



4-89 KA-89-01

Br No. 4-89 -8.90 (300)

K-4 over Blacksmith Creek

Shawnee County

CD1

N:39.021633 E-95.839170 (Approx)

NW ¼, NE ¼, SE ¼, S10, T12S, R14E

# KANSAS DEPARTMENT OF TRANSPORTATION



RTE./CO.	K-4-Shawnee	SOUNDING NO.	CD 1
		PROJ. NO.	4-89 KA2089-01
SITE NAME		K-4 over Blacksmith Creek	
		HOLE STA.	215+71, 21.0' Rt CL
GEOLOGIST	G. Worthington	SCALE	1 inch = 8.3 feet
		DATE	December 12, 2011
DRILLER	R. Vervynck	RIG TYPE	CME 75
		TOP HOLE ELEV.	993.2
GW ELEV.	969.4	TOTAL DEPTH	47.9
		MB ELEV.	992.7

BOREHOLE REPORT - KANSAS DOT.GDT - 1/3/12 16:22 - C:\USERS\GALEN\DESKTOP\PROJECTS\4-89 KA-2089-01\4-89 KA-2089-01 PA-CD.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
	Burlington Ls Member		0.5	993.2	topsoil/small gravel, brown				
			1	992.7	Limestone, gray-brown, hard to very hard, thickly bedded	296.5	1.62E+08		989.9
			2	987.4	Shale, dark-gray, soft to firm, moist, thickly-bedded	466	2.19E+08		988.1
			3	985.5	Shale, pale-olive to grayish-green to dark-gray, slightly limy, soft to medium hard, laminated to very thin-bedded	7.15	595000		985.5
			4	975		5.85	399000		976.9
			5	974.2	Sandstone, dark yellowish-orange to light olive-gray, micaceous, soft to medium hard, thin to medium thinly bedded	8.25	691000		974.5
			6	970.2	Shale, medium-bluish gray, to dark gray, very micaceous in spots, laminated to very thinly bedded	81	3.26E+07		973.1
			7	967.6	Shale, dark-gray, soft, medium-thin to thickly bedded,	9.5	850000		965.9
			8	959.1	Shale, limy, medium dark-gray, fossiliferous (crinoid frags), medium hard	5.55	6750000		962.4
			9	955.5	Organic shale to coal, black, medium hard	224.5	5.7E+07		957.1
	Silver Lake Sh Member		37.7	954.5	Shale, dark greenish-gray, w/ organic material, soft, laminated to very thin bedded, micaceous	296	9.9E+07		951.2
			38.7	950		66	1.25E+07		946.4
			47.9	945.3	T.D. = 47.9				