



**Illinois Department of Transportation**  
Division of Highways  
Illinois Department of Transportation

**SOIL BORING LOG**

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Date 5/10/10

ROUTE FAP 749 (IL 133) DESCRIPTION Embarras River LOGGED BY E. Sandschafer

SECTION (122BR)B-1 LOCATION W 12 - Sec 14, E 12 - Sec 15, SEC., TWP. 14 N, RNG. 10 E, 3 PM

COUNTY Coles DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 015-0030  
Station 713+10  
BORING NO. 102 (2010)  
Station 713+36  
Offset 6.0ft Lt  
Ground Surface Elev. 623.83 ft

Surface Water Elev. 596.00 ft  
Stream Bed Elev. 593.00 ft  
Groundwater Elev.:  
First Encounter 594.3 ft  
Upon Completion 596.8 ft  
After 24 Hrs. 598.8 ft

DEPTH (ft)	SOIL DESCRIPTION	BLU (Bulge)	SLU (Shear)	PLU (Penetrometer)	ESU (Estimated)
0	1 1/2" asphalt on 7" bridge deck.				
0	Air.				
5	Air.				
25	Soft, very damp, dark gray, SILTY LOAM w/wood chunk.	0	0.3	32	
30	Medium, wet, gray, fine grained, SAND, 3% passing #200 sieve.	1		22	
35	Gray, SANDSTONE.				
35	Very dense, moist, brown, SANDY CLAY SHALE.	505"		6	
35	Borehole continued with rock coring.	502"			
35		502"			

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) BBS, form 137 (Rev. 8-99)



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**ROCK CORE LOG**

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Date 5/10/10

ROUTE FAP 749 (IL 133) DESCRIPTION Embarras River LOGGED BY E. Sandschafer

SECTION (122BR)B-1 LOCATION W 12 - Sec 14, E 12 - Sec 15, SEC., TWP. 14 N, RNG. 10 E, 3 PM

COUNTY Coles CORING METHOD Rotary, surf set diamond bit

STRUCT. NO. 015-0030  
Station 713+10  
BORING NO. 102 (2010)  
Station 713+36  
Offset 6.0ft Lt  
Ground Surface Elev. 623.83 ft

CORING BARREL TYPE & SIZE NW, conv split inner bit  
Core Diameter 2.06 in  
Top of Rock Elev. 592.83 ft  
Begin Core Elev. 588.83 ft

DEPTH (ft)	ROCK DESCRIPTION	UCS (min)	UCS (max)	ROD
78	Gray, slightly weathered, SANDY CLAY SHALE.	78	78	1.4
37.0' to 37.5'	Rock core B102C1 from 37.0' to 37.5' depth = 35.3 tsf.			
98	Gray, moderately weathered, SANDY CLAY SHALE.	98	79	1
45	Gray, slightly weathered, SANDY CLAY SHALE.			
45	Rock core B102C2 from 44.5' to 45.0' depth = 23.3 tsf.			
100	Gray, weathered, SANDY CLAY SHALE.	100	79	1.2
46.1' to 46.5'	Rock core B102C3 from 46.1' to 46.5' depth = 1.6 tsf. This core exhibited a slickensided diagonal shear plane failure.			
50	Extent of exploration.			
55	Benchmark: Chiseled square on SE wingwall of existing structure, BM 1624 714+78.5, 18.5' Rt, Elev = 622.32'.			

Color pictures of the cores Available upon request  
Cores will be stored for examination until 05/10/15  
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)  
ROD is the ratio of the total length of sound core specimens > 4" to total length of core run BBS, form 138 (Rev. 8-99)