



KANSAS DEPARTMENT OF TRANSPORTATION

1. ROUTE-COUNTY NO. 77-58	7. SOUNDING NO. CD #2	2. SHEET OF
3. BRIDGE STA.	8. PROJECT NO. K-6064-05	9. BRIDGE NO. 77-58-25.07
4. DESCRIPTION US-77 over Spring Creek and VPRR	10. HOLE STA. 557 + 79	11. DATE 3-10-01
5. GEOLOGIST B. Hawthorne	12. VERTICLE SCALE 1" = 10'	13. ELEVATION TOP OF HOLE 1163.67
6. DRILLER J. Burns	14. RIG CME-55	15. ELEVATION TOP OF ROCK 1116.17
16. GROUND WATER ELEV. 1129.0	17. TOTAL DEPTH OF HOLE 554	

BIT TYPE & NO.	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE	
							BLOWS	ELEV.
					Top Hole Elev. 1163.67	TSE		
	6" Hollowstem Augers			1160	Silty clay. Brown to Dark Brown overlying 8' of sand and gravel.			
	Soil			1150				
	Montic			1140				
				1130				
				1120				
			47.5	1116.17				
"N"	Threemile Limestone Member			1110	Limestone, shale varves. Bands of limy shale. Gray with Dark Gray chert nodules	415.94 165.09		1114.17 1112.17
			554	1100				

Core	Hole	Soundings	Log	Project 77-58 K-6064-65			
				Bridge No. 25.07 (000)			
				Bridge Station			
				US-77 Over Spring Creek and UP Railroad			
				Marshall County			
Core Hole #2, Station 557+79, 17 ft. Lt. Centerline, Top Hole Elevation = 1163.67							
6 inch Hollowstem Augers							
		1163.67	0.0-35.0	Fill Material and Soil Mantle			
		1128.67	35.0-46.8	Gravel and Sand, Large Limestone Cobbles			
		1116.87	46.8-47.3	Shale, Weathered			
		1116.37	47.3-TD				
Core #1		1116.37	0.0-0.2	Shale, Red-Green, Soft			
47.3-47.5		1116.17	0.2-TD	RQD = 0%			
Cut 0.2							
Rec. 0.2							
Core #2		1116.17	0.0-0.5	Limestone, Tan-Buffer			
47.5-52.5		1115.67	0.5-1.3	Shale, Very Limey, Gray, with "Blue Valley Agates"			
Cut 5.0		1114.87	1.3-2.2	Limestone, Shaley, Gray,			
Rec. 4.8		1113.97	2.2-4.7	Limestone, Bands of Dark Gray Chert in Gray LS			
		1111.47	4.7-5.0	Shale, Gray, Limey			
		1111.17	5.0-TD	RQD = 76%			
Core #3		1111.17	0.0-2.6	Limestone, With Chert Nodules			
52.5-55.1		1108.57	2.6-TD				
Cut 2.6							
Rec. 2.6							
Coring ceased, due to Rig Breakdown.							
Core #	Depth	Elev.	Cut	Recov.	%	RQD	
#1	47.3-47.5	1116.37	0.2	0.2	100	0%	
#2	47.5-52.5	1116.17	5.0	4.8	96	75	
#3	52.5-55.1	1111.17	2.6	2.6	100	100	
Total	55.1-TD	1108.57	7.8	7.6	97	58.7	