

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP Rte 614	144(B-1)	Cass & Mason	351	216
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

Contract #72A76

SHEET NO. 80
86 SHEETS



SOIL BORING LOG

Page 1 of 3

Date 11-29-07
11-30-07

ROUTE FAP 614 (IL 78) DESCRIPTION IL 78 Over the Sangamon River LOGGED BY M. Teppen

SECTION 144(B-1) LOCATION SE 14, SEC. 30, TWP. 19 N, RING. 9 W, 3 PM

COUNTY Cass and Mason DRILLING METHOD HSA/Rotary HAMMER TYPE Auto

STRUCT. NO.	STATION	BORING NO.	STATION	Offset	Ground Surface Elev.	D E L C O I				Surface Water Elev.	Stream Bed Elev.	D E L C O I							
						(ft)	(#)	(%)	(min)			(ft)	(#)	(%)	(min)				
009-0510 Pr	913+16	0510-P6 Pier 6	914+17	8.0R LT	453.4					442.1 (Nov.)	436*								
Grey & Brown Dry CLAY Ref Class P7-1 6 8 2.7 14 8 S-11 (Washed)																			
Very Dark Grey Moist 2 3 1.6 26 3 B (Washed)																			
Dark Grey 3 3 2.0 19 4 B																			
Grey 3 4 1.8 16 6 B Grey Medium to Coarse SAND (Washed)																			
441.90 Grey Wet Medium SAND GRADATION P6-G1 5 3																			
440.40 Grey Medium to Coarse SAND GRADATION P6-G2 1 1 -5 1																			
417.40 1 3 3 Grey Medium SAND w/Some 14" to 12" Gravel																			
6 9 11 GRADATION P6-G3 (Washed)																			

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 T208) BBS, from 137 (Rev. 8-98)



SOIL BORING LOG

Page 2 of 3

Date 11-29-07
11-30-07

ROUTE FAP 614 (IL 78) DESCRIPTION IL 78 Over the Sangamon River LOGGED BY M. Teppen

SECTION 144(B-1) LOCATION SE 14, SEC. 30, TWP. 19 N, RING. 9 W, 3 PM

COUNTY Cass and Mason DRILLING METHOD HSA/Rotary HAMMER TYPE Auto

STRUCT. NO.	STATION	BORING NO.	STATION	Offset	Ground Surface Elev.	D E L C O I				Surface Water Elev.	Stream Bed Elev.	D E L C O I							
						(ft)	(#)	(%)	(min)			(ft)	(#)	(%)	(min)				
009-0510 Pr	913+16	0510-P6 Pier 6	914+17	8.0R LT	453.4					442.1 (Nov.)	436*								
Grey Medium SAND w/Some 14" to 12" Gravel (continued) 412.40 Grey Coarse SAND w/Some 14" Gravel 5 8 10 GRADATION P6-G4																			
389.40 Grey Fine SAND 407.40 Begin 11-30-07 Tan Fine SAND w/Some 12" Gravel 8 12 13 GRADATION P6-G5 GRADATION P6-G7 12 19																			
381.40 LIMESTONE 380.90 Borehole continued with rock coring.																			
369.40 Grey Medium SANDY GRAVEL -55 -75 7 8 6 GRADATION P6-G8																			

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 T208) BBS, from 137 (Rev. 8-99)



ROCK CORE LOG

Page 3 of 3

Date 11-29-07
11-30-07

ROUTE FAP 614 (IL 78) DESCRIPTION IL 78 Over the Sangamon River LOGGED BY M. Teppen

SECTION 144(B-1) LOCATION SE 14, SEC. 30, TWP. 19 N, RING. 9 W, 3 PM

COUNTY Cass and Mason CORING METHOD Double Barrel - Drilling Mud Flush

STRUCT. NO.	STATION	BORING NO.	STATION	Offset	Ground Surface Elev.	CORING BARREL TYPE & SIZE		D E P T H	C O R E	R - Q	T I M E	S T R E N G T H
						(#)	(#)					
009-0510 Pr	913+16	0510-P6 Pier 6	914+17	8.0R LT	453.4	BWD4	1.61 in					
Light Grey Crystalline LIMESTONE w/Some 1" Chert Seams Open Joints Spaced 2" to 12" 380.90 1 98 57 688												
373.90 Light Blue Grey Very Poorly Indurated Clayey SHALE (Core Barrel Plugged - Pulled and Cleaned Barrel) 373.70 2 100 92 410												
373.90 Light Grey Crystalline LIMESTONE Open Joints Spaced 1 ft to 3 ft 373.70 3 79 100 518												
367.60 Grey Well Indurated Crystalline LIMESTONE with 12" to 8" Grey Moderately Indurated Bloomy Chert Seams Closed Joints Spaced 1" to 3" Filled with Weathered Limestone Residue and Chert (Chert seams are heavily fractured possibly due to coring action.) 367.40 4 100 21 879												
354.10 Grey Well Indurated Crystalline LIMESTONE with 12" to 8" Grey Moderately Indurated Bloomy Chert Seams Closed Joints Spaced 1" to 3" Filled with Weathered Limestone Residue and Chert (Chert seams are heavily fractured possibly due to coring action.) 354.10 -90												

Color pictures of the cores Yes, On File
Cores will be stored for examination until 5 Years after Construction
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)
RQD is the ratio of the total length of sound core specimens >4" to total length of core run

BORINGS (SHEET 8)
F.A.P. 614 (IL 78) OVER SANGAMON RIVER
PUBLIC WATERS
CASS & MASON COUNTIES
SECTION 144 (B-1)
STA. 913+26.00
STRUCTURE NUMBER 009-0510
PROFESSIONAL DESIGN FIRM LICENSE #184-001084
© Copyright Hanson Professional Services Inc. \$MS_YEARS\$
JOB NO. 07S2026
DATE 03/27/09
Hanson Professional Services Inc.

LAYOUT: TEH 09/12/08
 DRAWN: BUC 09/10/08
 REVIEWED: TEH 09/30/08
 Mtr-3/2008 0804654M
 C:\mwork\p1007\LOGS\HURL\0314498\009-0510 Master Sheet 7/16/09