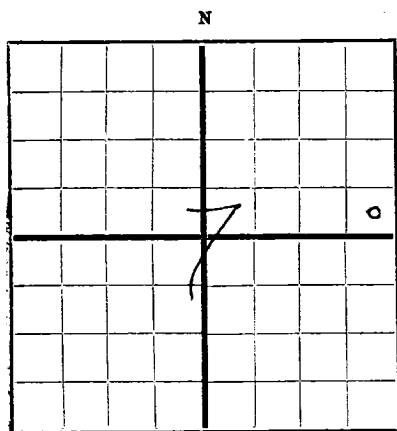


## FORMATION RECORD

| FROM                | TO                                                                        | THICKNESS<br>IN FEET                                                                                                                                                                                                         | FORMATION                                                                                                                                              |
|---------------------|---------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0                   | 750                                                                       | 750                                                                                                                                                                                                                          | Shale, red and surface sand                                                                                                                            |
| 750                 | 1050                                                                      | 300                                                                                                                                                                                                                          | Gyp and red shale                                                                                                                                      |
| 1050                | 1300                                                                      | 250                                                                                                                                                                                                                          | Anhydrite, grey wht.                                                                                                                                   |
| 1300                | 2030                                                                      | 1530                                                                                                                                                                                                                         | Anhydrite and salt                                                                                                                                     |
| 2030                | 2455                                                                      | 125                                                                                                                                                                                                                          | Black sand with frosted grains (later 2830)                                                                                                            |
| 2455                | 3407                                                                      | 445                                                                                                                                                                                                                          | Colomite, bentonitic, shaly sands, and black shale all interbedded. Tr. of oil and gas throughout (see coring and IST record). Gamma ray log attached. |
|                     |                                                                           |                                                                                                                                                                                                                              | <u>Coring and Testing records:</u>                                                                                                                     |
|                     |                                                                           |                                                                                                                                                                                                                              | See attached sheet.                                                                                                                                    |
| Core #1             | 2836-76<br>2836-82<br>2842-76                                             | 29'/20' recovery<br>Sand black frosted sand grains oil & r gas show (Yates)<br>Colomite lgt. gry slightly sacrose V.P.O.                                                                                                     |                                                                                                                                                        |
| Core #2             | 2876-96<br>2876-16<br>2886-96                                             | 17'/20' recovery<br>Colomite, waxy shaley<br>Shale Bentonitic very soft evy                                                                                                                                                  |                                                                                                                                                        |
| Core #3             | 2896-2916<br>2896-00<br>2900-06<br>2906-07<br>2907-09<br>2909-16          | 20'/20' recovery<br>Shale Bentonitic very soft evy<br>Sand black frosted sand grains (Yates) Sulphur gas.<br>Shale Bentonitic evy<br>Sand black (Yates) Sulphur odor<br>Colomite dense gr. lmy. 1 ft. porous colomite V.P.O. |                                                                                                                                                        |
| Core #4             | 2916-36<br>2916-17<br>2917-30<br>2930-36                                  | 20'/20' recovery<br>Colomite tan very porous V.P.O.<br>Shale gry colomitic slight oil & r gas<br>Shale Bentonitic very soft evy slight odor                                                                                  |                                                                                                                                                        |
| Core #5             | 2936-46<br>2936-48<br>2942-44<br>2944-46<br>2945-47<br>2947-49<br>2949-56 | 20'/20' recovery<br>Line white dense<br>Sand black fine sulphur odor<br>Line wht. dense<br>Line wht sandy<br>Sand black fine sand shale Bentonitic<br>Shale Bentonitic soft evy slight odor                                  |                                                                                                                                                        |
| Core #6             | 2956-76<br>2956-86<br>2966-76                                             | 19'/20' recovery<br>Black to gry sdy shale slight show g. s.<br>Colomite tan lmy slightly sacrose V.P.O. Fair fluorescence                                                                                                   |                                                                                                                                                        |
| Core #7             | 2976-85<br>2976-85                                                        | 7'/9' recovery<br>Tr. black-brown colomite thin line streaks V.P.O.                                                                                                                                                          |                                                                                                                                                        |
| Drill Stem Test #1: | 2985-86.                                                                  | Tool open 20 minutes. Gas to surface in 4 minutes.<br>Good blow throughout test. Flow pressure 400%. 15 min. buildup 900%. 2300' dry gas cut mid.                                                                            |                                                                                                                                                        |
| Drill Stem Test #2: | 2945-86.                                                                  | Tool open 1 hr. Recovered 90' gas and slightly oil cut mid. Flow pressure 200%. 15 minute buildup 400%                                                                                                                       |                                                                                                                                                        |
| Drill Stem Test #3: | 2985-3126.                                                                | Tool open 1 hr. Good blow air throughout test. Gas to surface in 50 minutes. Recovered 180 ft. drlg. mid. Flow pressure 0%. 15 minute buildup pressure 200%. Hyd. 1200. 10-27-48                                             |                                                                                                                                                        |
| Drill Stem Test #4: | 3091-3161.                                                                | Tool open 1 hr. Fair blow air throughout test. Recovered 200' drlg. mid. Flow pressure 150%. Buildup pressure 200%. Hyd. 1300. 10-30-48                                                                                      |                                                                                                                                                        |
| Drill Stem Test #5: | 3197-3298.                                                                | Tool open 1 hr. Recovered 60 ft. drlg. mid. Flow pressure 0%. Buildup pressure 200. Hyd pressure 1400% no show.                                                                                                              |                                                                                                                                                        |
| Drill Stem Test #6: | 3300-3400.                                                                | Tool open 1 hr. Recovered 100 ft. gas cut mid. Flow pressure 0%. Buildup pressure 0%. Hyd. 1500%.                                                                                                                            |                                                                                                                                                        |

AREA 640 ACRES  
LOCATE WELL CORRECTLYNEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico

## WELL RECORD

Mail to Oil Conservation Commission, Santa Fe, New Mexico, or its proper agent not more than twenty days after completion of well. Follow instructions in the Rules and Regulations of the Commission. Indicate questionable data by following it with (?). SUBMIT IN TRIPLICATE. FORM C-110 WILL NOT BE APPROVED UNTIL FORM C-105 IS PROPERLY FILLED OUT.

**R. Olsen Oil Company, et al.** 2811 APCO Tower, Oklahoma City, Okla.  
Company or Operator Address  
**Calley** Well No. **1** in **Se Se Ne** of Sec. **7**, T. **25S**  
Lease  
R. **37E** N. M. P. M., **Langlie-Mattix** Field, **Lea** County.  
**2501**  
Well is **2312** feet south of the North line and **339** feet west of the East line of **NE corner of Sec 7**  
If State land the oil and gas lease is No. Assignment No.  
If patented land the owner is **L. J. Calley** Address **Jal, New Mexico**  
If Government land the permittee is Address  
The Lessee is **R. Olsen Oil Company, et al.** Address  
Drilling commenced **Sept. 25** 19 **48** Drilling was completed **Nov 5** 19 **48**  
Name of drilling contractor **Hackelman - French** Address **Jal, N. Mex.**  
Elevation above sea level at top of casing **3148** feet.  
The information given is to be kept confidential until 19

## OIL SANDS OR ZONES

No. 1, from **2830** to **2985 (Yates)** No. 4, from to  
No. 2, from **3010** to **3400TD (spotted)** No. 5, from to  
**(Queens Seven Rivers)** No. 6, from to  
No. 3, from to

## IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from to feet.  
No. 2, from to feet.  
No. 3, from to feet.  
No. 4, from to feet.

## CASING RECORD

| SIZE          | WEIGHT PER FOOT | THREADS PER INCH | MAKE | AMOUNT      | KIND OF SHOE | CUT & FILLED FROM | PERFORATED FROM | TO | PURPOSE           |
|---------------|-----------------|------------------|------|-------------|--------------|-------------------|-----------------|----|-------------------|
| <b>10 3/4</b> | <b>40</b>       | <b>8R</b>        |      | <b>304</b>  | <b>Howco</b> |                   |                 |    | <b>Surface</b>    |
| <b>7</b>      | <b>20</b>       | <b>8R</b>        |      | <b>2955</b> | <b>"</b>     |                   |                 |    | <b>Oil String</b> |
|               |                 |                  |      |             |              |                   |                 |    |                   |
|               |                 |                  |      |             |              |                   |                 |    |                   |
|               |                 |                  |      |             |              |                   |                 |    |                   |
|               |                 |                  |      |             |              |                   |                 |    |                   |
|               |                 |                  |      |             |              |                   |                 |    |                   |

## MUDDING AND CEMENTING RECORD

| SIZE OF HOLE  | SIZE OF CASING | WHERE SET      | NO. SACKS OF CEMENT | METHODS USED | MUD GRAVITY | AMOUNT OF MUD USED |
|---------------|----------------|----------------|---------------------|--------------|-------------|--------------------|
| <b>13 3/8</b> | <b>10</b>      | <b>3/4 304</b> | <b>100</b>          | <b>Howco</b> |             |                    |
| <b>8 3/4</b>  | <b>7</b>       | <b>2955</b>    | <b>300</b>          | <b>"</b>     |             |                    |
|               |                |                |                     |              |             |                    |
|               |                |                |                     |              |             |                    |
|               |                |                |                     |              |             |                    |

## PLUGS AND ADAPTERS

Heaving plug—Material Length Depth Set  
Adapters — Material Size

## RECORD OF SHOOTING OR CHEMICAL TREATMENT

| SIZE                                                                                                                                                                                      | SHELL USED | EXPLOSIVE OR CHEMICAL USED | QUANTITY | DATE | DEPTH SHOT OR TREATED | DEPTH CLEANED OUT |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------------------|----------|------|-----------------------|-------------------|
| <b>Twenty-four holes 2904-10 (Cone shot) 2000 gal acid to 2904-10. 2000 gal acid 2955-85. This work done between 10-19-48 and 10-21-48. 300 qts nitro 3200-3400TD. Work done 11-7-48.</b> |            |                            |          |      |                       |                   |
|                                                                                                                                                                                           |            |                            |          |      |                       |                   |
|                                                                                                                                                                                           |            |                            |          |      |                       |                   |

Results of shooting or chemical treatment **not noticeable**

## RECORD OF DRILL-STEM AND SPECIAL TESTS

If drill-stem or other special tests or deviation surveys were made, submit report on separate sheet and attach hereto.

## TOOLS USED

Rotary tools were used from **0** feet to **3400TD** feet, and from feet to feet  
Cable tools were used from feet to feet, and from feet to feet

## PRODUCTION

Put to producing **awaiting pipe line connection, 11-16-48.**  
The production of the first 24 hours was **20** barrels of fluid of which **100** % was oil; % emulsion; % water; and % sediment. Gravity, Be.  
If gas well, cu. ft. per 24 hours **Est. 5 mil.** Gallons gasoline per 1,000 cu. ft. of gas.  
Rock pressure, lbs. per sq. in. **1200**

## EMPLOYEES

**Floyd Hackelman** Driller **Lon Whitely** Driller  
**Clyde Hackelman** Driller Driller

## FORMATION RECORD ON OTHER SIDE

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

Subscribed and sworn to before me this **18th** **Jal, New Mexico** **11-16-48**  
Place Date