Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 10/3/2008

ROUTE FA 646 (IL-40) DESCRIPTION IL-40 over the Rock River LOGGED BY TC

SECTION 1B-2 LOCATION NE 1/4 SEC.28 TWP. 21N RNG. 7EPM 3

COUNTY Whiteside STRUCTURE NO. 098-0014 (Exist.)

BORING NO. P7W DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic SPT Hammer

Station 733+71
Offset 43 Lt
Ground Surface Elev. _____ (ft.)

Surface Water Elev. 628.11 (ft.)
Groundwater Elev.
First Encounter ____ (ft.)
Upon Completion ____ (ft.)
After ____ Hrs. ____ (ft.)

SOIL DESCRIPTION	ELEV. (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MOIST. (%)
Approx. 9.5 feet Water					
		-5			
	616.61				
WEATHERED LIMESTONE at 9.5 feet		-10	50/3"		10
	616.11				
WEATHERED LIMESTONE WITH CHERT Run 1 12' – 20' : REC 96/96, 100% RQD 40/96, 42%					
Drill time: 12'-15': 3.5 minutes 15'-20': 5 minutes		-15			
		-20		241	

SOIL DESCRIPTION (continued)	ELEV. (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MOIST. (%)
(continued) WEATHERED LIMESTONE Run 2 20' – 23' : REC 28/36, 78% RQD 0/36, 0%					
Drill time: 20'-23': 3 minutes					
Clay encountered @ 23.5'					
½" void encountered at 24.5'					
Run 2 – continued (labeled Run 3)		-25			
23' – 30' : REC 44/84, 52% RQD 12/84, 14%					
Drill time: 23'-25': 2 minutes 25'-30': 4.5 minutes					
4" void from 28.5'-28.8'					
Clay encountered @ 30' – 31'		-30			
Run 3 (labeled Run 4) 30' – 37' : REC 63/86, 73% RQD 37/86, 43%				292	
Drill time: 30'-35': 2.5 minutes 35'-27': 2 minutes					
2.5'-3' void encountered from 30 to 35 feet		-35			
	591.11				
Bottom of Boring @ 591.11'					
NOTE: CORING CAUSES BUBBLING FROM PRIOR ADJOINING CORE HOLE AT B-P7E		-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

BBS 137 (9/05)

Illinois Department of Transportation

ROCK CORE LOG

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Date 10/3/2008

ROUTE FAP 646 (IL40) DESCRIPTION ILLINOIS 40 OVER ROCK RIVER STERLING – ROCK FALLS LOGGED BY G. Jamison

SECTION 1B-2 LOCATION NE ¼ SEC. 28 TWP. 21N RNG. 7E, 3 PM

COUNTY Whiteside CORING METHOD Wireline

STRUCT. NO. 098-0014 CORING BARREL TYPE & SIZE NQ

Station 729+71.26 Core Diameter 1.7/8 in
Top of Rock Elev. 618.61 ft
Begin Core Elev. 616.11 ft

BORING NO. B-P7W
Station 733+71
Offset 43 Lt
River Water Surface Elev. 628.11 ft

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
DOLOMITE: yellow brown to light gray, hard, fine to medium, slightly to non-calcareous, occasional chert; horizontal joints, partially remineralized, generally hard and little to no soil filling, moderately intact. 32 pieces 1"-6" long		1	100	42		
Depth 12-15 feet took 3.5 minutes to core	-15				1.2	
Depth 15-20 feet took 5 minutes to core	606.11 -20				1.0	241
16 pieces ¾"-3" long; yellow brown, vesicular, small vugs, soil film on joints		2	78	0		
Inner barrel plugged. Run terminated (probably due to clay). Depth 20-23 feet took 3 minutes to core	605.11 -23				1.0	
As above. More vesicular and vugs with depth; some soil filled joints More than 30 pieces ¼"-6" long; "Clay" reported at 23.5 feet; brown stiff clay in upper 6" of core run; ½" void at 24.5 feet. Depth 23-25 feet took 2 minutes to core	-25	3	52	14	1.0	
Void – 28.5 to 28.8 feet.						
Depth 25-30 feet took 4.5 minutes to core	598.11 -30				0.9	
Yellow brown, brown and gray stiff clay, upper 9" of recovered core. 14 pieces ½"-12"		4	73	43		292

Color pictures of the cores Yes
Cores will be stored for examination until _____
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS 138 (Rev. 3/01)

Illinois Department of Transportation

ROCK CORE LOG

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SECTION 1B-2 LOCATION NE ¼ SEC. 28 TWP. 21N RNG. 7E, 3 PM

COUNTY Whiteside CORING METHOD Wireline

STRUCT. NO. 098-0014 CORING BARREL TYPE & SIZE NQ

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Begin Core Elev. 616.11 ft

BORING NO. B-P7W
Station 733+71
Offset 43 Lt
River Water Surface Elev. 628.11 ft

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Void – 2.5 to 3.0 feet from 30-35 feet Yellow brown to brown moderately to highly vesicular, vuggy (some ½"- ¾" wide and deep) below about 36 feet.						
Depth 30-35 feet took 2.5 minutes to core	-35				0.5	
Depth 35-37 feet took 2 minutes to core	591.11 -37				1.0	
	-40					

Color pictures of the cores Yes
Cores will be stored for examination until _____
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS 138 (Rev. 3/01)

FILE NAME = D264880-sht-borings19.dgn	USER NAME = dwozniarski	DESIGNED - ACB	REVISED -
		CHECKED - JMB	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	DRAWN - RLK	REVISED -
	PLOT DATE = 7/18/2011	CHECKED - ACB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING AND ROCK CORE LOGS
STRUCTURE NO. 098-0115
SHEET NO. 101 OF 103 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	1B-2	WHITESIDE	257	204
		CONTRACT NO. 64B80		
	ILLINOIS FED. AID PROJECT			