT OF TRANSPORTATION
SOIL BORINGS - 1
ILLINOIS ROUTE 127 OVER
BEARCAT CREEK
F.A.P. ROUTE 42 - SECTION 106 (B-1)
MONTGOMERY COUNTY
STA. 126+58.45
STRUCTURE NO. 068-0506

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