



DRILLERS LOG

ANGELL NO. 1-A

|                  |                                |                        |
|------------------|--------------------------------|------------------------|
| CASING RECORD:   | OPERATOR: Imperial Oil Company | DESCRIPTION:           |
| 8-5/8" @ 1505'   | CONTRACTOR: Sage Drilling Co.  | E/2 NE SE              |
| w/750 sax cement |                                | <u>Sec. 31-32S-29W</u> |
|                  | COMMENCED: June 16, 1971       | Meade Co., Kansas      |
| TOTAL DEPTH:     |                                | EL 2716                |
| 5800'            | COMPLETED: June 29, 1971       | 90 BOPD                |

| <u>FORMATION</u>  | <u>FROM</u> | <u>TO</u> | <u>REMARKS</u>     |
|-------------------|-------------|-----------|--------------------|
| Surface Soil      | 0           | 360       |                    |
| Sand              | 360         | 737       |                    |
| Sand & Shale      | 737         | 1035      |                    |
| Sand              | 1035        | 1150      |                    |
| Sand & Shale      | 1150        | 1477      |                    |
| Anhydrite         | 1477        | 1505      |                    |
| Anhydrite & Shale | 1505        | 1638      |                    |
| Shale             | 1638        | 1990      |                    |
| Shale & Lime      | 1990        | 2660      |                    |
| Lime & Shale      | 2660        | 5800      |                    |
|                   |             |           | 5 1/2" set @ 5798' |
|                   |             |           | w/150 sax cement.  |

*Louise K. Whitted*  
Louise K. Whitted, Notary Public

My commission expires:  
November 26, 1974.

| LOG TOPS    | DEPTH |
|-------------|-------|
| CHASE GROUP | 2705  |
| CO GR       | 3084  |
| HEEB        | 4435  |
| TOR         | 4454  |
| LANS        | 4558  |
| MARM        | 5199  |
| NOV         | 5210  |
| CHER        | 5370  |
| ATOKA       | 5608  |
| MRW SH      | 5656  |
| MRW SD      | 5696  |
| CHEST       | 5736  |
| RTD         | 5800  |
| LTD         | 5801  |