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. P5W DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic SPT Hammer

Station 731+21
Offset 46 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 feet Water					
		-5			
	619.11				
Light Brown WEATHERED LIMESTONE at 9 ft		-10	50/3"		13
	616.44				
LIMESTONE WITH CHERT AND SHALE SEAMS Run 1 11.7' – 19.7' : REC 83/96, 86% RQD 44/96, 46% Drill Time: 11.7'-14.7': 4.5 minutes 14.7'-19.7': 5.5 minutes		-15			
	608.41				
LIMESTONE		-20			

(continued) SOIL DESCRIPTION	ELEV. (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MOIST. (%)
(continued) LIMESTONE Run 2 19.7' – 29.7' : REC 119/120, 99% RQD 94/120, 78% Drill time: 19.7'-24.7': 7 minutes 24.7'-29.7': 6 minutes		-25		607	
	598.41	-30			
LIMESTONE WITH SHALE SEAMS Run 3 29.7' - 37.2' : REC 90/90, 100% RQD 70/90, 78% Drill Time: 29.7-34.7: 5 minutes 34.7-37.2: 2 minutes		-35			
	590.91				
Bottom of Boring @ 590.91'		-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 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. 619.11 ft
Begin Core Elev. 616.44 ft

BORING NO. B-P5W
Station 731+21
Offset 46 Lt
River Water Surface Elev. 628.11 ft

		DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Starting depth of Core 1 is 11.67 feet	616.44	-11.7					
DOLOMITE: light gray and gray, hard, fine to medium, slightly to non-calcareous, occasional chert; occasional vugs, some partially filled; horizontal joints, partially remineralized, generally hard and little to no soil filling. More than 50 pieces ¼"-7" long; gravel and shells at top of run is transported Depth 11.7-14.7 feet took 4.5 minutes to core		-15	1	86	46	1.5	
Soil and broken chert filled joints at about 16 and 19 feet.							
Depth 14.7-17.7 feet took 5.5 minutes to core						1.8	
Depth 17.7-19.7 feet took 3.5 minutes to core Ending depth of Core 1 is 19.7 feet	608.41	-19.7				1.8	
More than 25 pieces 1"-18" long; more intact, little or no soil film in joints; light gray		-20	2	99	78		
Depth 19.7-24.7 feet took 7 minutes to core		-25				1.4	
Slightly vesicular below about 26 feet							607
Depth 24.7-29.7 feet took 6 minutes to core Ending depth of Core 2 is 29.7 feet	598.41	-29.7				1.2	
20 pieces 3"-14"; Gray, more vesicular		-30	3	100	78		

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

Page 2 of 2

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Begin Core Elev. 616.44 ft

BORING NO. B-P5W
Station 731+21
Offset 46 Lt
River Water Surface Elev. 628.11 ft

		DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Depth 29.7-34.7 feet took 5 minutes to core		-35				1.0	
Depth 34.7-37.2 feet took 2 minutes to core Ending depth of Core 3 is 37.2 feet	590.91	-37.2				0.8	
		-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 = 0264B80-sht-borings15.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. 97 OF 103 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	1B-2	WHITESIDE	257	200
		CONTRACT NO. 64B80		
	ILLINOIS FED. AID PROJECT			