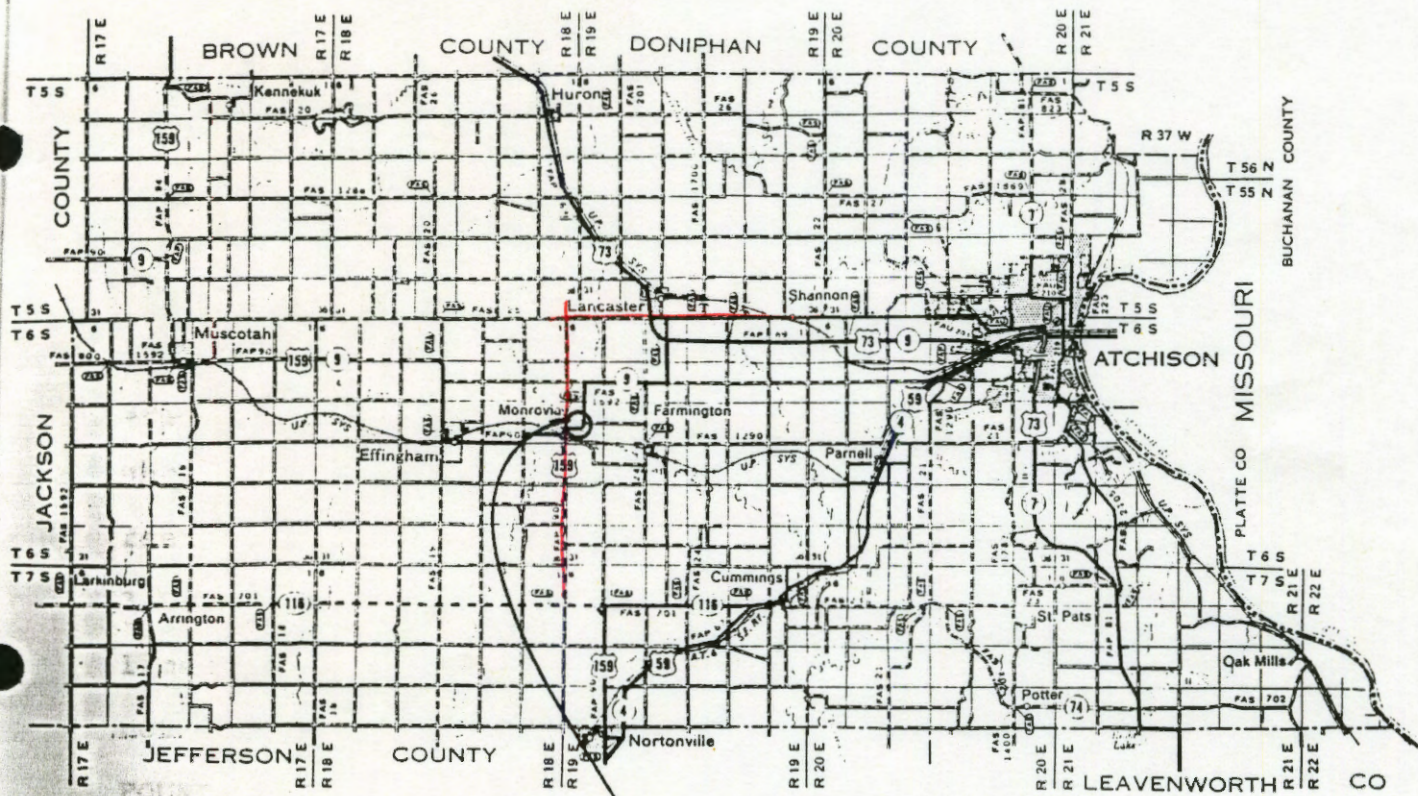


Kansas Department of Transportation

BRIDGE FOUNDATION GEOLOGY REPORT



18-65-19E

9-3 K-2629-01
Br. No. 16.57
Atchison County

KANSAS DEPARTMENT OF TRANSPORTATION

COUNTY Atchison

PROJECT NO. 7-3-K-2627-01

BRIDGE NO. 16.57

DESCRIPTION K-9 over Stranger Crk.

STA. 115+32

GEOLOGIST D.L. Thompson

VERTICAL SCALE 1" = 5'

DATE 10-24-99

BIT TYPE & NO.	GEOLOGIC NAME	GEOLOGIC COLUMN	GROUNDWATER ELEVATION	DEPTH	ELEVATION	GEOLOGIC DESCRIPTION AND REMARKS Core Drill # 1 Sta. 114+73, ①	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE	
								BLOWS	ELEV.
				0°	1006.1				
					1000	Clay, silty, brown to gray-brown			
					995		1.32		999.2
				12°	993.5 Oct. '91		.46		992.1
					990				
					985		.43		982.6
					980				
					975				

Soil Mantle

Push 4" Casing

KANSAS DEPARTMENT OF TRANSPORTATION

COUNTY Atchison

PROJECT NO. 9-3-K-2629-01 BRIDGE NO. 16.57

DESCRIPTION K-9 over Stranger Crk.

STA. 115+33

GEOLOGIST D.L. Thompson

VERTICAL SCALE 1" = 5'

DATE 10-24-77

BIT TYPE & NO.	GEOLOGIC NAME	GEOLOGIC COLUMN	GROUNDWATER ELEVATION	DEPTH	ELEVATION	GEOLOGIC DESCRIPTION AND REMARKS Core Drill # 1 Sta. 114+73, C	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE	
								BLOWS	ELEV.
	Soil Mantle			34.5	971.6	Clay, silty, gray-brown			
					970	Gravel; Light, Clay, silty, gray-brown		Push	
				39.9	966.2				
	Stranger Fm.	1			965	Shale, light gray, clayey, upper 3.0' slightly weathered.		190 Blows	965.1
		2			961.6		13.6		961.8
		3			960	Shale, light gray, sandy with numerous thin sandstone lenses interbedded.			
		4			955		7.26		957.5
		5			950				
		6			945		6.53		949.1
					940		10.1		944.1
							8.88		941.3
							334		939.6
				66.8	939.3	Limestone, light gray, algal to impure			
				68.9	937.2	Shale, black, very firm			

KANSAS DEPARTMENT OF TRANSPORTATION

COUNTY Atchison

PROJECT NO. 9-3- K-2629-01 BRIDGE NO. 16.57

DESCRIPTION K-9 over Stranger Crk

STA. 115+93

GEOLOGIST D. L. Thompson

VERTICAL SCALE 1" = 5'

DATE 10-24-91

BIT TYPE & NO.	GEOLOGIC NAME	GEOLOGIC COLUMN	GROUNDWATER ELEVATION	DEPTH	ELEVATION	GEOLOGIC DESCRIPTION AND REMARKS Core Drill # 1 Sta. 114+73, E	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE	
								BLOWS	ELEV.
		6		66.8	939.3	Shale, light gray, sandy	334		939.3
		6QD		68.9	937.2	Limestone, light gray, sigal to impure			
		78 %		70.9	935.2	Shale, black, very fine	494		935.7
		7		72.7	933.4	Limestone, dark gray, impure	760		934.6
		RQD		74.8	931.3	Shale, dark gray, limy	63.1		931.4
		70 %		75.7	930.4	T.D. Shale, olive, limy			
					930	Core Descriptions			
						Core # 1, 41 ² -46 ² , Cut 5°, Reco. 5°			
						41 ² -44 ⁵ - Shale, light gray, clayey, silty, weathered			
						44 ⁵ -46 ² - Shale, gray, with thin sandstone lenses			
						Sample # 1 43 ⁴ -44 ³ , Shale, gray			
						RQD = 54%			
						Core # 2, 46 ² -50 ⁷ , Cut 5°, Reco. 4°			
						46 ² -47 ⁹ - Shale, gray, with thin sandstone lenses			
						47 ⁹ -50 ⁷ - Shale, gray, clayey			
						Sample # 2 48 ⁸ -49 ⁶ , shale, gray			
						RQD = 64%			
						Core # 3, 50 ⁷ -55 ⁷ , Cut 5°, Reco. 5°			
						50 ⁷ -55 ⁷ , Shale, gray, sandy to thin sandstone lenses.			
						RQD = 54%			
						Low RQD is the Result of the thin sandstone lenses which cause a Fissile effect.			

KANSAS DEPARTMENT OF TRANSPORTATION

COUNTY Atchison PROJECT NO. 9-3-K-2629-01 BRIDGE NO. 16.57

DESCRIPTION K-9 over Stranger Crt. STA. 115+93

GEOLOGIST D. L. Thompson VERTICAL SCALE N. A. DATE 10-24-91

BIT TYPE & NO.	GEOLOGIC NAME	GEOLOGIC COLUMN	GROUNDWATER ELEVATION	DEPTH	ELEVATION	GEOLOGIC DESCRIPTION AND REMARKS Core Drill # 1 Descriptions	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE	
								BLOWS	ELEV.
						Core # 4, 55'-60' Cut 5° Recov. 5° 55'-60' - Shale, gray, sandy to sandstone lenses. Sample # 3 57'-59', Shale, gray, sandy RQD = 30%			
						Core # 5, 60'-65', Cut 5°, Recov. 5° 60'-65' - same as above. Sample # 4 - 61'-62', Shale gray, very sandy. Sample # 5 - 64'-64 ⁸⁵ ', Shale gray, sandy RQD = 82%			
						Core # 6, 65'-70', Cut 5°, Recov. 5° 65'-66' - Shale, dark gray, limy 66'-69' - Limestone, light gray, algal to impure 69'-70' - Shale, dark gray to black, very firm Sample # 6 66'-67' - Limestone Sample # 7 69'-70' - Shale, black RQD = 98%			
						Core # 7, 70'-75' Cut 5°, Recov. 4° 70'-70' - Shale, black, very firm 70'-72' - Limestone, dark gray, impure 72'-73' - Shale, dark gray, limy 73'-73' - Limestone, impure 73'-74' - Shale, dark gray, limy 74'-75' - Shale, olive, limy			