

NW - 13 - 125 - 5E

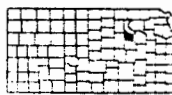
LEGEND

ROADS AND ROADWAY FEATURES

PRIMITIVE ROAD	-----
UNIMPROVED ROAD	-----
GRADED AND DRAINED ROAD	=====
SOIL SURFACED ROAD	-----
GRAVEL OR STONE ROAD - NOT GRADED OR DRAINED	-----
GRAVEL OR STONE ROAD - GRADED AND DRAINED	=====
GRAVEL OR STONE ROAD WITH STABILIZED SURFACE	-----
BITUMINOUS ROAD - LOW TYPE	=====
PAVED ROAD	=====
DIVIDED HIGHWAY	=====
HIGHWAY WITH FULL CONTROL OF ACCESS AND INTERCHANGE	=====

ROAD SYSTEM DESIGNATION

FEDERAL-AID INTERSTATE HIGHWAY SYSTEM	-----
FEDERAL-AID PRIMARY HIGHWAY SYSTEM	-----
FEDERAL-AID SECONDARY HIGHWAY SYSTEM	-----
INTERSTATE NUMBERED HIGHWAY	-----
U.S. NUMBERED HIGHWAY	-----
STATE HIGHWAY SYSTEM OR STATE NUMBERED HIGHWAY	-----
END OF DESIGNATED SYSTEM OR MARKED ROUTE	-----



FA SYSTEM REVISED TO JAN. 15, 1968

BRIDGE FOUNDATION GEOLOGY REPORT

70-31 K-2611-02
 BR. 7.38 & 7.39
 I-70 over U.P. RR
 Geary County

KANSAS DEPARTMENT OF TRANSPORTATION

COUNTY *Geary* PROJECT NO. *70-31-K-2611-02* BRIDGE NO. *7.39*
 DESCRIPTION *70th W.B. Lane, over U.P.R. Ry* STA. *496+20, L+74' E Proj.*
 GEOLOGIST *Alex Kotoyantz* VERTICAL SCALE *1" = 10'* DATE *4-18-1989*

BIT TYPE & NO.	GEOLOGIC NAME	GEOLOGIC COLUMN	GROUNDWATER ELEVATION	DEPTH	ELEVATION	GEOLOGIC DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE	
								BLOWS	ELEV.
						<i>T.H. El. 1085.0</i>			
	<i>A 1 4 V 1 4 M</i>	<i>Diagonal Hatching</i>			<i>1080</i>				
		<i>Dotted Pattern</i>	<i>26.5</i>	<i>1058.5</i>	<i>1070</i>	<i>Silt, some clay binder, tan.</i>			
		<i>Horizontal Dashed Pattern</i>	<i>1052.5</i>	<i>1051.0</i>	<i>1060</i>	<i>Sand, fine-coarse</i>	<i>Pushed Rods Hydraulically</i>		
		<i>Vertical Dashed Pattern</i>	<i>54.0</i>	<i>1031.0</i>	<i>1050</i>	<i>Sand & gravel</i>			
		<i>Horizontal Dotted Pattern</i>	<i>66.0</i>	<i>1019.0</i>	<i>1040</i>	<i>Heavy gravel</i>			
		<i>Vertical Dotted Pattern</i>	<i>72.0</i>	<i>1012.6</i>	<i>1030</i>				

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COUNTY Geary PROJECT NO. 70-31-K-2611-02 BRIDGE NO. 7.39
 DESCRIPTION STA. 496+20, L+74' E Proj.

GEOLOGIST _____ VERTICAL SCALE _____ DATE _____

BIT TYPE & NO.	GEOLOGIC NAME	GEOLOGIC COLUMN	GROUNDWATER ELEVATION	DEPTH	ELEVATION	GEOLOGIC DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE	
								BLOWS	ELEV.
	<u>Alluvium</u>								
	<u>Early Geol. Fm.</u>			<u>75'</u>	<u>1010</u> <u>1009.9</u>	<u>Ls., dense, hard, lower 0³ vertical fracture, gray-lt. gray.</u>			<u>1012.6</u>
				<u>78'</u>	<u>1006.3</u>	<u>Sh., limy, blocky, hard, grayish-green-lt. gray.</u>	<u>So. #1</u>	<u>Qu. 79.8</u>	<u>1007.9</u>
				<u>82'</u>	<u>1002.8</u>	<u>sh., limy, hard, maroon with lt. gray, grayish green band.</u>	<u>So. #2</u>	<u>Qu. 92.7</u>	<u>1004.6</u>
				<u>84'</u>	<u>1000</u> <u>1000.7</u>	<u>sh., limy, lt. gray-dk. gray.</u>	<u>So. #3</u>	<u>Qu. 27.8</u>	<u>1001.9</u>
						<u>Gypsum, lt. gray.</u>	<u>So. #4</u>	<u>Qu. 87.2</u>	<u>998.5</u>
				<u>91'</u>	<u>993.7</u>				
				<u>92.1</u>	<u>992.9</u>	<u>Ls., hard, banded, gray</u>			
				<u>92.8</u>	<u>992.2</u>	<u>sh., limy, dk. gray.</u>			
				<u>95'</u>	<u>990</u> <u>989.5</u>	<u>Ls., hard, dense, gray.</u>			
	<u>Middleburg Mbr.</u>					<u>Core #1, 72' - 75' (1012.6 - 1009.5)</u> <u>Cut 3' Rec. 2'</u> <u>R.O.D. 0 %</u> <u>Core Rec. 94 %</u>			
						<u>Core #2, 75' - 80' (1009.5 - 1004.5)</u> <u>Cut 5' Rec. 4'</u> <u>R.O.D. 75 %</u> <u>Core Rec. 98 %</u>			
						<u>Core #3, 80' - 85' (1004.5 - 999.5)</u> <u>Cut 5' Rec. 5'</u> <u>R.O.D. 75 %</u> <u>Core Rec. 100 %</u>			
						<u>Core #4, 85' - 90' (999.5 - 994.5)</u> <u>Cut 5' Rec. 5'</u> <u>R.O.D. 97 %</u> <u>Core Rec. 100 %</u>			
						<u>Core #5, 90' - 95' (994.5 - 989.5)</u> <u>Cut 5' Rec. 5'</u> <u>R.O.D. 91 %</u> <u>Core Rec. 100 %</u>			