

24-89 KA-0711-01 US-24 over Ensign Creek

Bridge No. 24-89-8.42(299)

Shawnee County

CD 03

N: 39.116250 E: -95.903002

SW ¼, SE ¼, SW ¼, Section 06 T11S, R14E

KANSAS DEPARTMENT OF TRANSPORTATION

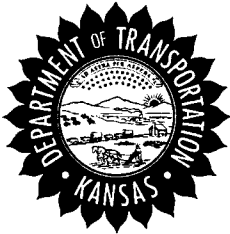


RTE./CO.	24-89	SOUNDING NO.	CD3	SHEET 1 of 4	
BRIDGE STA.	523+61.75	PROJ. NO.	KA-0711-01	BRIDGE NO.	24-89-8.42 (299)
SITE NAME	US-24 over Ensign Ck			HOLE STA.	523+22, 43.0' Rt CL
GEOLOGIST	R. Crow	SCALE	1 inch = 5.0 feet	DATE	June 28, 2010
DRILLER	R. Vervynck	RIG TYPE	CME 55	TOP HOLE ELEV.	912.0
GW ELEV.	905.0	TOTAL DEPTH	72.5	M/B ELEV.	842.5

BOREHOLE REPORT - KANSAS DOT.GDT - 7/7/10 13:49 - Q:\GEOLOGY\BRIDGE\24-89 KA-0711-01\ENSIGN CREEK SOUNDINGS.GPJ

Bit Type	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION (TSF)	ELASTIC MODULUS (PSF)	N60 COUNT (SPT)	ELEVATION
	Alluvium			912.0	Silt, brown, moist				
			4.0	908.0	Sand, very fine, tan/brown, wet	0.1465	209		906.0
				905.0	Sand, fine to medium, tan, mixed lithologies, wet	0.364	12300		901.0
			14.0	898.0	Sand, fine to medium, tan, mixed lithologies, wet			9	896.5
				895.0				12	886.5
				890.0					
				885.0					

8" Hollow Augers



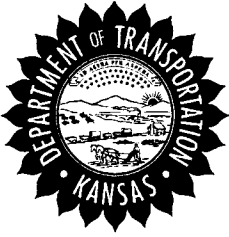
KANSAS DEPARTMENT OF TRANSPORTATION

RTE./CO.	24-89	SOUNDING NO.	CD3	SHEET 2 of 4	
BRIDGE STA.	523+61.75	PROJ. NO.	KA-0711-01	BRIDGE NO.	24-89-8.42 (299)
SITE NAME	US-24 over Ensign Ck			HOLE STA.	523+22, 43.0' Rt CL

Bit Type	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION (TSF)	ELASTIC MODULUS (PSF)	N60 COUNT (SPT)	ELEVATION
		Alluvium			Sand, fine to medium, tan, mixed lithologies, wet			18	881.5
			880						
			875						
			870					20	871.5
			865						
			860					15	861.5
			855						
			850					12	851.5

BOREHOLE REPORT - KANSAS DOT.GDT - 7/7/10 13:49 - Q:\GEOLOGY\BRIDGE\24-89 KA-0711-01\ENSIGN CREEK SOUNDINGS.GPJ

8" Hollow Augers



KANSAS DEPARTMENT OF TRANSPORTATION

RTE./CO.	24-89	SOUNDING NO.	CD3	SHEET 3 of 4
BRIDGE STA.	523+61.75	PROJ. NO.	KA-0711-01	BRIDGE NO. 24-89-8.42 (299)
SITE NAME	US-24 over Ensign Ck			HOLE STA. 523+22, 43.0' Rt CL

Bit Type	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION (TSF)	ELASTIC MODULUS (PSF)	N60 COUNT (SPT)	ELEVATION
	Alluvium			845	Sand, fine to medium, tan, mixed lithologies, wet				
Diamond	White Clay Shale		69.5	842.5	Shale, very limy and hard, laminated, gray, vertical fracture	362	1.15E+08		841.6
			72.5	839.5	T.D. = 72.5				

BOREHOLE REPORT - KANSAS DOT.GDT - 7/7/10, 13:49 - Q:\GEOLOGY\BRIDGE\24-89 KA-0711-01\ENSGN CREEK SOUNDINGS.GPJ



KANSAS DEPARTMENT OF TRANSPORTATION

RTE./CO.	24-89	SOUNDING NO.	CD3	SHEET 4 of 4	
BRIDGE STA.	523+61.75	PROJ. NO.	KA-0711-01	BRIDGE NO.	24-89-8.42 (299)
SITE NAME	US-24 over Ensign Ck			HOLE STA.	523+22, 43.0' Rt CL

Bit Type	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION (TSF)	ELASTIC MODULUS (PSF)	N60 COUNT (SPT)	ELEVATION																				
					<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th>Core</th> <th>Depth</th> <th>Elev.</th> <th>Cut</th> <th>Rec</th> <th>Rec %</th> <th>RQD</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">69.5</td> <td style="text-align: center;">842.5</td> <td style="text-align: center;">3.0</td> <td style="text-align: center;">3.0</td> <td style="text-align: center;">100</td> <td style="text-align: center;">87%</td> </tr> <tr> <td style="text-align: center;">Total</td> <td style="text-align: center;">72.5</td> <td style="text-align: center;">839.5</td> <td style="text-align: center;">3.0</td> <td style="text-align: center;">3.0</td> <td style="text-align: center;">100</td> <td style="text-align: center;">87%</td> </tr> </tbody> </table>	Core	Depth	Elev.	Cut	Rec	Rec %	RQD	1	69.5	842.5	3.0	3.0	100	87%	Total	72.5	839.5	3.0	3.0	100	87%			
Core	Depth	Elev.	Cut	Rec	Rec %	RQD																							
1	69.5	842.5	3.0	3.0	100	87%																							
Total	72.5	839.5	3.0	3.0	100	87%																							