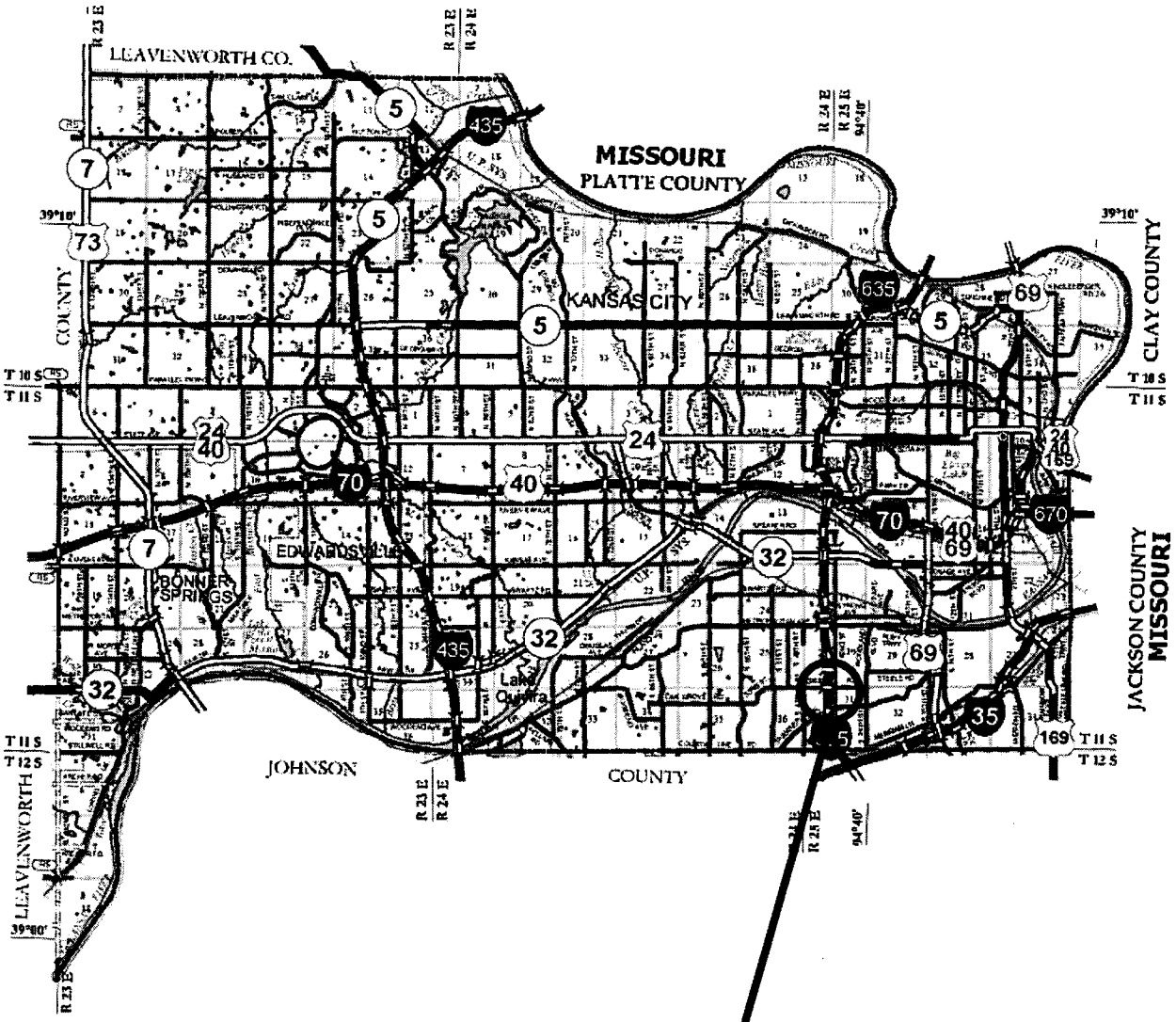

635-105 KA-2093-01 Gibbs Rd. over I-635

1.43 miles North of I-35

Wyandotte County

CD 03

N: 39.058622 E: -94.679289 (Approximate)

SE ¼, SE ¼, SW ¼, Sect 30, T11S, R25E

9/10/2012

KANSAS DEPARTMENT OF TRANSPORTATION

Kansas Department of Transportation

RTE./CO.	I-635 / Wyandotte	SOUNDING NO.	CD 03	SHEET 1 of 4	
BRIDGE STA.	154+97.14	PROJ. NO.	635-105 KA-2093-01	BRIDGE NO.	1.05(326)
SITE NAME	Gibbs Rd over I-635			HOLE STA.	50+74, 31.0' Lt CL
GEOLOGIST	R. Crow, P.G.	SCALE 1 inch = 5.0 feet		DATE	September 10, 2012
DRILLER	R. Vervynck	RIG TYPE	CME 55	TOP HOLE ELEV.	1007.43
GW ELEV.	N/A	TOTAL DEPTH	81.2	M/B ELEV.	1002.23

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			1007.4	Silty clay, brown, limestone gravel				
	Platts-burg Ls		5.2	1002.2	Limestone, shaly				
NQ2 Diamond	Bonner Springs Shale Formation	1	6.8	1000.6	Shale, greenish gray, limy				
			8.1	999.3	Shale, gray				
		2	10.4	997.0	Sandstone, shaly, gray	194	9.17E+07		996.23
			11.3	996.1	Shale, dark greenish gray				
		3	13.1	994.3	Sandstone, gray, occasionally shaly, micaceous, micro cross beds				
		4	20.1	987.3	Shale, sandy, light and dark gray varves	24	2080000		986.03
		5				37	3400000		982.73
		6							

Elevation scale: 1005, 1000, 995, 990, 985, 980

BOREHOLE REPORT - KANSAS DOT.GDT - 9/25/12 14:14 - Q:\GEOLOGY\BRIDGE\635-105 KA-2093-01\GIBBS RD OVER 635.GPJ

KANSAS DEPARTMENT OF TRANSPORTATION

Kansas Department of Transportation

RTE./CO.	I-635 / Wyandotte	SOUNDING NO.	CD 03	SHEET 2 of 4	
BRIDGE STA.	154+97.14	PROJ. NO.	635-105 KA-2093-01	BRIDGE NO.	1.05(326)
SITE NAME	Gibbs Rd over I-635			HOLE STA.	50+74, 31.0' Lt CL

Bit Type	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION		CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION (TSF)	ELASTIC MODULUS (PSF)	N60 COUNT (SPT)	ELEVATION
NQ2 Diamond		6, 7		975		Shale, sandy, light and dark gray varves				
	Farley Limestone Member		36.5	970	970.9	Limestone, hard, very fine, dense				
			38.1		969.3	Limestone, hard, gray, fossiliferous, impure				
		8	39.7		967.7	Shale, limy, gray, white fossil fragments				
			42.3	965	965.1	Shale, gray, limy				
		9								
		10	47.3	960	960.1	Shale, gray, very limy, sandy				
			51.2	955	956.2	Limestone, hard, dense, gray, very fine grained				
		11	53.7		953.7	Shale seam, gray				
			53.8		953.6	Limestone, gray, hard, stylolytic seams				
			56.6		950.8	Shale seam, dark gray with white fossil fragments				
			56.7	950	950.7	Limestone, hard, dense, light gray, stylolytic seams, fossiliferous				
	Island Creek Shale Member	12	59.5		947.9	Shale, gray, sandy, limy				
			61.5		945.9	Sandstone, gray, shaly				
		13	62.1	945	945.3	Shale, gray, sandy, micaceous, limy				

BOREHOLE REPORT - KANSAS DOT.GDT - 9/25/12 14:14 - Q:\GEOLOGY\BRIDGE\635-105 KA-2093-01\GIBBS RD OVER 635.GPJ

KANSAS DEPARTMENT OF TRANSPORTATION

Kansas Department of Transportation

RTE./CO.	I-635 / Wyandotte	SOUNDING NO.	CD 03	SHEET 3 of 4	
BRIDGE STA.	154+97.14	PROJ. NO.	635-105 KA-2093-01	BRIDGE NO.	1.05(326)
SITE NAME	Gibbs Rd over I-635			HOLE STA.	50+74, 31.0' Lt CL

Bit Type	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION (TSF)	ELASTIC MODULUS (PSF)	N60 COUNT (SPT)	ELEVATION
NQ2 Diamond		13, 14		940	Shale, gray, sandy, micaceous, limy				
	Argentine Limestone Member	15	70.4	937.0	Limestone, nearly white, wavy bedded	347	2.23E+08		935.43
				935		312	2.23E+08		929.93
			77.5	930 929.9	Limestone, gray, wavy bedded, fossiliferous	134	1.75E+08		929.43
		16	78.8	928.6	Limestone, gray, wavy bedded, fossiliferous with vertical fracturing				
			81.2	926.23	T.D. = 81.2				

KANSAS DEPARTMENT OF TRANSPORTATION

Kansas Department of Transportation

RTE./CO.	I-635 / Wyandotte	SOUNDING NO.	CD 03	SHEET 4 of 4	
BRIDGE STA.	154+97.14	PROJ. NO.	635-105 KA-2093-01	BRIDGE NO.	1.05(326)
SITE NAME	Gibbs Rd over I-635			HOLE STA.	50+74, 31.0' Lt CL

Bit Type	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION (TSF)	ELASTIC MODULUS (PSF)	N60 COUNT (SPT)	ELEVATION

Core	Depth	Elev.	Cut	Rec	Rec %	RQD
1	6.4	1001.03	1.7	1.7	100	29%
2	8.1	999.33	5.0	5.0	100	84%
3	13.1	994.33	5.0	5.0	100	88%
4	18.1	989.33	5.0	5.0	100	62%
5	23.1	984.33	5.0	5.0	100	92%
6	28.1	979.33	5.0	5.0	100	84%
7	33.1	974.33	5.0	5.0	100	94%
8	38.1	969.33	5.0	4.2	84	94%
9	43.1	964.33	4.2	4.9	117	98%
10	47.3	960.13	5.1	5.1	100	98%
11	52.4	955.03	5.1	5.1	100	94%
12	57.5	949.93	5.0	5.0	100	94%
13	62.5	944.93	5.0	5.0	100	84%
14	67.5	939.93	5.0	5.0	100	98%
15	72.5	934.93	5.0	5.0	100	92%
16	77.5	929.93	3.7	3.7	100	32%
Total	**81.2**	**926.23**	**74.8**	**74.7**	**100**	**85%**