



SU-30-5-35-1E

**GEOTECHNICAL UNIT
GEOLOGY SECTION**

BRIDGE FOUNDATION GEOLOGY REPORT

PROJECT NO. 36-101-K-4044-01
 Br. No. 01.14, Sta. 60+44
 U.S. 36 over Davis Creek
 Washington County

KANSAS DEPARTMENT OF TRANSPORTATION

COUNTY *Washington* PROJECT NO. *36-101-K-4044-01* BRIDGE NO. *1.14*

DESCRIPTION *U.S. 36 over Davis Crk* STA. *60+44*

GEOLOGIST *Thompson* VERTICAL SCALE *1" = 5'* DATE *3-26-92*

BIT TYPE & NO.	GEOLOGIC NAME	GEOLOGIC COLUMN	GROUNDWATER ELEVATION	DEPTH	ELEVATION	GEOLOGIC DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE	
								BLOWS	ELEV.
				0°	1445	1445.1			
						Clay, silty, brown to light brown			
					1440		2.50		1438.3
					1435				
				13°		1432.1	0.43		1433.1
					1430				
				18°		1427.1			
					1425	Clay, silty, gray-brown	1.23		1425.3
					1420				
					1415		0.45		1418.1
				31°		1413.9	1.72		1413.9
					31.6	1413.5 Shale, gray-maroon			
					32.3	1412.8 Sandstone, dense, calcareous			
						Shale, tan, very weathered			

KANSAS DEPARTMENT OF TRANSPORTATION

COUNTY *Washington*

PROJECT NO. *36-101-K-4044-01*

BRIDGE NO. *1.14*

DESCRIPTION

STA. *60+44*

GEOLOGIST *Thompson*

VERTICAL SCALE *1" = 5'*

DATE *3-26-92*

BIT TYPE & NO.	GEOLOGIC NAME	GEOLOGIC COLUMN	GROUNDWATER ELEVATION	DEPTH	ELEVATION	GEOLOGIC DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE	
								BLOWS	ELEV.
		2	35.9		1409.2	<i>Sandstone, tan, weathered</i>			
		3			1405	<i>Shale, light gray to maroon, clayey tends to swell, occasional thin sandstone lenses</i>	7.28		1408.2
		4	41.8 42.5		1403.3 1402.6	<i>Sandstone, conglomerate, calcareous</i>			
		5			1400		8.38		1401.2
		6			1395		14.3		1396.2
		7			1390		17.0		1392.1
		8			1385		4.75		1388.8
		9			1380		14.4		1383.1
				69.2	1375.9		18.8		1378.2
					1375				

KANSAS DEPARTMENT OF TRANSPORTATION

COUNTY Washington PROJECT NO. 36-101-K-4044-01 BRIDGE NO. 1.14

DESCRIPTION US 36 over Davis Crk STA. 60+44

GEOLOGIST Thompson VERTICAL SCALE NA DATE 3-26-92

BIT TYPE & NO.	GEOLOGIC NAME	GEOLOGIC COLUMN	GROUNDWATER ELEVATION	DEPTH	ELEVATION	GEOLOGIC DESCRIPTION AND REMARKS Core Descriptions	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE	
								BLOWS	ELEV.
						Core # 1 31 ⁶ -33 ² Cut 1 ⁶ Recov. 1' 31 ⁶ -32 ²⁵ Sandstone, dense, calcareous 32 ²⁵ -32 ⁷ shale, tan, very weathered RQD = 34%			
						Core # 2 33 ² -37 ⁸ Cut 4 ⁶ Recov. 3' 33 ² -34 ⁸ - Lost-very soft shale 34 ⁸ -35 ⁵ - Shale, tan, very, weathered 35 ⁵ -35 ⁹ - Sandstone, tan, weathered 35 ⁹ -37 ⁸ - shale, light gray to brown, sandy RQD = 42% Sample # 1 36 ² -36 ⁹⁵			
						Core # 3 37 ⁸ -41 ⁸ , Cut 4 ⁰ Recov. 1 ⁸ Shale, light gray to brown RQD - NA			
						Core # 4 41 ⁸ -45 ⁰ , Cut 3 ² Recov. 3 ² 41 ⁸ -42 ⁵ - Sandstone, conglomerate, calcareous Sample # 2 43 ² -43 ⁹ RQD = 85%			
						Core # 5 45 ⁰ -50 ⁰ Cut 5 ⁰ Recov. 5 ⁰ 45 ⁰ -50 ⁰ - Shale, light gray to maroon, clayey Sample # 3 48 ² -48 ⁹ RQD = 94%			
						Core # 6 50 ⁰ -55 ⁰ Cut 5 ⁰ , Recov. 5 ⁰ 50 ⁰ -51 ⁵ - Shale, maroon to light gray 51 ⁵ -55 ⁰ - Shale light gray with maroon streaks Sample # 4 52 ² -53 ⁰ RQD = 100%			

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DESCRIPTION *US 36 over Davis Crk.* STA. *60+44*

GEOLOGIST *Thompson* VERTICAL SCALE *NA* DATE *3-26-92*

BIT TYPE & NO.	GEOLOGIC NAME	GEOLOGIC COLUMN	GROUNDWATER ELEVATION	DEPTH	ELEVATION	GEOLOGIC DESCRIPTION AND REMARKS <i>Cone Descriptions</i>	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE	
								BLOWS	ELEV.
						<p>Cone # 7 55°-60° Cut 5° Recov. 5° 55°-60° Shale light gray with maroon streaks. Sample # 5 55²-56³ RQD = 94%</p>			
						<p>Cone # 8 60°-65° Cut 5° Recov. 5° 60°-65° Same as above Sample # 6 61⁴-62° RQD = 73%</p>			
						<p>Cone # 9 65°-69° Cut 4² Recov. 4° 65°-69² Same as above. Sample # 7 66²-66⁹ RQD = 94%</p>			