

GEOLOGIST REPORT

COMPANY:	James E. Ely	LOCATION:	C NW SE
CONTRACTOR:	Sterling Drilling Co.	DESCRIPTION:	Sec. 22-19s-32w
FARM:	Ely-Scott #2	COUNTY:	Scott County, Kansas
POOL:	Wildcat	ELEVATION:	3015 Rotary Bushing
COMMENCED:	December 27, 1964	COMPLETED:	January 11, 1965

Samples were examined on location, by writer, from 2700 feet to Rotary Total Depth. Welox radiation Guard Log was run, and one drill stem test was taken.

FORMATION TOPS

	Sample	Electric Log
TOP KRIDER	2804 (+211)	2806 (+209)
TOP WINFIELD	2860 (+155)	2862 (+153)
TOP TOWANDA	2915 (+100)	2819 (+96)
TOP FT. RILEY	2966 (+49)	2969 (+46)
TOP HEBNER	3980 (-965)	3983 (-968)
TOP TORONTO	3998 (-983)	4000 (-985)
TOP LANSING	4028 (-1013)	4029 (-1014)
BASE KANSAS CITY	4432 (-1415)	4433 (-1416)
TOP FT. SCOTT	4561 (-1546)	4565 (-1550)
TOP CHEROKEE	4576 (-1563)	4577 (-1564)
TOP MORROW	4697 (-1682)	4698 (-1683)
MISS (ST. LOUIS)	4736 (-1721)	4736 (-1721)
L.T.D.	4820 (-1805)	4821 (-1806)

TOP KRIDER 2804 (+211)

2804-20 Grey fine crystalline dolomitic lime, shaley in part. Trace of porosity in cleaner part.

2820-37 Grey fine crystalline dolomitic lime, clean - fair porosity from 2820 to 31. Basal part of Krider - dense grey lime. No show.

TOP TOWANDA 2915 (+100)

2915-56 Tan-buff fine crystalline sandy dolomite. Fair to good porosity in top 20 feet with good reservoir conditions grading into grey fine crystalline shaley dolomite. No show.

TOP FT. RILEY 2966 (+49)

2966-3011 Grey shaley fine crystalline, vugular lime. Good fossiliferous porosity and reseroir conditions. No show.

TOP TOPEKA 3690 (-675)

The Topeka section in this hole developed fair to good fossiliferous porosity in the lower section and chalky conditions in the upper section. No shows of oil were encountered.

TOP TORONTO 3998 (-983)

3998-4010 Cream to tan medium crystalline fossiliferous lime. Poor porosity, No show of oil.

TOP LANSING 4028 (-1013)

The Lansing section was very chalky throughout, with only one zone of good porosity. This zone from 4280-4296 was buff to grey oolitic lime with large good oolitic porosity. No show of oil - no odor - for further descriptions in Lansing section, consult attached strip log.

TOP FT. SCOTT 4561 (-1546)

4564-68 Brown medium crystalline dense agatized chert nodules. No show of oil.

TOP CHEROKEE 4576 (-1563)

The Cherokee section consisted of alternating lime and shale beds. No porosity or commercial shows of oil were encountered. One piece of chert was found in 4650-55 sample, with a trace of stain. This came from a streak of chert porosity from 4645-46. (No value) No sand deposits were in the Cherokee section.

TOP MORROW 4697 (-1682)

4700-03 White very fine grain silty glauconitic sand. No porosity. No show.

4703-08 Same as above grading into a fine to medium crystalline sandy lime. No porosity, no shows.

4709-16 Fine to medium grained glauconitic limy sand clusters. Poor samples. No show of oil. Electric Log calculated from 15 to 30% porosity and 26 to 31% salt water saturation. D.S.T.

D.S.T. #1 (Straddle) 4707-40

Open 52 minutes, weak blow for 30 minutes. Recovered 60' Water cut mud and 70' of Rotary mud. (Bottom packer failed to seat)
IBHP #612/20" FBHP 215#/30" IFP 46# FFP 77#

TOP MISSISSIPPI (ST. LOUIS) 4736 (-1721)

4736-4804 Light grey to tan fine crystalline to dense chalky lime, with zones of same with fine to medium oolites. Trace of few loose oolites from 4767-71. Very poor to no porosity developed in this section. No shows of oil.

4804-20 (Spurgeon?) (4804 (-1789)
White fine crystalline oolitic lime with abundant fresh white opaque chert. No porosity. No shows of oil.

Due to the low structural position of this hole to surrounding control and the lack of shows of oil, it was recommended that this hole be plugged as Dry and abandoned January 11, 1965.

Respectfully yours,



Orlin R. Phelps

DRILLING TIME

One Foot Interval

2700-01 4-4-4-2-1/1-1-2-3-3
 20 2-2-2-2-3/4-3-5-2-3
 30 3-3-4-3-2/2-3-1-2-4
 40 3-3-5-3-3/4-3-3-1-2
 50 3-2-2-1-1/3-1-2-2-2
 60 4-2-3-5-6/6-5-4-1-1
 70 3-2-6-4-6/3-2-2-4-2
 80 5-1-2-4-4/2-4-1-2-10-4 Trip 2779
 90 3-3-3-3-3/3-4-3-3-3
 00 3-4-4-3-3/4-3-3-2-2

3200-10 2-3-2-3-3/3-2-3-2-2
 20 3-2-4-3-2/2-3-3-4-4
 30 3-5-3-3-3/3-5-3-4-4
 40 2-4-3-3-3/3-4-4-5-4
 50 3-5-5-5-5/4-4-3-4-5
 60 4-3-4-5-4/4-4-3-2-4
 70 4-4-4-4-3/4-4-3-4-4
 80 4-3-3-3-4/3-2-5-5-4
 90 4-5-5-5-5/5-5-5-5-5
 00 7-5-5-5-6/3-2-5-5-2

2800-10 2-2-2-2-3/3-3-2-2-3
 20 2-3-2-3-2/3-2-2-2-2
 30 3-2-2-3-3/3-3-4-3-3
 40 2-4-5-5-5/5-4-2-2-2
 50 2-3-4-3-3/2-2-3-3-3
 60 3-3-2-3-3/2-2-2-2-2
 70 3-4-3-3-3/3-4-4-4-4
 80 3-3-3-4-5/4-5-4-4-4
 90 3-2-3-3-2/2-3-3-2-2
 00 3-3-2-3-3/4-3-3-4-2

3300-10 3-4-4-5-5/5-7-4-5-4
 20 4-4-5-5-5/5-5-4-4-5
 30 3-4-3-4-3/3-4-3-4-4
 40 5-4-5-5-4/6-5-4-4-5 Trip 3343
 50 7-3-3-3-3/3-3-5-4-4
 60 4-6-6-6-7/7-7-3-10-5
 70 7-7-7-10/6-4-4-4-5
 80 3-5-4-4-5/4-4-4-4-3
 90 4-5-5-5-7/5-1-1-1-1
 00 3-7-5-4-3/3-5-3-4-7

2900-10 3-3-3-3-2/6-1-1-1-3
 20 1-1-3-3-2/5-5-3-3-4
 30 2-5-3-3-2/3-3-4-4-5
 40 5-4-6-4-2/3-4-4-5-7
 50 6-5-5-3-3/5-8-7-6-7
 60 7-3-4-4-5/6-2-2-3-3
 70 3-2-2-3-3/3-1-2-1-1
 80 1-1-1-1-2/3-2-1-2-2
 90 3-4-2-2-3/2-2-2-2-2
 00 4-2-2-2-2/2-2-1-2-1

3400-10 7-7-3-10-9/11-12-1-3-13
 20 12-14-4-4-5/5-4-5-3-3 Trip 3412
 30 ~~4-6-10-12-12/11-10-7-7-9~~
 40 7-3-3-10-4/7-5-6-9-9
 50 3-5-5-6-5/6-7-5-6-4
 60 5-6-6-6-7/5-4-4-4-7
 70 7-7-3-6-4/5-7-5-5-4
 80 4-4-4-5-5/4-4-3-4-3
 90 4-1-4-5-5/6-6-6-5-5
 00 3-3-4-5-7/5-5-5-2-2

3000-10 1-2-2-1-1/2-1-2-2-2
 20 2-1-1-1-2/2-2-2-2-1
 30 2-1-3-2-2/2-1-2-1-2
 40 2-2-3-3-3/4-5-4-4-5
 50 2-3-3-3-3/4-3-4-2-2
 60 4-3-3-5-3/2-3-5-6-6
 70 7-7-7-6-7/3-3-3-3-4
 80 2-3-3-3-3/3-2-3-4-3
 90 1-1-1-1-1/1-2-2-3-3
 00 3-2-3-3-5/3-4-4-4-5

3500-10 4-5-4-3-4/3-4-5-5-5
 20 4-6-3-2-4/3-4-6-6
 30 3-2-5-6-7/6-7-7-5-5
 40 4-5-6-6-6/5-4-5-5-5 Trip 3535
 50 4-5-4-2-3/2-3-4-3-4
 60 3-3-3-4/4-5-4-4-4
 70 4-4-4-4/4-4-5-4-4
 80 4-4-3-4-3/3-3-3-4-3
 90 4-5-5-2/2-3-4-3-3
 00 4-3-4-5-5/4-4-3-3-5

3100-10 2-2-3-5-5/5-5-6-9-3
 20 5-2-2-10-8/10-2-2-3-5 Trip 3116
 30 4-3-3-3-4/5-5-4-4-4
 40 3-2-2-1-2/3-2-2-3-3
 50 4-4-4-4-5/4-4-4-3-3
 60 3-4-3-3-4/4-4-4-3-3
 70 4-3-3-3-2/3-3-4-3-4
 80 4-4-3-3-3/4-4-3-4-2
 90 4-2-4-2-3/3-2-3-2-2
 00 3-1-4-3-3/3-3-3-2-2

3600-10 5-3-3-4-4/3-4-5-5-6
 20 5-7-4-3-4/7-3-4-4-4
 30 4-4-3-2-2/3-4-1-3
 40 3-4-3-4-4/4-4-3-3-3
 50 4-2-4-4-4/3-3-2-3-2
 60 2-3-3-4-3/5-3-2-3-2
 70 3-2-4-5-4/5-3-5-3-4
 80 4-4-5-4-4/4-5-2-2-2
 90 2-2-1-2-2/2-3-1-2-5
 00 5-3-4-4-4/3-4-5-3-2

DRILLING TIME

One Foot Intervals

3700-10 3-4-2-2-3/4-4-4-3-3
 20 4-5-5-5-6/6-5-5-4-3
 30 5-8-4-3-3/4-3-3-4-2
 40 3-3-4-5-4/4-6-5-5-4
 50 5-7-4-5-5/5-6-4-5-3
 60 3-3-3-3-3/2-2-2-2-2
 70 3-2-3-3-2/3-3-2-1-1
 80 2-2-2-2-2/2-1-2-2-2
 90 2-2-2-4-4/3-3-5-5-6
 00 6-4-2-2-3/3-3-3-4-2

3800-10 3-1-2-2-2/3-2-3-3-5
 20 3-5-4-5-4/4-3-3-3-3
 30 3-5-5-3-5/5-4-3-4-3
 40 2-4-4-4-3/4-3-3-2-3
 50 2-2-2-2-2/4-2-3-2-4
 60 5-5-5-3-5/4-3-4-4-3
 70 4-4-6-5-5/7-5-5-6-6
 80 6-6-6-6-4/3-4-5-5-3
 90 3-2-2-3-3/3-3-4-3-7
 00 5-6-4-2-3/5-4-3-4-2

Total 3.55

3900-10 2-8-4-3-4/3-5-7-5-6
 20 6-6-5-3-5/5-4-6-3-5
 30 2-3-3-4-4/5-5-6-5-5
 40 5-3-2-5-5/5-5-6-4-4
 50 4-2-2-2-2/2-2-2-5-4
 60 5-4-4-4-3/3-3-3-3-2
 70 2-2-3-2-3/3-3-4-3-4
 80 3-3-3-3-3/3-3-2-3-3
 90 1-1-2-2-3/7-7-4-6-5
 00 2-3-3-4-3/4-4-3-3-3

4000-10 4-3-1-5-3/4-4-4-4-4
 20 3-3-6-5-5/3-4-4-4-4
 30 5-6-6-4-3/3-4-4-9-9
 40 7-6-6-7-6/6-6-5-8-3
 50 8-5-4-4-4/5-6-6-7-5
 60 7-7-3-4-4/7-7-6-4-3
 70 4-3-5-4-3/3-4-3-4-4
 80 5-4-4-4-6/6-5-5-6-7
 90 3-4-4-4-4/3-3-3-4-6
 00 5-4-3-3-3/3-4-4-4-4

4100-10 3-3-2-3-3/4-4-3-4-5
 20 2-2-3-4-4/4-6-6-6-5
 30 6-4-3-6-6/6-7-6-5-2
 40 4-4-5-3-2/3-4-5-4-6
 50 4-7-5-5-4/4-4-5-4-6
 60 5-3-4-2-3/5-4-6-3-5
 70 4-5-3-5-4/3-4-4-6-6
 80 6-5-3-4-3/3-3-2-3-3
 90 3-4-6-6-5/5-4-4-3-4
 00 4-2-4-4-5/3-3-4-5-6

4200-10 7-5-6-6/7-7-7-7
 20 6-7-7-4/7-6-7-6-7
 30 6-7-7-7/7-7-7-12
 40 12-10-10-10-9/10-10-10-9
 50 50 11-10-10-12-11/6-7-7-7-4 Trip
 60 60 3-7-7-7-10/10-10-5-6-9 4245
 70 9-5-5-2/1-1-1-10
 80 7-7-7-7/2-1-1-7
 90 4-9-6-9-2/2-2-3-3
 00 1-3-3-2-2/2-1-1-5

4300-10 7-7-7-7-3/7-7-7-7
 20 10-10-7-7/5-5-5-5
 30 7-7-7-7/7-11-10-7-3
 40 11-7-7-7-3/7-7-7-7
 50 6-5-7-7/2-2-7-6-6
 60 7-7-7-3-3/4-4-5-4-4
 70 6-7-7-5-5/4-3-4-5-6
 80 3-7-7-3-3/5-6-6-4
 90 5-7-7-7/7-7-6-5
 00 7-7-7-7/1-1-1-7

4400-10 7-7-7-7/1-1-1-1
 20 7-7-7-7/6-5-5-5
 30 7-7-7-7/7-7-7-7
 40 10-5-7-7/1-5-5-5
 50 3-4-7-7/1-10-1-3
 60 7-7-7-5/5-6-7-6
 70 7-7-7-7/1-2-2-1-3
 80 7-7-7-4/1-1-1-5
 90 5-7-7-7/7-7-7-4
 00 6-7-7-7/7-5-5-5 Trip 4496

4500-10 303-10-10/1-1-1-4
 20 6-7-7-7/7-7-5-5-6
 30 7-7-7-5/5-5-6-5-5
 40 7-7-7-3/1-5-5-5
 50 5-7-7-7/5-5-5-5
 60 6-7-7-7/7-7-7-5
 70 4-7-7-7/2-2-1-5
 80 7-7-7-7/7-6-7-5
 90 3-5-10-7/7-7-7-7
 00 6-5-7-7/10-10-7-7-3

4600-10 10-7-5-6-9/12-11-9-10-3/ Trip
 20 7-7-7-6/7-7-7-6 4610
 30 5-5-7-7/6-7-7-4
 40 3-7-1-3-5/9-10-11-10-3
 50 2-7-7-11/7-7-10-3
 60 1-3-11-7-3/3-10-9-10-9
 70 11-7-10-10/11-10-10-11-5
 80 10-7-3-7/10-10-7-6
 90 6-7-7-5/7-6-7-6
 00 5-7-7-3-3/1-3-1-3-7

DRILLING TIME

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4700-10 11-11-11-9-10/8-10-8-4-8 Trip 4707

20 7-5-3-6-7/7-6-5-2-2

30 3-3-2-4-5/6-3-4-7

40 6-7-5-8-6/7-10-8-10-10

50 9-11-12-8-10/10-12-10-10-10

60 11-11-8-12-11/9-10-7-7-12

70 10-12-10-10-10/10-10-7-5-9

80 9-12-11-8-9/11-11-10-10-3

90 11-12-13-12-7/7-8-13-13-13

00 8-11-9-11-14/15-14-13-12-11

4800-10 14-12-10-8-13/18-17-14-13-10

20 10-17-15-13-13/10-17-26-33-17

R.T.D. 4820