



**Illinois Department of Transportation**  
Division of Highways  
GSC CONSULTANTS INC.

**SOIL BORING LOG**

Date 8/18/09

ROUTE FAP 317 (US24/IL 9) DESCRIPTION US 24/ IL9 Over LaMarsh Creek (Hollis Road District) LOGGED BY RJC

SECTION 45BR-2 LOCATION 40° 34' 52.6" N 89° 41' 40.4" W, SEC. 22, TWP. 7N, RNG. 7E, 4<sup>th</sup> PM, Latitude, Longitude

COUNTY Peoria DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. Station	BORING NO. Station	DEPTH (ft)	BLOW COUNT (/6")	UCS Qu (tsf)	MOIST (%)	Surface Water Elev. Stream Bed Elev.	GROUNDWATER ELEV. First Encounter Upon Completion After 24 Hrs.	DEPTH (ft)	BLOW COUNT (/6")	UCS Qu (tsf)	MOIST (%)
072-0228 337+89.89	B-2 East Pier 337+59										
	Offset 48.50ft RT										
	Ground Surface Elev. 447.80 ft										
Brown SILTY CLAY LOAM (fill), trace gravel		443.80	1	0.5	15					6.1	
		443.50	2	B					26	B	
									70		10
									100		
Borehole continued with rock coring.											
		443.80	WH								
Very Loose, Brown and Gray, Fine, SAND, trace gravel		443.50	1	B	15						
			2								
Loose Brown and Gray, Fine SAND, trace gravel		440.80	2	1.8	16						
			4	B							
Stiff Gray, Wet CLAY LOAM, trace gravel, coal seam at 7.5'		439.30	2								
			3		25						
Loose Brown, Medium, Wet SAND, trace gravel			4								
		436.80	1								
Very Loose Gray, Fine, Wet SAND, trace gravel			1		25						
			2								
4" coarse sand seam at 12'		434.30	2								
Very Loose Brown, Medium, Wet SAND, trace gravel			1		21						
		432.90	1								
Gray, Fine, Wet SAND			8								
		431.80	7		17						
Gray, Fine to Medium, Wet SILTY LOAM, trace gravel		431.30	4								
Medium Dense Brown and Gray, Fine to Medium, Wet SAND and gravel		429.30	1		19						
		428.80	14	<.25	13						
Brown, Medium, Wet, SAND, trace gravel		428.30	16	B	14						
Very Soft, Gray, Wet, CLAY, trace			20								

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
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**

Date 8/18/09

ROUTE FAP 317 (US24/IL 9) DESCRIPTION US 24/ IL9 Over LaMarsh Creek (Hollis Road District) LOGGED BY RJC

SECTION 45BR-2 LOCATION 40° 34' 52.6" N 89° 41' 40.4" W, SEC. 22, TWP. 7N, RNG. 7E, 4<sup>th</sup> PM, Latitude, Longitude

COUNTY Peoria CORING METHOD Rotary, Diamond Bit Core Barrel

STRUCT. NO. Station	BORING NO. Station	DEPTH (ft)	CORING BARREL TYPE & SIZE	RECOVERY (%)	ROQ (%)	CORE TIME (min/hr)	STRENGTH (tsf)
072-0228 337+89.89	B-2 East Pier 337+59		NX 5' split barrel				
	Offset 48.50ft RT						
	Ground Surface Elev. 447.80 ft						
		425		75	0	10	
SHALE, Dark Gray, Damp, Thin Horizontal Lamination, Aphanitic, Highly Weathered, Very Soft Field Hardness (Core Run 1, RMR: 32, Rock Core Class IV: Poor Rock)							
		421.80					
		420		93	93	3	30.0
LIMESTONE (4" lens), Gray, Dry, Aphanitic, Slightly Weathered, Medium Field Hardness (Core Run 2, RMR: 52, Rock Class III: Fair Rock)							
SHALE, Dark Gray, Damp, Thin Horizontal Lamination, Aphanitic, Moderately Weathered, Soft Field Hardness, Occasional Limestone Lenses <2" in Thickness							
Depth 28' 4", Moisture Content: 7.5%, Dry Density: 145.5 pcf Depth 29' 4", Moisture Content: 7.4%, Dry Density: 150.9 pcf Depth 35' 5", Moisture Content: 7.4%, Dry Density: 148.3 pcf							
		411.80		100	74	3	94.2
(Core Run 3, RMR: 42, Rock Class III: Fair Rock)							
		411.80					39.2
		410.30		100	65	3	354.8
LIMESTONE, Gray, Damp, Aphanitic, Slightly Weathered, Medium Field Hardness (Core Run 4, RMR: 45, Rock Class III: Fair Rock)							
Depth 36' 7", Moisture Content: 9.0%, Dry Density: 144.7 pcf							
		410.30					
SHALE, Dark Gray, Damp, Thin Horizontal Lamination, Aphanitic, Moderately Weathered, Soft Field Hardness, Occasional Limestone Lenses <2" in Thickness.							
		406.80					
End of Boring							

Color pictures of the cores Yes

Cores will be stored for examination until 2/25/10

The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

<b>BORING LOGS II &amp; ROCK CORE LOG</b>					
<b>U.S. ROUTE 24 &amp; IL ROUTE 9 OVER LA MARSH CREEK</b>					
<b>STATION 337+89.89</b>			<b>STRUCTURE NO. 072-0228</b>		
SHEET NO. S33 OF 39 SHEETS	F.A.P. RTE. 317	SECTION 45BR-2	COUNTY PEORIA	TOTAL SHEETS 122	SHEET NO. 81
			CONTRACT NO. 68719		
		ILLINOIS FED. AID PROJECT			



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