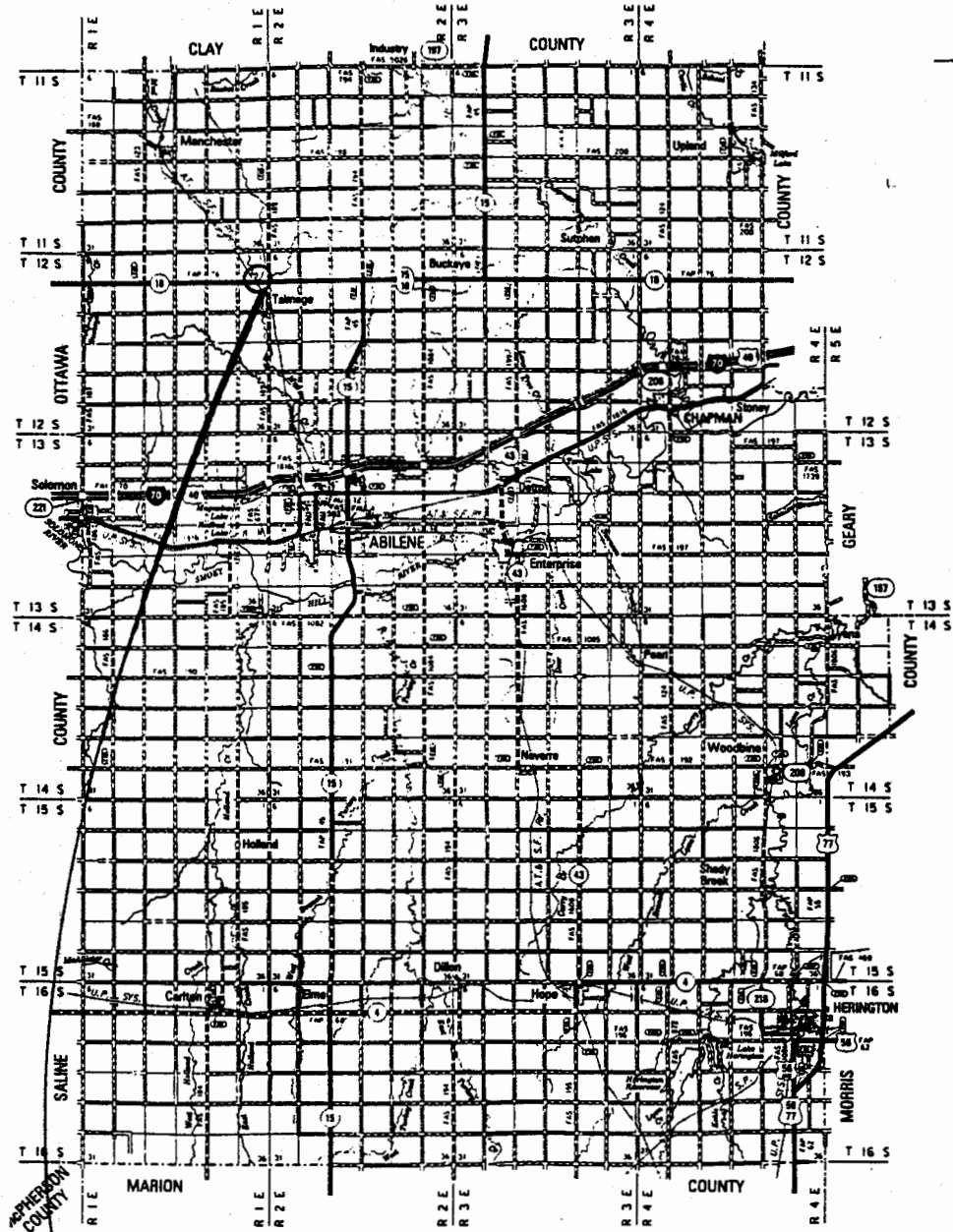


Kansas Department of Transportation

BRIDGE FOUNDATION GEOLOGY REPORT

2AEΦ



18-21 K-4374-01
Br. No. 5.69
Dickinson County



KANSAS DEPARTMENT OF TRANSPORTATION

1. ROUTE-COUNTY NO. 18-21	7. SOUNDING NO. CD#1	2. SHEET 1 OF 2
3. BRIDGE STA. 307+53.21	8. PROJECT NO. K-4374-01	9. BRIDGE NO. 5.69
4. DESCRIPTION K-18 over Mud Creek	10. HOLE STA. 308+44, 33' Lt	11. DATE Aug/1993
5. GEOLOGIST Art Peterson	12. VERTICLE SCALE 1" = 10'	13. ELEVATION TOP OF HOLE 1212.40
6. DRILLER Bob Bergman	14. RIG B-61	15. ELEVATION TOP OF ROCK 1175.9
16. GROUND WATER ELEV. 1197.2	17. TOTAL DEPTH OF HOLE 52.6	

BIT TYPE & NO.	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE	
							BLOWS	ELEV.
					Abut. # 2			
					T.H.EI. 1212.40			
				1210				
				1200	Silt, clay binder, brown contains scattered sand			1200
				1190				1190
			30°	1182.4				1182.4
			33°	1178.9	Sand and gravel, clay binder with shale, clayey, gray-green			1180
			40°	1172.4				1172.1
				1170	Gypsum, light gray to white, crystalline Lost circulation in lower part of Gypsum			1170
			51.8 52.6 TD	1160.6		Sa. #1	Q _u = 169.30	1163.85
				1159.8	Dolomite, shaly, light gray, void	Sa. #2	Q _u = 139.82	1160.5
				1150	Core #1, 40' - 42' (1172.0 - 1169.8) cut 2' Rec. 2' core Rec. 77% RQD 0%			1160
					Core #2, 42' - 47' (1169.8 - 1164.9) cut 4' Rec. 4' core Rec. 100% RQD 0%			1150

3 1/2" Hawthorne

Carbide
Core bit
bottom discharge

Diamond core bit

Alluvium

Wellington Formation

Pushed 4" casing

DRILLING LOG (con't sheet)		SOUNDING NO. CD#1		PROJECT NO. 18-21-K4374-01		SHEET 2 OF 2		
ELEVATION TOP OF HOLE 1212.40		GROUND WATER ELEV. 1197.2		TOTAL DEPTH OF HOLE 52.6		ELEVATION TOP OF ROCK 1175.9		
BIT TYPE & NO.	GEOLOGIC NAME	STRATIGRAPHIC COLUMN	DEPTH	ELEVATION	CLASSIFICATION OF MATERIALS DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE	
							BLOWS	ELEV.
					<u>Core#3</u> , 47.5 - 50.0 (1164.9-1162.4) cut 2 ⁵ Rec. 2 ⁰ Core Rec. 80% RQD 38%			
					<u>Core#4</u> , 50 ⁰ - 52 ² (1162.4-1160.2) cut 2 ³ Rec. 1 ² Core Rec. 92% RQD 50%			