



KA-0461-01 US-24 over Topeka Blvd.  
 CD 01  
 N: 39.091081 E:-95.664608 (Approximate)  
 SW ¼, Section 17, T11S, R16E  
 5/11/2012

# KANSAS DEPARTMENT OF TRANSPORTATION



RTE./CO.	US-24 / Shawnee	SOUNDING NO.	CD 01	SHEET 1 of 4	
BRIDGE STA.	381+01.67	PROJ. NO.	24-89 KA-0461-01	BRIDGE NO.	24-89-22.09(302)
SITE NAME	US-24 over Topeka Blvd.			HOLE STA.	381+47, 70.0' Lt CL
GEOLOGIST	R. Crow, P.G.	SCALE	1 inch = 5.0 feet	DATE	May 11, 2012
DRILLER	R. Vervynck	RIG TYPE	CME 55	TOP HOLE ELEV.	881.92
GW ELEV.	855.0	TOTAL DEPTH	72.7	M/B ELEV.	835.22

BOREHOLE REPORT - KANSAS DOT GDT - 5/23/12 08:29 - Q:\GEOLOGY\BRIDGE\24-89 KA-0461-01\US-24 OVER TOPEKA BLVD.GPJ

8" Hollow Augers

Bit Type	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION (TSF)	ELASTIC MODULUS (PSF)	N60 COUNT (SPT)	ELEVATION
		881.9			Silty Clay, brown, moist				
		880			Very fine sand, tan moist				
		875			Sand, gray, wet	1.5	130000		876.72
		9.2		872.7	Very fine sand, tan, moist	0.4	76000		871.52
		870				0.7	48700		866.62
		865				0.6	25300		861.32
		24.2		857.7	Sand, gray, wet	0.1			856.42
		855			▼				

Alluvium



# KANSAS DEPARTMENT OF TRANSPORTATION

RTE./CO.	US-24 / Shawnee	SOUNDING NO.	CD 01	SHEET 2 of 4
BRIDGE STA.	381+01.67	PROJ. NO.	24-89 KA-0461-01	BRIDGE NO. 24-89-22.09(302)
SITE NAME	US-24 over Topeka Blvd.			HOLE STA. 381+47, 70.0' Lt CL

BOREHOLE REPORT - KANSAS DOT GDT - 5/23/12 08:29 - Q:\GEOLOGY\BRIDGE\24-89 KA-0461-01\US-24 OVER TOPEKA BLVD.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		
8" Hollow Augers	Alluvium	[Dotted pattern]		850	Sand, gray, wet	0.5	82100		850.92		
				845							
				840							
				835	1	46.7	835.2	Limestone, weathered to hard, fossiliferous, broken			
				834.2			834.2	Limestone, hard, cherty, somewhat broken, stlyolytic seams			
				830	2		830		212	1.34E+08	829.52
				827.3			827.3	Limestone, laminar	175	1.19E+08	827.22
				827.0			827.0	Shale, limy, gray			
				826.8			826.8	Shale, gray to dark gray			
				826.0			826.0	Shale, black			
				825			825				
				824.5			824.5	Shale, very dark gray			
				824.2			824.2	Shale, black, soft to hard			
				822.4	4	59.5	822.4	Limestone, nearly white/gray, very hard, vertical fracture, very fossiliferous near base	328	2.4E+08	820.62
				820			820				
	820.1			820.1	Shale, gray						
	819.2	5	62.7	819.2	Shale, limy, greenish gray						

NQ2 Diamond

Lashburnoak Shale Mbr

Ervine Creek Limestone Member

8" Hollow Augers

Alluvium

Rock Bluff Ls

Oskaloosa Shale Mbr



# KANSAS DEPARTMENT OF TRANSPORTATION

RTE./CO.	US-24 / Shawnee	SOUNDING NO.	CD 01	SHEET 3 of 4
BRIDGE STA.	381+01.67	PROJ. NO.	24-89 KA-0461-01	BRIDGE NO. 24-89-22.09(302)
SITE NAME	US-24 over Topeka Blvd.			HOLE STA. 381+47, 70.0' Lt 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
NQ2 Diamond	Ozawkie Limestone Mbr		5	815	Shale, limy, greenish gray	26	5350000		815.02
			6	810	Limestone, shaly Limestone, nearly white, granular texture, slightly impure, occasional vertical fracture	108	7E+07		810.42
			72.7	809.22	T.D. = 72.7				

BOREHOLE REPORT - KANSAS DOT, GDT - 5/23/12 08:29 - Q:\GEOLOGY\BRIDGE\24-89 KA-0461-01\US-24 OVER TOPEKA BLVD.GPJ



# KANSAS DEPARTMENT OF TRANSPORTATION

RTE./CO.	US-24 / Shawnee	SOUNDING NO.	CD 01	SHEET 4 of 4
BRIDGE STA.	381+01.67	PROJ. NO.	24-89 KA-0461-01	BRIDGE NO. 24-89-22.09(302)
SITE NAME	US-24 over Topeka Blvd.			HOLE STA. 381+47, 70.0' Lt 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>1</td> <td>46.7</td> <td>835.22</td> <td>1.0</td> <td>1.0</td> <td>100</td> <td>0%</td> </tr> <tr> <td>2</td> <td>47.7</td> <td>834.22</td> <td>5.0</td> <td>4.7</td> <td>94</td> <td>8%</td> </tr> <tr> <td>3</td> <td>52.7</td> <td>829.22</td> <td>5.0</td> <td>5.0</td> <td>100</td> <td>76%</td> </tr> <tr> <td>4</td> <td>57.7</td> <td>824.22</td> <td>5.0</td> <td>5.0</td> <td>100</td> <td>82%</td> </tr> <tr> <td>5</td> <td>62.7</td> <td>819.22</td> <td>5.0</td> <td>4.9</td> <td>98</td> <td>90%</td> </tr> <tr> <td>6</td> <td>67.7</td> <td>814.22</td> <td>5.0</td> <td>5.0</td> <td>100</td> <td>82%</td> </tr> <tr> <td><b>Total</b></td> <td><b>72.7</b></td> <td><b>809.22</b></td> <td><b>26.0</b></td> <td><b>25.6</b></td> <td><b>98</b></td> <td><b>65%</b></td> </tr> </tbody> </table>	Core	Depth	Elev.	Cut	Rec	Rec %	RQD	1	46.7	835.22	1.0	1.0	100	0%	2	47.7	834.22	5.0	4.7	94	8%	3	52.7	829.22	5.0	5.0	100	76%	4	57.7	824.22	5.0	5.0	100	82%	5	62.7	819.22	5.0	4.9	98	90%	6	67.7	814.22	5.0	5.0	100	82%	<b>Total</b>	<b>72.7</b>	<b>809.22</b>	<b>26.0</b>	<b>25.6</b>	<b>98</b>	<b>65%</b>				
Core	Depth	Elev.	Cut	Rec	Rec %	RQD																																																											
1	46.7	835.22	1.0	1.0	100	0%																																																											
2	47.7	834.22	5.0	4.7	94	8%																																																											
3	52.7	829.22	5.0	5.0	100	76%																																																											
4	57.7	824.22	5.0	5.0	100	82%																																																											
5	62.7	819.22	5.0	4.9	98	90%																																																											
6	67.7	814.22	5.0	5.0	100	82%																																																											
<b>Total</b>	<b>72.7</b>	<b>809.22</b>	<b>26.0</b>	<b>25.6</b>	<b>98</b>	<b>65%</b>																																																											

BOREHOLE REPORT - KANSAS DOT.GDT - 5/23/12 08:29 - C:\GEOLOGY\BRIDGE\24-89 KA-0461-01\US-24 OVER TOPEKA BLVD.GPJ