

19-13-19W

EMPHASIS OIL OPERATIONS

P. O. Box 506  
Russell, KS 67665

DRILLERS LOG

OPERATOR: Tokco, Inc.  
P. O. Box 1916  
Pampa, TX 79065

CONTRACTOR: Emphasis Oil Operations  
Box 506  
Russell, KS 67665

LEASE: Orth

WELL #1

LOCATION: NE SE NW  
Section 19-13S-19W  
Ellis County, Kansas

Log Total Depth: 3887'

Rotary Total Depth: 3887'

Elevation: 2176' K.B.

Commenced: 12/17/85

Completed: 12/23/85

Casing: 8-5/8" @ 250' w/165 sks cement  
5-1/2" @ 3886' w/575 sks cement

Status: Oil Well

DEPTHS & FORMATIONS

(All measurements from K.B.)

|                      |       |              |                |
|----------------------|-------|--------------|----------------|
| Post rock            | 45'   | Anhydrite    | 1538'          |
| Shale                | 126'  | Shale        | 3028'          |
| Iron Pyrite          | 130'  | Lime & Shale | 3408'          |
| Shale                | 800'  | Shale & Lime | 3466'          |
| Dakota Sand          | 1196' | Lime & Shale | (R.T.D.) 3887' |
| Shale w/Sand streaks | 1493' |              |                |

MAR 03 1986  
State Geological Survey  
WICHITA BRANCH

STATE OF KANSAS )  
                          ss  
COUNTY OF RUSSELL)

Kyle B. Branum, of Emphasis Oil Operations, states that the above and foregoing is a true and correct log of the above captioned well, to the best of his knowledge.