ROUTE NO. SOUNDING NO. CD #1A SHEET 1 OF 3

KANSAS DEPARTMENT OF TRANSPORTATION

COUNTY Shawnee PROJECT NO. 70-89. K-2446-01 BRIDGE NO. 10.71

DESCRIPTION Fair Iowa Rd over I-70 STA. 78+83. 111' Lt & Mainline

GEOLOGIST Clarke VERTICAL SCALE 1" = 10' DATE May 1990

BIT TYPE & NO.	GEOLOGIC NAME	GEOLOGIC COLUMN	GROUNDWATER ELEVATION	DEPTH	ELEVATION	GEOLOGIC DESCRIPTION AND REMARKS	UNCONFINED COMPRESSION	STANDARD PENETRATION OR CASING DRIVE BLOWS	STANDARD PENETRATION OR CASING DRIVE ELEV.
					960	T.H.E. 957.93			
"N" Core Barrel	Wabaunsee Group Mantle				950		Qu 2.0	Shelby 1	951.93
							1.1	Shelby 2	946.93
					940			Pushed 4" Casing	
				19.5	938.4				
						Ss - tan - wtrd - poorly cemented Hard, brown, concretionary nodules			
				24.8	933.13		27.6	Sa 1	933.5
					930	Sandstone - tan to tan/gray - hard Shale lenses, firm, gray	91.6	Sa 2	931.4
							96.9	Sa 3	929.2
							79.2	Sa 4	928.6
							117.0	Sa 5	926.3
					923.23		86.9	Sa 6	924 ±
					920	Shale - gray, firm, sandy Ss stringers, hard, gray/tan wavy bedded	30.9	Sa 7	921.7
							45.9	Sa 8	919.8
							15.0	Sa 9	917.2
				42.3	915.163				
				44.6	913.33	Sh - gray, limey, hard	30.6	Sa 10	914.5
				45.7	912.163	Ls, gray, hard, fossiliferous T.D. 912.63	507.1	Sa 11	912.7
					910				

5/30/90

Proj = 70-89 K-2446-01
Fairborn Road over I-70
Br # 10.71

	+	HI	−	Elev.	
Err = 29A				979.98	Sta 9+84, 19.5 Lt ℄ Fairborn Rd
T.	0.35	980.33			
BC = 1A			22.40	957.93	Sta 10+72, 59 Lt ℄ Fairborn Rd
					Sta 78+83, 111 Lt ℄ I-70
					Sta 49+46, 59 Rt ℄ Fairborn Rd
BC = 1A			957.93	0°-4°	Silty Clay, dk brown, stiff, moist
			953.93	4°-6°	Shelby Tube #1
			951.93	6°-9°	Silty Clay, dk brown to brown/olive, soft, moist
			948.93	9°-11°	Shelby Tube #2

* Shelby Tubes Taken Through 8" Hollow Stem Auger

Casing				
	1	3.8'	3.8'	
	2	7'	10.9'	
	3	7°	17.9'	
	4	3°	20.9'	
		-1'	19.5'	

* Drove Casing to seal only
19.3 - 19.4 = 7.8PT
19.6 - 19.5 = 9.8PT

938.43	19.5-19.6	Ss, wthd, tan to brown, firm *Returned cuttings, hard, brown, sharp from concretions in ss. (see Core #1)
938.33	19.6-19.8	Ss. wthd - tan, to brown, firm to hard *Returned cuttings, hard, brown, sharp from concretions in ss. (See Core #1)

* Ss contact - 938.4 - Casing reached resistance and presence of cuttings like those found in Core #1

[illegible] K-2666-01 El = 1071

Core #1		937.13	19⁸-23²	Lost *
Cut 5⁰ [illegible]		934.73	23²-24⁸	Ss, tan, wthd, soft, fine grnd
Rec [illegible]				Tan hollow, concretionary nodules from 23²-23⁴
RQD	[illegible] = X			
[illegible]				Ss crumbles between fingers
Sa #1	23⁸-24⁰ [illegible]			* 19⁸-23² lost due to large amount of [illegible] that fell in hole. See Top Core #1 Box #1
Core #2		933.13	24⁸-25⁸	Lost *
Cut 2⁵		932.13	25⁸-27³	Ss - tan/gray, firm to hard
Rec 1⁵				A few soft, gray, sh. lenses
RQD	1⁵ = X	930.73	27²-27³	Lost *
24⁸-27³				
Sa #2	26⁰-26⁵ [illegible]			
Core #3		930.63	27³-27⁴	Lost
Cut 3⁷		930.53	27⁴-28⁹	Ss. hard, tan/gray
Rec 3⁵				Some hard lt gray limy [illegible] to 28⁹
RQD	0⁴ 0⁸ = 32%			Few gray, soft sh. lenses
27³-31⁰		929.03	28⁹-30⁹	Ss hard, gray
Sa #3	28⁰-28⁷ [illegible]			Some gray, soft sh lenses
Sa #4	28⁸-29³ [illegible]			No Concretions
		927.03	30⁹-31⁰	Lost
Core #4		926.93	31⁰-31⁴	Ss - hard, tan/gray
Cut 1³		926.53	31⁴-31⁷	Ss - tan/gray, hard
Rec 1³				Some gray, soft sh lenses
RQD	1³ = 100%	926.23	31⁷-32¹	Ss - tan, hard
31⁰-32³				Some gray, soft sh. lenses
Sa #5	31⁰-31⁶ [illegible]	925.73	32¹-32³	Ss - gray, hard, limey?
				Some gray, soft sh lenses

[illegible] 72-	79	K-2046-01		B # 1071
Core # 5			925.63	32^3-[illegible] Ss. tan/gray, hard,
Cut 5°				few soft gray sh [illegible]
Rec 5°			925.23	32^7-32^9 Ss [illegible] ls? tan, hard
RQD	[illegible] = 92%		925.13	32^8-36^7 Ss. tan, hard,
32^3-37^3				V few, soft gray sh. [illegible]
Sa # 6	$3[illegible]$-$3[illegible]$	[illegible]	923.33	$3[illegible]^7$-37^3 Sh. gray, v firm, V sandy, ss stringers, tan
Sa # 7	35^7-36^2	[illegible]		hard, wavy bedded
Core # 6			920.63	37^3-41^3 Sh. gray, firm, sandy, ss stringers tan
Cut 5°				hard, wavy bedded
Rec 5°				* More ss between 37^3-39^0
RQD	1^0, 1^9, 0^9	= 76%	916.63	41^3-42^3 Sh. sandy, firm, broken
37^3-42^3				
Sa # 8	37^7-38^1	to [illegible]		
Sa # 9	40^3-40^7	to [illegible]		
Core # 7			915.63	42^3-43^0 Sh. gray, limey, hard
Cut 3°			914.53	43^0-43^6 Conglomerate, tan to gray
Rec 3°			914.33	43^6-44^6 Sh. dk gray, hard,
RQD	$[illegible]^3$, 1^6	= 97%		fossiliferous from 44'
42^3-45^3			913.33	44^6-45^3 Ls, gray, hard, fossiliferous (Topeka?)
Sa # 10	43^0-43^6	to 32° [illegible]	912.63	45^3 SLS
Sa # 11	44^8-45^2	to 35° [illegible]		

Sounding No. CD-1A

May 1990

FO-89-K-2246-01
Shawnee Co
Fairlawn Rd over I-70
Sta 78+83, 111' Lt ℄ mainline

Core No. 1
Depth: 19' to 24' Elevation: 938.13 to 933.13

Cut: 5'
Recored: 1'6
RQD: N/A

Core No: 2
Depth: 24' to 27'3 Elevation: 933.13 to 930.63

Cut: 2'5
Recv: 1'5
RQD: N/A

Core No: 3
Depth 27'3 to 31' Elevation: 930.63 to 926.93

Cut: 3'7
Recv: 3'5
RQD 32%

Core No: 4
Depth: 31' to 32'3 Elevation: 926.93 to 925.63

Cut: 1'3
Recv: 1'3
RQD: 100%

Sounding No CD-1A

May 1990

70-89-K-2446-01
Shawnee Co
Fairlawn Rd over I-70
Sta 78+83, 111' Lt ℄ Mainline

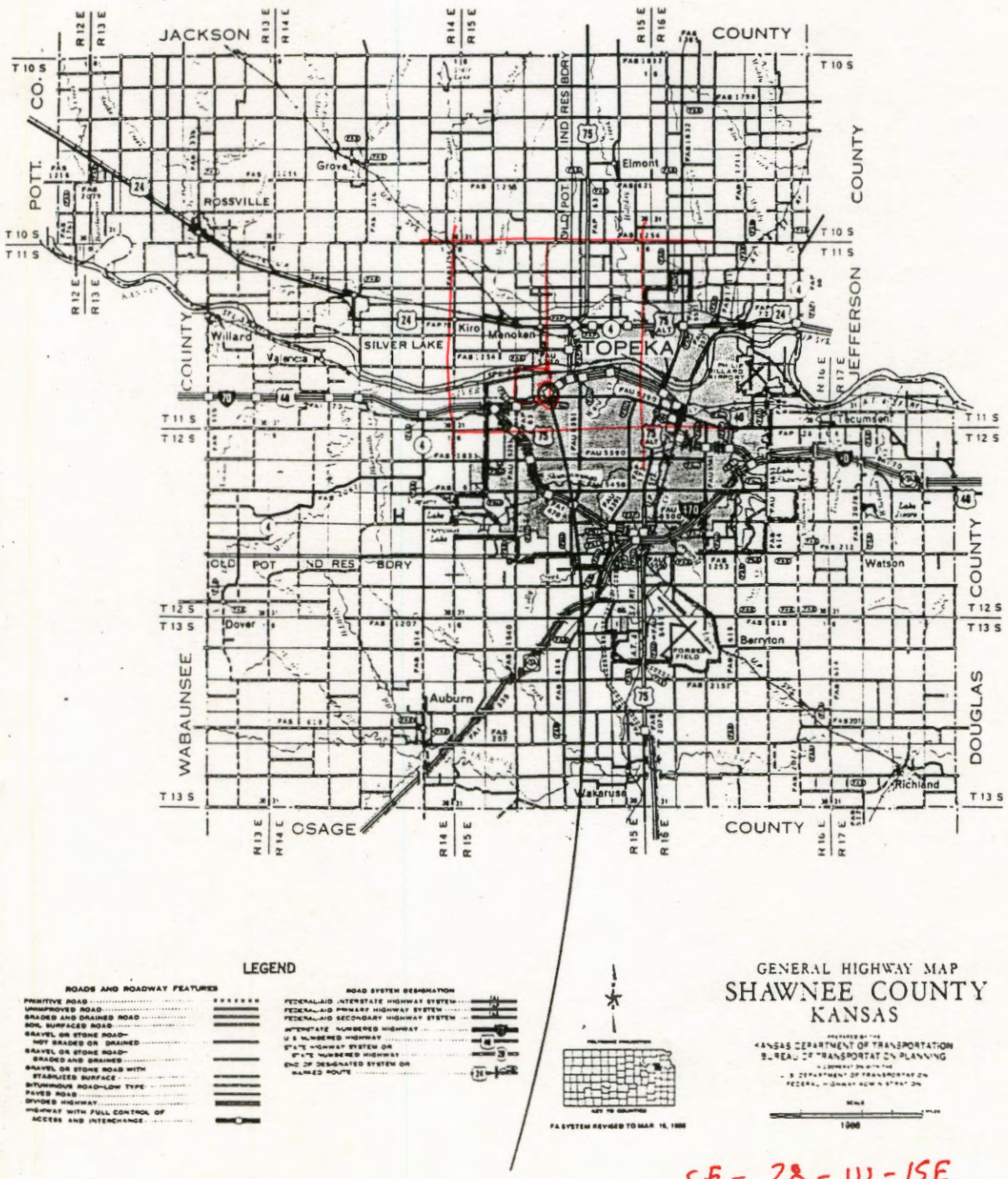
Core No: 5
Depth: 32' to 37' Elevation: 925.63 to 920.63
Cut: 5'
Recv: 5'
RQD: 88%

Core No: 6
Depth: 37' to 42' Elevation: 920.63 to 915.63
Cut: 5'
Recv: 5'
RQD: 76%

Core No: 7
Depth: 42' to 45' Elevation: 915.63 to 912.63
Cut: 3'
Recv: 3'
RQD: 97%

BRIDGE FOUNDATION GEOLOGY REPORT

Duplicate



SE - 28 - 11 - 15E

0-45

Wabaunsee

White Cloud member

70-89-K-2446-01

Br.No. 70-89-10.71
FAIRLAWN ROAD over I-70