

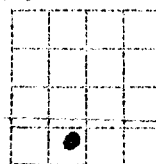
Company - MARTIN & HEARING  
Farm - Kultgen "D" No. 1

SEC. 16 T. 16 R. 12 W  
NE SE SW

DEEPENING RECORD

Total Depth. 3360'  
Comm. 5-22-45 Comp. 7-19-45  
Shot or Treated. 2000 gals acid.  
Contractor. Harry Gore  
Issued. 12-7-46

County. Barton  
KANSAS



CASING:

12 1/2" 510' 7" 3085' Cem. LI  
10" 853'  
8 1/4" 2122'  
Reamed to 2539'

Elevation. 1915 *act*

Production. Pot. 10 BO &  
5 BW

Figures indicate Bottom of Formations.

|                     |      |                        |      |                 |      |
|---------------------|------|------------------------|------|-----------------|------|
| cellar              | 0-8  | lime shells & shale    | 2465 | shale           | 3317 |
| clay yellow         | 20   | lime                   | 2510 | lime            | 3333 |
| shale blue          | 165  | shale blue             | 2527 | shale           | 3340 |
| shale gy            | 210  | lime                   | 2550 | sand            | 3344 |
| shale sdy           | 225  | lime shells & shale    | 2625 | shale-congl.    | 3355 |
| shale blue          | 290  | shale blue             | 2660 | sand            | 3358 |
| red rock            | 305  | lime                   | 2675 | shale-congl.    | 3360 |
| water sand          | 330  | lime shells & shale    | 2700 | Total Depth.    |      |
| red rock            | 350  | lime                   | 2855 | Formation Tops: |      |
| shale blue          | 370  | shale blue             | 2860 | Lansing         | 3068 |
| sand                | 375  | lime                   | 2935 | Conglomerate    | 3333 |
| shale blue          | 405  | shale blue             | 2937 | 1st Sand        | 3340 |
| shale sdy           | 440  | lime                   | 2994 | 2nd Sand        | 3355 |
| sand                | 450  | shale blue             | 3004 |                 |      |
| shale blue          | 515  | lime                   | 3015 |                 |      |
| sand                | 528  | shale blue             | 3045 |                 |      |
| shale blue          | 545  | lime                   | 3080 |                 |      |
| red rock            | 823  | shale blue             | 3085 |                 |      |
| anhydrite           | 848  | lime                   | 3092 |                 |      |
| red rock            | 1040 | oil pay                | 3094 |                 |      |
| shale blue          | 1092 | lime                   | 3097 |                 |      |
| red rock            | 1140 | Steel line correction  |      |                 |      |
| shale blue          | 1195 | 3097 = 3101            |      |                 |      |
| shale & shells      | 1240 | Total Depth.           |      |                 |      |
| salt                | 1435 |                        |      |                 |      |
| lime shells & shale | 1505 | Small show of gas 2910 |      |                 |      |
| lime                | 1515 | Gas 3006'              |      |                 |      |
| red rock            | 1525 | Oil 3092-94            |      |                 |      |
| lime                | 1530 |                        |      |                 |      |
| shale blue          | 1545 | Acidized w/2000 gals.  |      |                 |      |
| lime                | 1555 |                        |      |                 |      |
| shale & shells      | 1570 | 3 BW 225               |      |                 |      |
| lime                | 1590 | HPW 305-20             |      |                 |      |
| shale blue          | 1600 | 2 BWPH 1780            |      |                 |      |
| lime                | 1615 | 1/2 BW 2941-45         |      |                 |      |
| shale blue          | 1620 | DEEPENING RECORD:      |      |                 |      |
| lime                | 1670 | Comm. 4-3-46           |      |                 |      |
| shale blue          | 1705 | Comp. 6-12-46          |      |                 |      |
| lime                | 1730 | Pot. 22 B. plus 13 BW  |      |                 |      |
| red rock            | 1750 |                        |      |                 |      |
| lime shells & shale | 1780 | shaly lime             | 3114 |                 |      |
| lime                | 1950 | lime                   | 3122 |                 |      |
| shale & shells      | 1970 | shale                  | 3126 |                 |      |
| red rock            | 1975 | shaly lime             | 3159 |                 |      |
| lime                | 1990 | limy shale             | 3165 |                 |      |
| red rock            | 2005 | lime                   | 3213 |                 |      |
| lime                | 2040 | shale                  | 3218 |                 |      |
| shale & shells      | 2060 | lime                   | 3232 |                 |      |
| red rock            | 2065 | limy shale             | 3239 |                 |      |
| lime                | 2080 | lime                   | 3247 |                 |      |
| red rock            | 2096 | shaly lime             | 3258 |                 |      |
| lime                | 2150 | lime                   | 3268 |                 |      |
| shale & shells      | 2180 | shale                  | 3272 |                 |      |
| red rock            | 2190 | lime                   | 3277 |                 |      |
| lime                | 2275 | shale                  | 3286 |                 |      |
| shale blue          | 2280 | lime                   | 3293 |                 |      |
| lime brkn           | 2305 | shale                  | 3297 |                 |      |
|                     |      | lime                   | 3314 |                 |      |