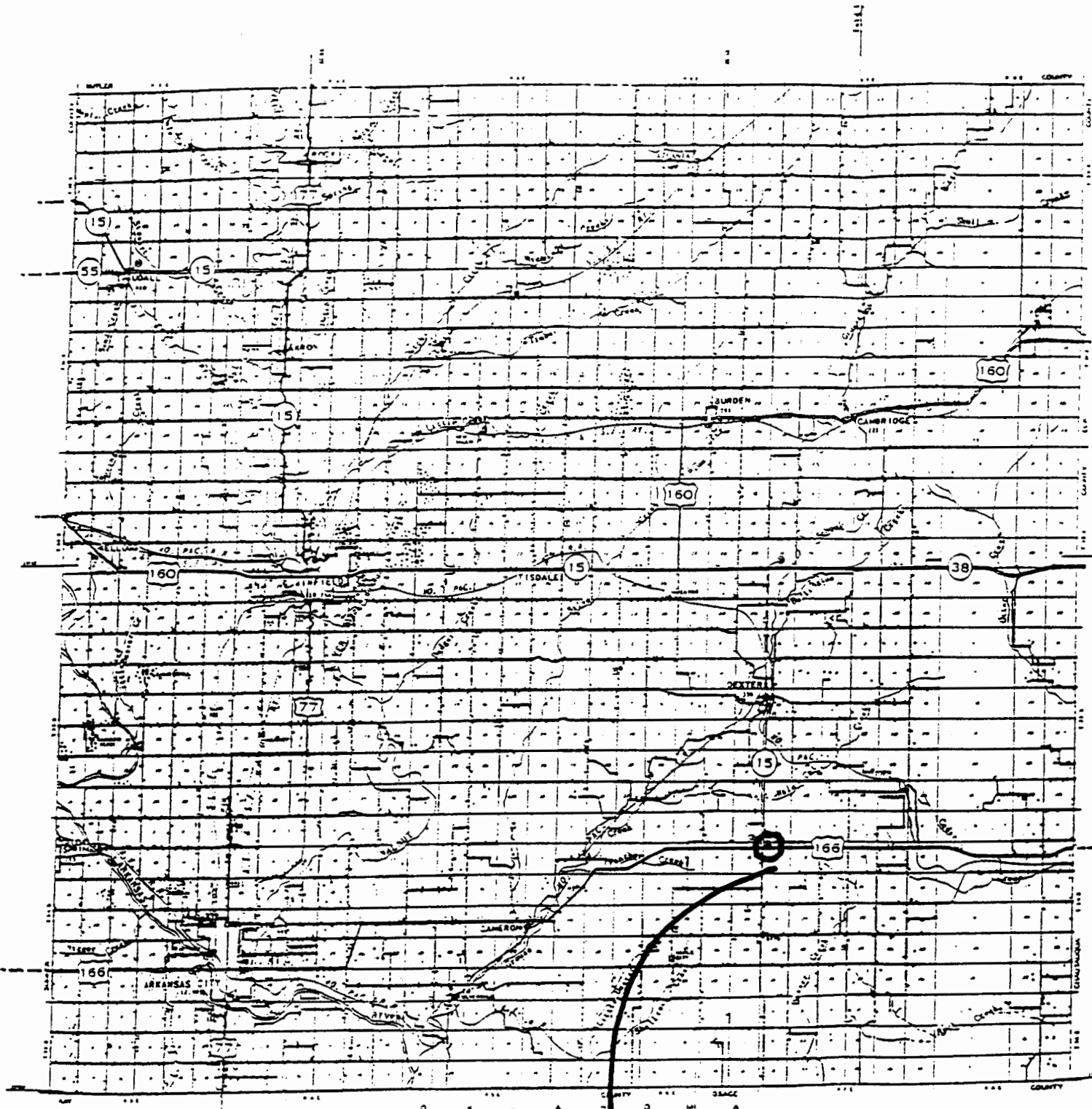


BRIDGE FOUNDATION GEOLOGY REPORT  
Job No. 02905163C



NW - 7-343-SE  
0-50'

166-18 K-435501  
Cowley County  
Bridge at Sta. 981+78

COWLEY-18

Cornal Grove

Florena sh - Eskridge shale

# LOG OF STATION: 982+07 RT 19.0', BORING NO. B-4-3

OWNER KANSAS DEPARTMENT OF TRANSPORTATION		ENGINEER COOK, FLATT & STROBELL								
SITE COWLEY COUNTY, KANSAS		PROJECT 166-18K-4355-01								
GRAPHIC LOG	DESCRIPTION	DEPTH (FT.)	SAMPLES				TESTS			
			HORIZON	SPT - N BLOWS/FT.	TYPE	RECOVERY, in.	KDOT TEXTURAL SYMBOL	IN-SITU MOISTURE, %	IN-SITU DRY DENSITY, PCF	KDOT SAMPLE NUMBER
	Surface Elevation: 1210.53 ft. Station: 982+07 RT 19.0'									
	0.8 RIVER GRAVEL	1209.7			PA					
	GRAVELY CLAY, Grayish Brown, 10YR 5/2									
	6.7	1203.8			PA					
	7.5 **LIMEY SHALE with Limestone	1203.0		12	SS	8			1	34,16,18
	8.3 Stringers and Thinly Bedded Limestone, Gray	1202.2								
	10.3 **SHALE	1200.2								
	**LIMEY SHALE with Thin Limestone Bedding, Gray									
	**SHALE, Gray									
	15.2	1195.3								
	**LIMEY SHALE with Limestone Stringers, Gray (Florena)	1192.7								
	**SHALE, Gray to Slighty Maroon (Eskridge)									
	24.5	1186.0								
	**CLAYEY SHALE, Maroon									
	29.0	1181.5								
	29.8 **SHALE, Maroon	1180.7								
	BOTTOM OF BORING									

Continued Next Page

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: IN-SITU, THE TRANSITION MAY BE GRADUAL.

WATER LEVEL OBSERVATIONS			BORING STARTED 7-16-93	
WL	NONE	W.D.	NONE	A.B.
WL				
WL				
<h1 style="font-size: 2em; margin: 0;">Terracon</h1>			BORING COMPLETED 7-16-93	
			RIG	CME 45
			FOREMAN	LR
			APPROVED	EMK
			JOB #	02905163C