

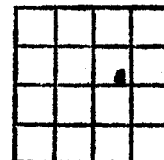
WELL LOG BUREAU—KANSAS GEOLOGICAL SOCIETY  
508 East Murdock, Wichita, Kansas

Company- EMPIRE DRILLING CO.  
Farm- Riedel "B" No. 4

SEC. 9 T. 10 R. 25W  
SE SW NE

Total Depth. 4230'  
Comm. 1-6-59 Comp. 1-17-59  
Shot or Treated.  
Contractor. Empire Drlg.  
Issued. 3-21-59

County Graham  
KANSAS



Elevation. 2503' KB

Production. 133 BO, 13 BWPD

CASINO:

8 5/8" 115' cem w/100 sx.  
5 1/2" 4222' cem w/200 sx.

Figures indicate Bottom of Formations.

|                     |          |
|---------------------|----------|
| surface             | 136      |
| shale, shell & sand | 1200     |
| shale & shells      | 2130     |
| Anhydrite           | 2163     |
| shale & shells      | 2800     |
| shale & lime        | 3115     |
| lime & shale        | 3190     |
| shale & lime        | 3270     |
| lime & shale        | 3390     |
| shale & lime        | 3490     |
| lime & shale        | 3740     |
| lime                | 4095     |
| shale               | 4180     |
| lime                | 4230 RTD |
| Total Depth         |          |

TOPS:

|                     |      |
|---------------------|------|
| Anhydrite (scout)   | 2130 |
| Heebner             | 3736 |
| Toronto             | 3759 |
| Lansing-Kansas City | 3777 |
| Base Kansas City    | 4011 |
| Cherokee Group      | 4207 |

L O G

9-10-25W

*Ind*

COMPANY: Empire Drilling Company, Wichita, Kansas  
 CONTRACTOR: Empire Drilling Company, Wichita, Kansas  
 FARM: Riedel B #4  
 LOCATION: SE SW NE section 9-10-25W, Graham County, Kansas  
 COMMENCED: January 6, 1959 ELEVATION: 2503 KB  
 COMPLETED: January 17, 1959 POTENTIAL: 133 bbls, 13 bbls water

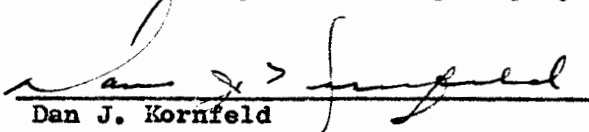
|      |    |      |                       |
|------|----|------|-----------------------|
| 0    | to | 136  | Surface               |
| 136  | to | 1200 | Shale, Shell and Sand |
| 1200 | to | 2130 | Shale and Shells      |
| 2130 | to | 2163 | Anhydrite             |
| 2163 | to | 2800 | Shale and Shells      |
| 2800 | to | 3115 | Shale and Lime        |
| 3115 | to | 3190 | Lime and Shale        |
| 3190 | to | 3270 | Shale and Lime        |
| 3270 | to | 3390 | Lime and Shale        |
| 3390 | to | 3490 | Shale and Lime        |
| 3490 | to | 3740 | Lime and Shale        |
| 3740 | to | 4095 | Lime                  |
| 4095 | to | 4180 | Shale                 |
| 4180 | to | 4230 | Lime                  |
|      |    | 4230 | RTD                   |

SET: 8 5/8" 115' with 100 Sacks Cement  
 RAN: 5 1/2" 4222' with 175 sacks cement, 25 sacks Latex

TOPS: Heebner 3736  
 Toronto 3759  
 Lansing Kansas City 3777  
 Base Kansas City 4011  
 Cherokee Group 4207

C E R T I F I C A T I O N

I, Dan J. Kornfeld, do hereby certify that the above and foregoing is a true and correct copy of the log on the Riedel B #4, SE SW NE section 9-10-25W, Graham County, Kansas as reflected by the files of the Empire Drilling Company.

  
 Dan J. Kornfeld

Subscribed and sworn to before me, a notary public within and for Sedgwick County, Kansas, this 21st day of January, 1959.

