BORING LOG: B-426 (Page 4 of 4)

Illinois Department of Transportation
Division of Highways
Geotechnology, Inc

SOIL BORING LOG

Page 4 of 4

Date 9/9/10

ROUTE FAP 998 DESCRIPTION Trilevel Interchange LOGGED BY BJS

SECTION 82-1 LOCATION East St. Louis, IL, SEC. 18, TWP. 2N, RNG. 9W

COUNTY St. Clair DRILLING METHOD HSA with MR below 25 ft HAMMER TYPE CME 550 / 82%

STRUCT. NO. 082-0324
Station NA

BORING NO. B-426
Station 54+99
Offset
Ground Surface Elev. 428.0 ft

Surface Water Elev. Unknown ft
Stream Bed Elev. Unknown ft

Groundwater Elev.:
First Encounter ** ft
Upon Completion ** ft
After Hrs. ** ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Very dense, gray, FINE TO COARSE GRAINED SAND				CRYSTALLINE LIMESTONE - See Rock Core Log *(continued)*			
	13						
-125	34			-145			
	50						
-130				-150			
296.5							
CRYSTALLINE LIMESTONE - See Rock Core Log							
-135				-155			
-140				270.5			
				End of Boring			
				-160			

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)

* Rimac attempted, not measured due to sample disturbance
** Not measured due to drilling methods used

BBS, from 137 (Rev. 8-99)

ROCK CORE LOG: B-426 CORE (Page 1 of 2)

Illinois Department of Transportation
Division of Highways
Geotechnology, Inc

ROCK CORE LOG

Page 1 of 2

Date 9/9/10

ROUTE FAP 998 DESCRIPTION Trilevel Interchange LOGGED BY BJS

SECTION 82-1 LOCATION East St. Louis, IL, SEC. 18, TWP. 2N, RNG. 9W

COUNTY St. Clair CORING METHOD Wireline

STRUCT. NO. 082-0324
Station NA

CORING BARREL TYPE & SIZE NX

BORING NO. B-426 Core
Station 54+99
Offset
Ground Surface Elev. 428.0 ft

Core Diameter 2 in
Top of Rock Elev. 295.5 ft
Begin Core Elev. 295.5 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Hard, gray, finely crystalline, massive, fresh, LIMESTONE	1	100	90		
-135	2	98	95		945.0
blue clay seam - 1" blue clay seam - 1/2" blue clay seam - 1/4" blue clay seam - 3" argillaceous from 136.8 to 136.8 feet unconfined compressive strength = 484 tsf					
-140	3	100	95		1892.0
soft, gray shale seam - 1/2" soft, gray shale seam - 1"	4	98	88		
shaley					
-150	5	100	100		578.6

Color pictures of the cores Yes
Cores will be stored for examination until 12-9-10
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

ROCK CORE LOG: B-426 CORE (Page 2 of 2)

Illinois Department of Transportation
Division of Highways
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ROCK CORE LOG

Page 2 of 2

Date 9/9/10

ROUTE FAP 998 DESCRIPTION Trilevel Interchange LOGGED BY BJS

SECTION 82-1 LOCATION East St. Louis, IL, SEC. 18, TWP. 2N, RNG. 9W

COUNTY St. Clair CORING METHOD Wireline

STRUCT. NO. 082-0324
Station NA

CORING BARREL TYPE & SIZE NX

BORING NO. B-426 Core
Station 54+99
Offset
Ground Surface Elev. 428.0 ft

Core Diameter 2 in
Top of Rock Elev. 295.5 ft
Begin Core Elev. 295.5 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Hard, gray, finely crystalline, massive, fresh, LIMESTONE *(continued)*					
gray shale seam - 1/2"					
-155	6	100	83		
270.5					
End of Boring					
-160					
-165					
-170					

Color pictures of the cores Yes
Cores will be stored for examination until 12-9-10
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

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AECOM

USER NAME =	DESIGNED - PJL	REVISED -	
	DRAWN - BRD	REVISED -	
PLOT SCALE = 0.2 '/ IN.	CHECKED - DDB	REVISED -	
PLOT DATE = 6/27/2011	DATE - 07-01-11	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS XLII
I–70E OVER I–55, CSX & KCS RAILROADS

SCALE: | SHEET S-231 OF S-234 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	82-1-B-2	ST. CLAIR	399	358
S.N. 082-0322 & S.N. 082-0324		CONTRACT NO. 76C76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		