

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	DATE	SHEET	SHEET NO. 18
FAP 328	4	CLAY	109	95	18 SHEETS
PRI. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-	CONTRACT NO. 74107		

\* (89R-4)B-1

### Illinois Department of Transportation SOIL BORING LOG

Page 1 of 3  
Date: 7/12/07  
LOGGED BY: E. Sandbacher

ROUTE FAP 328 (US 45) DESCRIPTION: Seminary Creek  
SECTION BRT 6BR3 BBR4B-I LOCATION: Sec 16 - NW 1/4 Sec 17 - NE 1/4 SEC. TWP. 2 N. R. 10 E. 3 PM

STRUCT. NO.	Station	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.	First Encounter	Upon Completion	After 24 Hrs.	Drill Depth	Penetration	Hammer Type	Auto 1408
013-0015	968+56	420.40	420.33	351.2	351.2	351.2	351.2	351.2	1	1	1
<p>1<sup>st</sup> asphalt pavement: 11' 0.4" (R) (67) (14) (34)</p> <p>Very soft to medium, very damp, gray, SILTY LOAM: 3</p> <p>Medium to stiff, damp, reddish brown, gray, LOAM: 4-10, 17</p> <p>Soft, damp, brownish-gray, CLAY: 21.5-24</p> <p>Soft, damp, gray, CLAY LOAM: 24</p> <p>Medium to stiff, damp, brown, SANDY LOAM: 24</p> <p>Soft, damp, gray, CLAY LOAM: 30.15</p> <p>Soft, damp, brown mottled gray, CLAY: 41.35</p> <p>Soft, damp, gray, CLAY TILL: 41.15</p>											

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer). The SPT (N value) is the sum of the last two blow values in each sampling zone (ASTM D 1586).

BBS, from 137 (Rev. 8-99)

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013-0015	968+56	420.40	420.33	351.2	351.2	351.2	351.2	351.2	1	1	1
<p>Soft, damp, gray, CLAY TILL (continued): 4</p> <p>Soft, damp, gray, CLAY TILL (continued): 3 1.2 19</p> <p>Soft, damp, gray, CLAY LOAM: 3 0.7 23</p> <p>Soft, damp, gray, CLAY TILL (continued): 4</p> <p>Soft, damp, gray, CLAY LOAM: 4 1</p> <p>Soft, damp, gray, CLAY LOAM TILL: 2 1.3 20</p> <p>Soft, damp, gray, CLAY LOAM TILL: 3 8</p> <p>Soft, damp, gray, CLAY LOAM: 1 2 1.8 18</p> <p>Medium, wet, gray, fine grained SAND: 4</p> <p>Soft, damp, gray, SANDY LOAM: 2 1.5 21</p> <p>Soft, damp, gray, SANDY LOAM: 3 1</p> <p>Soft, damp, gray, SANDY LOAM: 2 1.5 21</p>											

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer). The SPT (N value) is the sum of the last two blow values in each sampling zone (ASTM D 1586).

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STRUCT. NO.	Station	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.	First Encounter	Upon Completion	After 24 Hrs.	Drill Depth	Penetration	Hammer Type	Auto 1408
013-0015	968+56	420.40	420.33	351.2	351.2	351.2	351.2	351.2	1	1	1
<p>Soft, damp, gray, SANDY LOAM (continued): 11 0.4 15</p> <p>Very dense, moist, gray, SANDSTONE: 342.10</p> <p>Extent of exploration: 340.00</p> <p>Benchmark: BM 208 R/W Spine at 107' 60.21" on W side of US-45. Sta. 968+25.28 7' W of centerline = 429.86 elevation. Provided by Program Development.</p>											

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer). The SPT (N value) is the sum of the last two blow values in each sampling zone (ASTM D 1586).

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STRUCT. NO.	Station	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.	First Encounter	Upon Completion	After 24 Hrs.	Drill Depth	Penetration	Hammer Type	Auto 1408
013-0015	968+56	420.40	420.33	351.2	351.2	351.2	351.2	351.2	1	1	1
<p>15' asphalt pavement: 11' 0.4" (R) (67) (14) (34)</p> <p>Very soft to medium, very damp, gray, SILTY LOAM: 3</p> <p>Medium to stiff, damp, reddish brown, gray, LOAM: 4-10, 17</p> <p>Soft, damp, brownish-gray, CLAY: 21.5-24</p> <p>Soft, damp, gray, SILTY CLAY: 24</p> <p>Soft, damp, gray, SANDY LOAM: 24</p> <p>Soft, damp, gray, SILTY CLAY: 30.15</p> <p>Soft, damp, gray, SILTY LOAM: 30.15</p> <p>Soft, damp, gray mottled red, SILTY CLAY: 41.35</p> <p>Soft, damp, reddish brown, CLAY w/ trace gravel: 41.35</p> <p>Soft, damp, reddish brown, CLAY LOAM TILL: 41.15</p>											

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer). The SPT (N value) is the sum of the last two blow values in each sampling zone (ASTM D 1586).

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STRUCT. NO.	Station	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.	First Encounter	Upon Completion	After 24 Hrs.	Drill Depth	Penetration	Hammer Type	Auto 1408
013-0016	968+58	420.40	420.33	351.1	351.1	351.1	351.1	351.1	1	1	1
<p>Soft, damp, gray, marlified silty CLAY w/ trace gravel (continued): 4 1.6 19</p> <p>Soft, damp, gray, SILTY CLAY: 4 8</p> <p>Medium to stiff, damp, gray, SILTY CLAY: 28.08</p> <p>Very soft, wet, gray, SANDY LOAM: 3 0.7 20</p> <p>Soft, damp, gray, SANDY LOAM: 3 8</p>											

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer). The SPT (N value) is the sum of the last two blow values in each sampling zone (ASTM D 1586).

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STRUCT. NO.	Station	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.	First Encounter	Upon Completion	After 24 Hrs.	Drill Depth	Penetration	Hammer Type	Auto 1408
013-0016	968+58	420.40	420.33	351.1	351.1	351.1	351.1	351.1	1	1	1
<p>Loose, wet, gray, fine grained SAND: 4% passing #200 sieve (continued): 3 5 24</p> <p>Very dense, moist, gray, SANDSTONE: 340.00</p> <p>Granite concrete with rock coring (continued): 340.00</p>											

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer). The SPT (N value) is the sum of the last two blow values in each sampling zone (ASTM D 1586).

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### Illinois Department of Transportation ROCK CORE LOG

Page 4 of 4  
Date: 7/11/07  
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ROUTE FAP 328 (US 45) DESCRIPTION: Seminary Creek  
SECTION BRT 6BR3 BBR4B-I LOCATION: Sec 16 - NW 1/4 Sec 17 - NE 1/4 SEC. TWP. 2 N. R. 10 E. 3 PM

STRUCT. NO.	Station	Core Depth	Core Diameter	Top of Core Elev.	Regr. Core Elev.	Ground Surface Elev.	Core Type	Notes
013-0016	968+58	2.05	4	341.58	340.58	420.33	SANDSTONE	
<p>Rock core B-2 @ 62.7 to 64.7 depth = 173' lat.</p> <p>Black COAL: 342.08</p> <p>Soft, gray, interbedded, weathered, SANDSTONE: 341.58</p> <p>Extent of exploration: 340.00</p> <p>Benchmark: BM 208 R/W Spine at 107' 60.21" on W side of US-45. Sta. 968+25.28 7' W of centerline = 429.86 elevation. Provided by Program Development.</p>								

The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D 2938).

BBS, from 138 (Rev. 8-99)

# ESCA

CONSULTANTS, INC.

DESIGNED BY: MTD 04/08  
DRAWN BY: DWH 04/08  
CHECKED BY: DAJ 05/08  
APPROVED BY: RDP 08/08

**BORING LOGS**  
**US 45 OVER SEMINARY CREEK**  
**FAP ROUTE 328 - SECTION (BBR-4)B-1**  
**CLAY COUNTY**  
**STATION 968+56.00**  
**STRUCTURE NO. 013-0043**