SE¼, SE¼, Sec. 24, T34S, R13E
Montgomery Co, KS

KANSAS DEPARTMENT OF TRANSPORTATION

Kansas Department of Transportation

RTE./CO.	US-166 / Montgomery	SOUNDING NO.	CH-02	SHEET 1 of 3	
		PROJ. NO.	166-63 KA-3906-01	BRIDGE NO.	
SITE NAME	US-166 over ATSF Railway			HOLE STA.	126+08, 64.0' Lt CL
GEOLOGIST	T. LeSage, G.T.	SCALE 1 inch = 5.0 feet		DATE	June 23, 2016
DRILLER	J. Burns	RIG TYPE	CME 55	TOP HOLE ELEV.	794.03
GW ELEV.	789.0	TOTAL DEPTH	36.8	M/B ELEV.	792.4
GPS COORDINATES	37.067394, -95.92896				

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 Stem Augers	Ma-ntle			794.0	Clay				
			1.6	792.4	Shale, weathered				
			2.8	791.2	Shale, clayey, slightly limey, gray, medium soft				
		1		790					
						6.2	198000		786.13
	Weston Sh		8.8	785.2	Iron rich concretion, brown, hard				
		2	8.9	785.1	Shale, clayey, gray, medium soft				
				785		2.3	127000		784.03
			11.8	782.2	Iron rich concretion, red, hard				
			11.9	782.1	Shale, clayey, slightly limey, gray, iron rich concretions 0.1 foot thick at 14.1, 14.6, and 16.1				
		3		780		4.6	282000		781.43
						2.6	159000		778.23
			16.9	777.1	Shale, sandy, limey, gray, soft to medium soft				
		4		775		3.1	203000		775.33
	South Bend Ls		19.5	774.5	Limestone, shaley, fossiliferous, light to dark gray				
			20.7	773.3	Sandstone, hard, blue-gray, $CaCO_3$ cemented	323.0	1.49E+08		772.63
			23.2	770.8	Shale, clayey, slightly sandy, dark gray, soft to medium hard				
		5		770		8.4	449000		769.93
	Rock Lake Sh		25.0	769.0	Sandstone, shaley, light gray, medium hard to hard				
			26.1	767.9	Shale, dark gray, medium soft to medium hard	112.0	3.05E+07		767.93
		6							
			28.9	765	765.1 Sandstone, laminated with shale, light to dark gray, medium hard, contains limey nodules from 2.1 to 3.6				
NQ2 Diamond		7							

BOREHOLE REPORT - KANSAS DOT.GDT - 12/19/16 11:02 - C:\TYSON\BRIDGES\MONTGOMERY COUNTY\KA-3906-01 (US-166 OVER ATSF RAILWAY)\GINT\KA-3906-01B.GPJ

KANSAS DEPARTMENT OF TRANSPORTATION

Kansas Department of Transportation

RTE./CO. US-166 / Montgomery	SOUNDING NO. CH-02	SHEET 2 of 3
	PROJ. NO. 166-63 KA-3906-01	BRIDGE NO.
SITE NAME US-166 over ATSF Railway		HOLE STA. 126+08, 64.0' 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	Rock Lake Sh	6			Sandstone, laminated with shale, light to dark gray, medium hard, contains limey nodules from 2.1 to 3.6	67.0	1.19E+07		763.23
			31.8	762.2					
		7		760	Shale, laminated with sandstone, light to dark gray, breaks easily in horizontal planes, convoluted bedded at 35.0 to 35.8	67.0	1.55E+07		758.23
			36.8	757.23	T.D. = 36.8				

KANSAS DEPARTMENT OF TRANSPORTATION

Kansas Department of Transportation

RTE./CO. US-166 / Montgomery	SOUNDING NO. CH-02	SHEET 3 of 3
	PROJ. NO. 166-63 KA-3906-01	BRIDGE NO.
SITE NAME US-166 over ATSF Railway		HOLE STA. 126+08, 64.0' 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 %	R D
1	5.0	789.03	2.9	3.1	107	69
2	7.9	786.13	4.8	5.2	108	77
3	12.7	781.33	4.2	4.3	102	43
4	16.9	777.13	5.0	5.2	104	72
5	21.9	772.13	4.9	5.2	106	69
6	26.8	767.23	5.0	5.0	100	66
7	31.8	762.23	5.0	5.0	100	20
Total	**36.8**	**757.23**	**31.8**	**33.0**	**104**	

Box 1 → 5' - 16.3'

Box 2 → 16.3' - 27.1'

Box 3 → 27.1' - 36.8'