

KGS Test Hole - University of Ks. - Campus West
T. 13S, R. 19E, Sec. 2 aaca.

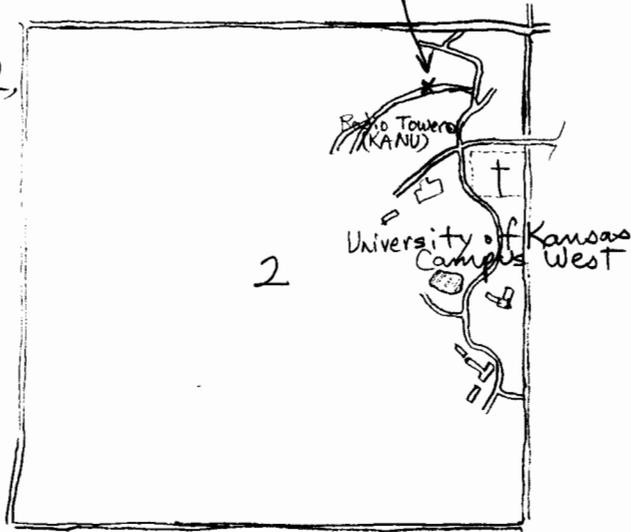
April 24, 1984

Drilled with KGS Auger Rig

KGS test hole

≈ 20 ft. north of
centerline of road

very near $W\frac{1}{2}$, $NE\frac{1}{4}$, $NE\frac{1}{4}$ Sec. 2,
T. 13S, R. 19E



KFS Test Hole drilled April 24, 1984
 on KU's Campus West
 Melvin Kleinschmidt, Don Bahrmaier, Pam Chaffee
 Lawrence West Quad
 7½ min. Topo.
 13-19E-2 AAB

Used KFS Auger Rig and 4¾ in tricone roller bit (bit segment 12-13 in in length)

Depth to
 0 - 9.5

push cored by M.K. and D.B., P.C. not present

9 - 12.

reddish yellow brown clay or shale w/ some lt. gray ls. chips

13:20

12 - 16.5

same as 9-12 but lighter in color

16.5 - 17

drilling fast, fm. soft.

13:35 @ 18'

17 - 18

lt. tan ls., some lt. gray ls.; drilling slow with some water loss so added mud at 18 ft.

Drilling stops to add 5 ft stem.

13:46

Drilling starts again.

18 - 18.5

same as 17-18, drilling hard.

18.5 - 19

reddish yellow brown shale, sm. amt. ls. chunks; drilling soft

19 - 20

same as 18.5-19 bit start to get blue-gray and some maroon shale

13:55 @ 22.2

20 - 22.2

blue gray shale; drills fast

Stop drilling and pull out 15 ft of stem

Change to different 4¾ tricone roller bit (18 in in length)

	<u>Depth</u>	<u>to</u>	
14:40	22.2'	23'	lt. blue gray shale; sm. amt. lt. red-brown ls. chips
14:53			Stop drilling - remove 5' stem and add a 10' stem.
	23' -	28'	lt. blue gray shale stop drilling and add 5' stem.
	28' -	30'	lt. blue-gray shale
	30' -	32.5	darker blue gray shale, sm. amt. maroon shale
15:21	32.5 -	33.	maroon shale stop drilling remove 5' stem and add 10' stem, some water loss.
16:00	33' -	35.5	maroon shale
	35.5 -	36.5	maroon and brownish gray shales
	36.5 -	37.0	maroon shale
	37. -	37.5	blue-gray shale
16:16	37.5 -	38.	maroon shale stop drilling add 5' stem

Depth - to
38' - 40.5'

maroon shale with sm. amt. blue-gray shale; slight crunch at 40.1

40.5' - 43.'

same as 38' - 40.5' but more lt. blue-gray shale

Stop drilling at 43'. Remove 5' stem and add 10' stem plus 2.5 inch double tread segment $\square \downarrow 2\frac{1}{2}$ in

16:39

43' - 46.'

maroon, lt. blue-gray, and some yellow-brown shales. Crunchy zone 45.4' - 45.6'

46' - 46.9'

blue-gray shale

46.9' - 48'

blue-gray shale with several thin hard crunchy zones of yellow-tan ls. Some yellow-tan shale near 48'. Stop drilling at 48' and add 5' stem.

16:53

48' - 53'

KC not present at rig during drilling of this 5'. Blue gray shale with some black coal film floating on water in mudpit. Stop drilling at 53'. Pilled out ^{all} stem and bit. Left as is overnight.

17:10

TD of test hole = 53 feet.