

CAD

GEOLOGY REPORT

**70-89 KA-2107-01
I-70 & Deer Creek
0.13 Miles East of I-70 and Carnahan Ave Junction
Shawnee County**

**Robert Henthorne, P.G.
Chief Geologist**

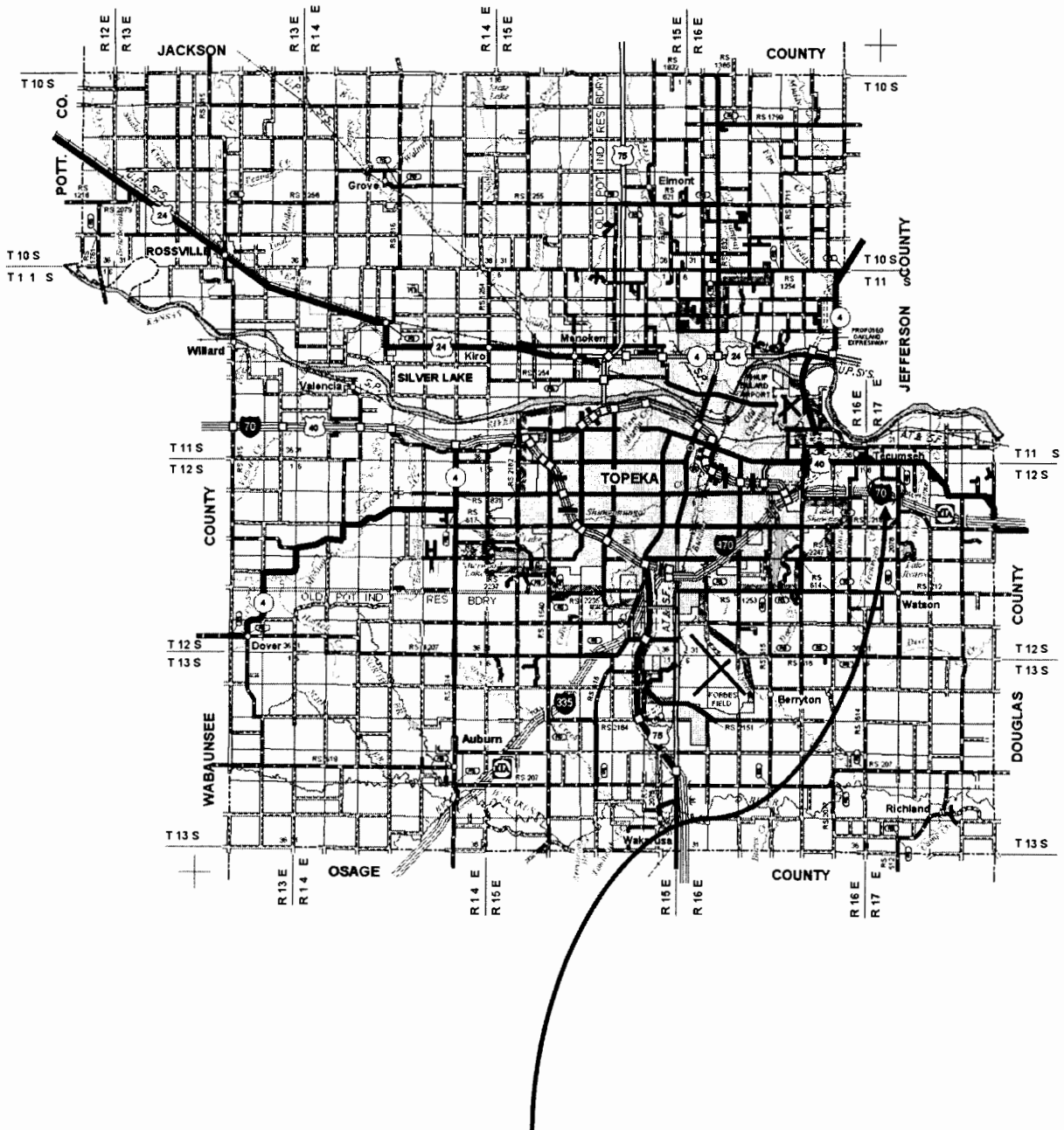
**Kyle Halverson, P.G.
Delmar Thompson, P.G., Regional Geologist**

December 2012



Bureau of Materials and Research

Geotechnical Unit



70-89 KA-2107-07 I-70 & Deer Creek
 Br. No. 70-89-18.78(043)
 Shawnee County
 CDI
 N:39.033995 E:-95.635233
 SW ¼, NE ¼, SE ¼, S04, T12S, R16E

KANSAS DEPARTMENT OF TRANSPORTATION



RTE./CO.	I-70 / Shawnee	SOUNDING NO.	CD 1	SHEET	1 of 2
		PROJ. NO.	70-89 KA-2107-01	BRIDGE NO.	
SITE NAME	I-70 and Deer Creeks			HOLE STA.	379+13, 68.0' Rt CL
GEOLOGIST	G. Worthington, G.A.	SCALE	1 inch = 10.8 feet	DATE	April 30, 2012
DRILLER	R. Vervynck	RIG TYPE	CME 75	TOP HOLE ELEV.	903.85
GW ELEV.	881.9	TOTAL DEPTH	62.4	M/B ELEV.	870.35

BOREHOLE REPORT - KANSAS DOT.GDT - 6/8/12 10:30 - C:\USERS\GALENN\DESKTOP\PROJECTS\70-89 KA-2107-01\70-89 KA-2107-01.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	Mantle		1.0	903.9 902.9	Silt, clayey, yellow-brown, moist, soft Silt, clayey, blue-gray, dry-moist, soft	0.9	87500		898.55	
			5.3	898.6	Clay, silty, reddish-brown, moist, soft	1.9	224000		893.55	
			13.5	890	890.4	Clay, silty, mottled gray and brown, moist, soft	1.1	173000		888.55
			15.3	885	888.6	Clay, silty, yellow-brown, moist, soft	0.9	382000		883.55
			20.3	880	883.6	Clay, silty, brown to dark-brown, moist, soft	1	175000		878.55
			23.5	875	880.4	Silt, clayey, or clay binder, dark-brown, moist, soft	0.3	140000		873.55
			28.5	870	875.4	Silt, clayey or silty clay, yellow-brown, soft, wet	227	1.32E+08		868.15
			33.0	865	870.9	Gravel, limestone, weathered, orange-gray	287	2.4E+08		864.85
			34.4	860	869.5	Limestone, gray, weathered, hard	65	2.17E+07		861.45
			37.4	855	866.5	Limestone, greenish-gray, hard	1.7	171000		858.25
			39.6	850	864.3	Shale, green, soft to medium-hard	27	2880000		852.3
			41.0	845	862.9	Shale, conglomerate appearance (silty or sandy nodules), medium-hard	24	2720000		846.55
42.4	840	861.5	Shale, medium bluish-gray, medium-hard	39	4240000		841.75			
47.0		856.9	Shale, dark-gray, medium-hard							
47.4		856.5	Shale, medium bluish-gray, laminated bedding							
57.4		846.5	Shale, bluish-gray to dark-gray, some fractured zones, medium-hard							
62.4		841.45	T.D. = 62.4							

NQ2 Diamond

Oravkie
l.s. Member

Tecumseh Shale Fm



KANSAS DEPARTMENT OF TRANSPORTATION

RTE./CO.	I-70 / Shawnee	SOUNDING NO.	CD 1	SHEET 2 of 2	
		PROJ. NO.	70-89 KA-2107-01	BRIDGE NO.	
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