

**GEOLOGICAL DEPARTMENT
SOUTHWESTERN GAS COMPANY
INDEPENDENCE, KANSAS**

Company

S. T. R.
County
State
Lease and
Well No.

34-31-12
Elk
Kansas
Nathan Vestal #3

Contractor **Willis Brothers**

Drilling
Commenced

Drilling
Completed

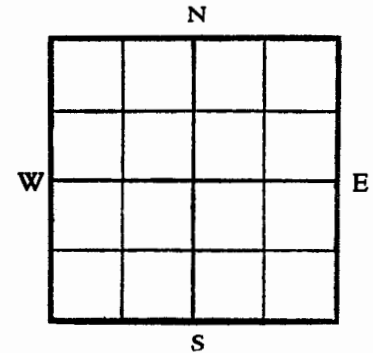
Initial
Production

Initial Rock
Pressure

Location

Casing **6 $\frac{1}{4}$ "** **462'**

shot with 60 qts. May 4, 1917



Driller's Record of Formations

2	soil	2
10	yellow sand	12
58	grey sand	70
85	blue mud	155
4	black lime	159
18	white shelly shale	167
12	white lime	179
70	white shale	249
187	blue muddy shale	436
4	oil sand and gas	440
6	brown water sand	446
12	water and sand	458
4	muddy shale	462
50	blue shale	512
2	white lime	514
12	white shale	526
2	white lime	528
20	blue shale	548
12	white lime	560
60	blue shale	620
2	cap rock	622
10	white sand	632
6	gas sand	638
6	gas sand	644
6	gas sand	650
6	gas sand	656
5	white sand	661
15	white sand	676
5	oil sand	681
5	slate	686
5	oil sand	691
5	white sand	696
5	blue shale	701 T.D.