

NE 1/4, NE 1/4, Sec. 12, T27S, R23E

KANSAS DEPARTMENT OF TRANSPORTATION



RTE./CO.	K-39 / Bourbon	SOUNDING NO.	CH-1	SHEET 1 of 3
		PROJ. NO.	39-6 KA-3910-01	BRIDGE NO.
SITE NAME	K-39 over Pawnee Creek			HOLE STA. 419+45, 28.0' Rt CL
GEOLOGIST	T. LeSage, G.T.	SCALE	1 inch = 5.0 feet	DATE March 23, 2016
DRILLER	J. Burns	RIG TYPE	CME 55	TOP HOLE ELEV. 869.97
GW ELEV.	863.1	TOTAL DEPTH	42.8	M/B ELEV. 860.7
GPS COORDINATES 37.71778333, -94.83459722				

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	Mantle		2.4	870.0	Silty clay, dark brown, with rubble				
				867.6	Silty clay, dark brown, moist, medium soft				
NQ2 Diamond	Labette Sh Fm		9.3	865					
			10.4	860.7	Limestone, tan-gray, hard				
				859.6	Shale, light gray, clayey, slightly sandy	3.1	186000		858.67
						2.4	123000		856.27
			15.5	855	Shale, black				
			15.6	854.5	Shale, gray, medium soft to medium hard, clayey				
				854.4		12.5	1200000		852.07
			19.6	850	Limestone, tan-gray, hard				
			19.7	850.4	Shale, gray, medium soft to medium hard	15.6	1170000		848.27
				847.0	Shale, dark gray, medium hard, laminated	53.0	4870000		845.87
			23.0	845					
			25.4	844.6	Coal, black				
			26.1	843.9	Shale, black, carbonaceous, medium hard	41.0	5200000		842.57
			29.1	840.9		540.0	2.17E+08		839.97

BOREHOLE REPORT - KANSAS DOT GDT - 4/7/16 13:39 - CITYSON BRIDGES BOURBON COUNTY KA-3910-01 (K-39 OVER PAWNEE CREEK) GINTVKA-3910-01.GPJ



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NQ2 Diamond	Higginsville Ls Mbr		5		Limestone, fossiliferous, tan-gray, hard, vertical fracture from 29.5 feet to 30.0 feet depth				
			6	835		975.0	2.99E+08		835.17
			36.4	833.6	Limestone, tan-gray, hard, with thin algal seams throughout	59.0	5.18E+07		832.67
			7	830		1000.0	4.07E+08		830.47
			42.8	827.17	T.D. = 42.8				



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					<table> <tr> <th>Core</th> <th>Depth</th> <th>Elev.</th> <th>Cut</th> <th>Rec</th> <th>Rec %</th> <th>RQD</th> </tr> <tr> <td>1</td> <td>9.3</td> <td>860.67</td> <td>3.9</td> <td>3.2</td> <td>82</td> <td>54</td> </tr> <tr> <td>2</td> <td>13.2</td> <td>856.77</td> <td>4.8</td> <td>5.0</td> <td>104</td> <td>48</td> </tr> <tr> <td>3</td> <td>18.0</td> <td>851.97</td> <td>5.0</td> <td>5.2</td> <td>104</td> <td>70</td> </tr> <tr> <td>4</td> <td>23.0</td> <td>846.97</td> <td>5.0</td> <td>5.0</td> <td>100</td> <td>82</td> </tr> <tr> <td>5</td> <td>28.0</td> <td>841.97</td> <td>5.0</td> <td>4.9</td> <td>98</td> <td>66</td> </tr> <tr> <td>6</td> <td>33.0</td> <td>836.97</td> <td>5.0</td> <td>4.7</td> <td>94</td> <td>84</td> </tr> <tr> <td>7</td> <td>38.0</td> <td>831.97</td> <td>4.8</td> <td>5.2</td> <td>108</td> <td>90</td> </tr> <tr> <td>Total</td> <td>42.8</td> <td>827.17</td> <td>33.5</td> <td>33.2</td> <td>99</td> <td></td> </tr> </table> Box 1 → 9.3' - 21.2' Box 2 → 21.2' - 33' Box 3 → 33' - 43.8'	Core	Depth	Elev.	Cut	Rec	Rec %	RQD	1	9.3	860.67	3.9	3.2	82	54	2	13.2	856.77	4.8	5.0	104	48	3	18.0	851.97	5.0	5.2	104	70	4	23.0	846.97	5.0	5.0	100	82	5	28.0	841.97	5.0	4.9	98	66	6	33.0	836.97	5.0	4.7	94	84	7	38.0	831.97	4.8	5.2	108	90	Total	42.8	827.17	33.5	33.2	99					
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