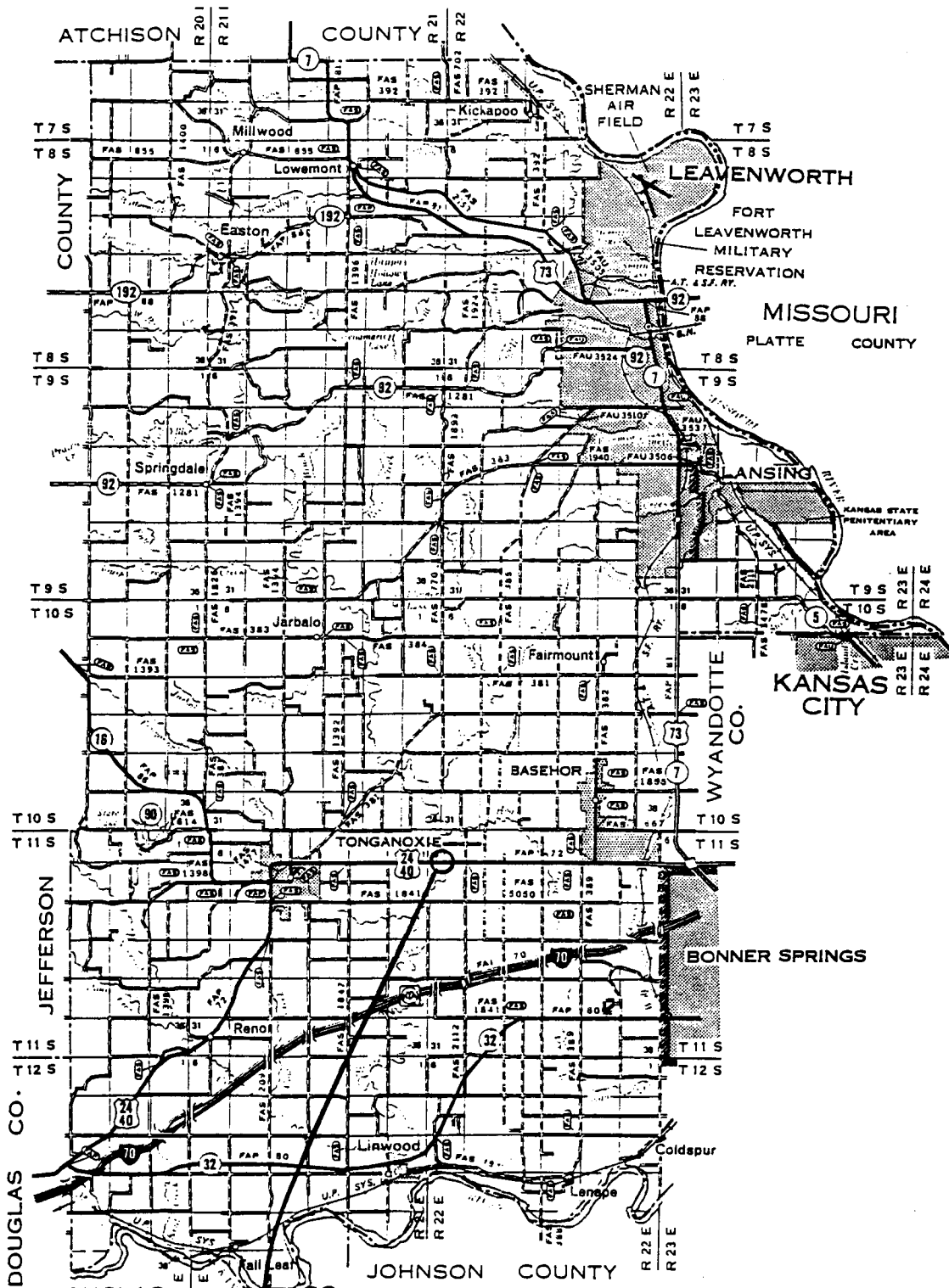


Kansas Department of Transportation

BRIDGE FOUNDATION GEOLOGY REPORT



24-52 K-4441-01
 Br. No. 14.31 & 14.32
 Leavenworth County

GEOLOGIST Randy Billinger VERTICAL SCALE 1" = 5' DATE 2-11-93

BIT TYPE & NO.	GEOLOGIC NAME	GEOLOGIC COLUMN	GROUNDWATER ELEVATION	DEPTH	ELEVATION	GEOLOGIC DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE	
								BLOWS	ELEV.
				0	824.5	Core Hole 1 Sta. 332+33, 14 Lt.			
				10°	815	814.5			
					820				
					810				
					805				
					800				
				28°	795	796.0			
					790				
				38°		786.0			

KANSAS DEPARTMENT OF TRANSPORTATION

COUNTY Leavenworth PROJECT NO. 24-52-K-4441-01 BRIDGE NO. 14.31/14.32DESCRIPTION highway 24 over Stranger Creek STA. 333+85 (WB)GEOLOGIST Randy Billinger VERTICAL SCALE 1" = 5' DATE 2-11-93

BIT TYPE & NO.	GEOLOGIC NAME	GEOLOGIC COLUMN	GROUNDWATER ELEVATION	DEPTH	ELEVATION	GEOLOGIC DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE	
								Blows	ELEV.
Diamond	Tonganoxie Member	1		40.4	785 784.1	Limestone, sandy, massive, gray, fossiliferous	280.1		783.6
				42.5	782.0				
	Iatan Member	2			780	Shale, sandy, gray, firm numerous thin sandstone stringers	3.5		779.8
		3		49.4	775 775.1		918.9		774.0
		4			770		290.5		769.5
		5			765	Limestone, hard, massive, gray, fossiliferous only a few shaly breaks.	371.8		765.9
				62.5	762.0		940.4		762

Core Hole 1

3 of 3

24-52-K-4441-01 highway 24 over Stranger Creek Bridge 14.31/14.32

Core Descriptions

Core 1

38⁵-42⁸

Cored 4³

Recov. 4³

RQD = 46.5%

38⁵-40⁴ Shale, sandy, gray, sandstone stringers

40⁴-42⁵ Limestone, hard, massive, gray
highly fossiliferous

42⁵-42⁸ Shale, sandy, gray, Firm

Sample 1

40⁴-40⁹ Limestone, hard, gray, Fossiliferous

Core 2

42⁸-47⁸

Cored 5⁰

Recov. 5⁰

RQD = 48%

Sample 2

42⁸-47⁸ Shale, sandy, dark gray, very firm
many thin sandstone stringers

44⁰-49⁷ Shale, Sandy, dark gray, very firm

Note: RQD may actually be higher. some breaks may have occurred removing the core from the core barrel.

Core 3

47⁸-52⁸

Cored 5⁰

Recov 5⁰

RQD = 100%

Sample 3

47⁸-49⁴ Shale, sandy, gray

49⁴-52⁸ Limestone, hard, massive, gray

49⁸-50⁵ Limestone, hard, gray

Core 4

52⁸-57⁷

Cored 4⁹

Recov 4⁹

RQD = 94%

Sample 4

52⁸-57⁷ Limestone, hard, massive, gray
numerous very thin shale partings
near 55.

54³⁵-55⁰⁵ Limestone, hard, massive, gray

Core 5

57⁷-62⁵

Cored 4⁸

Recov 4⁸

RQD = 100%

Sample 5

Sample 6

57⁷-62⁵ Limestone, hard, massive, gray
Fossiliferous

57⁷-58⁵⁵ Limestone, hard, gray

61⁹⁵-62⁵ Limestone, hard, gray

End Core Hole 1 62⁵