Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 9/30/2008

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

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

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

BORING NO. P4E DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic SPT Hammer

Station 729+98
Offset 38 Rt
Ground Surface Elev. _____ (ft.)

Surface Water Elev. 628.06 (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 feet Water					
	619.06				
Very Dense Grey SANDY GRAVEL, with metal pieces, trace organics	618.56	-10	35 50/2"		9 10
WEATHERED LIMESTONE WITH SHALE SEAMS at 9.17 feet					
Run 1 10' – 13' : REC 36/36, 100% RQD 0	615.06				
WEATHERED LIMESTONE					
Run 2 13' – 23' : REC 87/120, 73% RQD 17/120, 14%		-15			
Drill time: 13'-18': 3.5 minutes 18'-23': 3.5 minutes		-20			

SOIL DESCRIPTION	ELEV. (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MOIST. (%)
(continued) WEATHERED LIMESTONE					
Run 3 23' – 33' : REC 98/120, 80% RQD 64/120, 53%					
Drill time: 23'-28': 4 minutes 28'-33': 4 minutes		-25			
Run 4 33' – 35' : REC 24/24, 100% RQD 13/24, 52%		-30		436	
	593.06	-35			
Bottom of Boring @ 593.06'					
		-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

Page 1 of 2

Date 9/30/2008

ROUTE FAP 646 (IL 40) 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. 618.89 ft
Begin Core Elev. 618.06 ft

BORING NO. B-P4E
Station 729+98
Offset 38 Rt
River Water Surface Elev. 628.06 ft

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
DOLOMITE: light gray, hard, fine to medium, broken, slightly to non-calcareous, occasional chert. More than 50 pieces ½"-4" long.		1	100	0	*	
* Driller noted coring stopped twice due to "gravel"; obviously transported material on bedrock.	615.06 -13					
More than 50 pieces ¾"-7" long; weathered; most joints partially filled with soil or clay film.		2	73	14		
Gray 13-15 feet; Stiff clay 13.5-14 feet Mixed gray and yellow brown below 15 feet.	-15					
Depth 13-18 feet took 3.5 minutes to core					0.7	
Highly fractured from about 15-16 feet, 17-18 feet, and about 21-23 feet. More friable and badly broken from 22.5-23 feet.	-20					
Depth 18-23 feet took 3.5 minutes to core	605.06 -23				0.7	
13 pieces 1"-12" long, Slightly vesicular and a few vugs; more intact than runs 1 and 2.		3	80	53		
Light gray at about 27 feet.	-25					
Depth 23-28 feet took 3.5 minutes to core					0.7	
	-30					

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

BBS 138 (Rev. 3/01)

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ROCK CORE LOG

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Begin Core Elev. 618.06 ft

BORING NO. B-P4E
Station 729+98
Offset 38 Rt
River Water Surface Elev. 628.06 ft

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
						436
Depth 28-33 feet took 3.5 minutes to core	595.06 -33				0.7	
More than 50 pieces ½"-8"		4	100	54	NR	
More vesicular and fractured from 34-35 feet.	593.06 -35					

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

BBS 138 (Rev. 3/01)

FILE NAME = 0264B80-sht-borings12.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. 94 OF 103 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	1B-2	WHITESIDE	257	197
		CONTRACT NO. 64B80		
	ILLINOIS FED. AID PROJECT			