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Geological Report

Lebsack Oil Production  
Box 489  
Hays, Kansas

Foster "D"-2-14  
1650 FNL 370 FEL  
Sec. 14-T21s-R35w  
Kearney Co. Ks.

|                       |                                                                                           |
|-----------------------|-------------------------------------------------------------------------------------------|
| Contractor            | Abercrombie RTD Inc.                                                                      |
| Date Spudded          | Feb. 2, 1997                                                                              |
| Total Depth           | 5000 feet                                                                                 |
| Date Rotary Completed | February 11, 1997                                                                         |
| Casing                | 8-5/8" - Surface- 255 feet<br>5-1/2" - Production 4999 feet                               |
| Elevations            | Ground Level - 3097'<br>Zero - Kelly Bushing - 3102'                                      |
| Samples               | 2400 feet to T.D.                                                                         |
| Logs                  | Gas Detector, Halliburton -<br>Density-Neutron, Dual Induction<br>Micro Log & Frac Finder |

### Geological formation Tops

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| FORMATION   | Drilling<br>Depth | Elec.-Log<br>Depth | Sub-Sea<br>Depth |
|-------------|-------------------|--------------------|------------------|
| Krider      | N/A               | 2668               | + 434            |
| Lansing     | 3976              | 3980               | - 878            |
| Marmaton    | 4487              | 4487               | - 1385           |
| Cherokee    | 4627              | 4624               | - 1522           |
| Morrow      | 4833              | 4827               | - 1725           |
| Morrow Sand | 4885-4901         | 4882-98            | - 1780           |
| Mississippi | 4905              | 4905               | - 1803           |

## Intervals of Interest

### Krider

2675-90

- White and gray dolomitic limestone. Log porosity 17%. Gas detector logged 10 units.

### Lansing

3980

- No sample shows. Electric logs indicate possible pay 4433-40 - Log porosity 17%

### Marmaton

4503 - 13

- Tan & white oolitic-oolicastic limestone - trace of dark oil staining and free oil. Log porosity 17%

### DST No. 1

4490-4530

- Testing times 30-30-60-60, Weak blow. Recovered 270' muddy water with a show of oil.  
Pressures: Flow 32/93 : 90/174  
ICIP 728 - FCIP 728

### Morrow Sand

4882-98

- Clear fine grained, friable sand, with dark & lite oil staining & traces of free oil. Gas detector logged 10 units. Log porosity 24%

### DST No. 2

4880 - 4910

- Testing times 30-30-60-60, Fair - building to strong blow. Recovered: 310' gas, 260' gassy muddy oil. Pressures: Flow 41/83 : 91/193  
ICIP 710: 812.

### Mississippi

4905-5000

- No shows evident in samples, log porosity 5%

## SUMMARY

### Structural Comparisons

| Formation   | Foster D-2<br>This well | Foster D-1<br>N/offset | Scott #3<br>NE/offset |
|-------------|-------------------------|------------------------|-----------------------|
| Krider      | + 434                   | + 436                  | + 431                 |
| Lansing     | - 878                   | - 885                  | - 872                 |
| Marmaton    | - 1385                  | - 1384                 | - 1383                |
| Cherokee    | - 1522                  | - 1522                 | - 1526                |
| Morrow Sand | - 1780                  | - 1800                 | - 1789                |
| Mississippi | - 1803                  | - 1816                 | - 1810                |

Gas detector, samples, drill-stem test and electric logs indicate commercial oil production in the Morrow sand and marginal production in the Marmaton. Gas detector and logs indicate gas production in the Krider (Hugoton zone) 5½" casing was cemented at 4900' to test and complete for production.

Submitted by

Wayne Lebsack