

**Santa Fe, New Mexico**

## WELL RECORD

AREA 640 ACRES  
LOCATE WELL CORRECTLY

# Hairo

(Company or Operator)

(Lease)

Well No. 1, in NE ¼ of NE ¼, of Sec. 12, T 6 S, R. 30 E NMPM

## Wildcat

Pool, Chaves

...County.

Well is 660 feet from North line and 660 feet from East line

of Section 12 If State Land the Oil and Gas Lease No. is \_\_\_\_\_

Drilling Commenced..... **4 - 21** ....., 19**54**. Drilling was Completed..... **7 - 12** ....., 19**54**.

Name of Drilling Contractor..... **Arrow Drilling Company**

Address.....**105 Hendricks Building, Odessa, Texas**

Elevation above sea level 4367

The information given is to be kept confidential until

**Not confidential** 19

## OIL SANDS OR ZONES

No. 1, from None Encountered No. 4, from \_\_\_\_\_ to \_\_\_\_\_

\_\_\_\_\_ from \_\_\_\_\_ to \_\_\_\_\_

No. 3, from.....to..... No. 6, from.....to.....

## IMPORTANT WATER SANDS

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

No. 1, from None Encountered to \_\_\_\_\_ feet.

**XXXXXX** Refer to attached page (Drill Stem Tests). \_\_\_\_\_ feet. \_\_\_\_\_

No. 3, from ..... to ..... feet.

No. 4, from ..... to ..... feet. ....

## CASING RECORD

| SIZE    | WEIGHT PER FOOT | NEW OR USED | AMOUNT   | KIND OF SHOE   | CUT AND PULLED FROM | PERFORATIONS                                            | PURPOSE      |
|---------|-----------------|-------------|----------|----------------|---------------------|---------------------------------------------------------|--------------|
| 13-3/8" | 48#             | New         | 285.72'  | Float          | -                   | -                                                       | Surface      |
| 9-5/8"  | 36#             | New         | 3136.28' | Float & Collar | 638.79'             |                                                         | Intermediate |
|         |                 |             |          |                |                     | This well plugged. 638.79' of 9-5/8" csg. was salvaged. |              |

## MUDDING AND CEMENTING RECORD

| SIZE OF HOLE | SIZE OF CASING | WHERE SET | NO. SACKS OF CEMENT | METHOD USED         | MUD GRAVITY | AMOUNT OF MUD USED |
|--------------|----------------|-----------|---------------------|---------------------|-------------|--------------------|
| 17"          | 13-3/8"        | 302.02'   | 350                 | Displaced with plug |             |                    |
| 12 1/2"      | 9-5/8"         | 3151.53'  | 1400                | Displaced with plug |             |                    |
|              |                |           | 3% gel & 1#         |                     |             |                    |
|              |                |           | Floccle per sz.     |                     |             |                    |

### RECORD OF PRODUCTION AND STIMULATION

(Record the Process used, No. of Qts. or Gals. used, interval treated or shot.)

### Result of Production Stimulation.

..Depth Cleaned Out.....

# 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 9071 feet, and from feet to feet.  
 Cable tools were used from feet to feet, and from feet to feet.

## PRODUCTION

Put to Producing "Dry", 19

OIL WELL: The production during the first 24 hours was barrels of liquid of which % was  
 was oil; % was emulsion; % water; and % was sediment. A.P.I.  
 Gravity.

GAS WELL: The production during the first 24 hours was M.C.F. plus barrels of  
 liquid Hydrocarbon. Shut in Pressure lbs.  
 Length of Time Shut in.

PLEASE INDICATE BELOW FORMATION TOPS (IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE):

| Southeastern New Mexico   |                           |                  | Northwestern New Mexico        |                       |  |
|---------------------------|---------------------------|------------------|--------------------------------|-----------------------|--|
| T. Anhy. 1410 (+ 2957)    | T. Devonian 8748 (-4381)  | T. Ojo Alamo     | T. Salt.                       | T. Kirtland-Fruitland |  |
| B. Salt.                  | T. Base Dev. 9020 (-4653) | T. Farmington    | T. Yates. 1810 (+ 2557)        | T. Simpson            |  |
| T. 7 Rivers               | T. Montoya                | T. Menefee       | T. Queen                       | T. McKee              |  |
| T. Grayburg               | T. Ellenburger            | T. Point Lookout | T. San Andres. 2700 (+ 1667)   | T. Gr. Wash. 9035     |  |
| T. Glorieta. 3930 (+ 437) | T. Granite                | T. Mancos        | T. <del>1810</del> 4285 (+ 82) | T. Huaco 7033 (-2666) |  |
| T. Tubbs. 5415 (- 1048)   | T.                        | T. Dakota        | T. Abo. 6200 (- 1833)          | T. Penn.              |  |
| T. Penn. 7542 (- 3175)    | T.                        | T. Morrison      | T. Miss. 8300 (- 3933)         | T.                    |  |
|                           | T.                        | T.               |                                | T.                    |  |

## FORMATION RECORD

| From | To   | Thickness<br>in Feet | Formation                                         | From | To   | Thickness<br>in Feet | Formation                                |
|------|------|----------------------|---------------------------------------------------|------|------|----------------------|------------------------------------------|
| 0    | 4    | 4                    | Soil                                              | 4290 | 4430 | 140                  | Dol. w/Red Sh & Anhy.                    |
| 4    | 520  | 516                  | Sd., Gravel & Red Sh.                             | 4430 | 4710 | 280                  | Red Sh. w/Anhy. & Sd.                    |
| 520  | 1410 | 890                  | Red Shale & Sand                                  | 4710 | 4980 | 270                  | Dol. & red Sh. w/Sd. & Anhy.             |
| 1410 | 1810 | 400                  | Anhy. & Red Sh. w/Sd.                             | 4980 | 5160 | 180                  | Red Sh. w/Sd. & Anhy.                    |
| 1810 | 1860 | 50                   | Sd., Anhy. Red Sh.                                | 5160 | 5420 | 260                  | Dol., Anhy., red shale                   |
| 1860 | 2410 | 550                  | Anhy., Red Sh. w/some salt                        | 5420 | 5700 | 280                  | Red Sh. w/Dol. Gyp & Sd                  |
| 2410 | 2700 | 290                  | Red Sh. w/Anhy.                                   | 5700 | 6000 | 300                  | Red & gray Sh w/Gyp, Dol. & Sd.          |
| 2700 | 2720 | 20                   | Red Sh. w/Dol.                                    | 6000 | 6200 | 200                  | Dol. w/red & gray Sh, gyp.               |
| 2720 | 2900 | 180                  | Red Sh. w/ Anhy.                                  | 6200 | 6900 | 700                  | Red Sh w/green Sh, gyp. & Sd.            |
| 2900 | 3160 | 260                  | Dol., Red Sh. w/Anhy.                             | 6900 | 6980 | 80                   | Dol. w/red Sh. & Chert                   |
| 3160 | 3600 | 440                  | Dol., w/Anhy. & Red Sh.                           | 6980 | 7070 | 90                   | Limestone w/dol., red & gray Sh.         |
| 3600 | 3790 | 190                  | Limestone                                         | 7070 | 8150 | 1080                 | Limestone w/red & gray Sh., traces Chert |
| 3790 | 3930 | 140                  | Dol., Limestone w/ Anhy.                          | 8150 | 8300 | 150                  | Red & gray Sh. w/LS & Sh.                |
| 3930 | 3980 | 50                   | Porous Sand                                       | 8300 | 8700 | 400                  | LS w/chert, red & gry Sh.                |
| 3980 | 4020 | 40                   | Dol. & Limestone                                  | 8700 | 8750 | 50                   | Sd w/LS, red & gray Sh.                  |
| 4020 | 4290 | 270                  | Anhy. & Red Sh. w/Sd., Gray Sh., Limestone & Dol. | 8750 | 9035 | 285                  | Porous Dol. w/chert                      |
|      |      |                      |                                                   | 9035 | 9071 | 36                   | Granite Wash                             |

ATTACH SEPARATE SHEET IF ADDITIONAL SPACE IS NEEDED

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.

Company or Operator Lion Oil Company Address Box 492, Snyder, Texas  
 Name L. A. Carey Position or Title District Superintendent  
 (Date) 7/30/54

## DRILL STEM TESTS

- No. 1 3540-3750, Tool open 1 hr. Slight blow throughout test. SI 30 minutes. Recovered 110' slight salt water cut mud, 1' slight salt water and oil cut mud with skim of oil, Initial Flow Pressure 0, Final Flow Pressure 55, 30 min. Shut-in pressure 640, Hyd. Pressure 1645.
- No. 2 8125-8180, Tool open 1 hour. Weak to light blow 14 min., died. Recovered 120' slight salt water cut mud. Initial Flow Pressure 25#, Final Flow Pressure 50#, 15 min. Shut-in Pressure 50#.
- No. 3 8284-8426, Tool open 1 hour, good to fair blow throughout, Shut-in for 15 mins. Recovered 170' drilling mud, 30' gas cut mud, Initial Flow Pressure 35#, Final Flow Pressure 100#, Hyd. Pressure 4495#, 15 min. Shut-in pressure 165.
- No. 4 8725-8770 with 700' water cushion, Tool open 45 minutes, very weak blow 7 min., died. By-passed tool, very weak blow 5 min., died. Recovered 700' water cushion plus 230 slightly mud cut salty water, 50' drilling mud, Initial Flow Pressure 400#, Final Flow Pressure 400#, 15 min. Shut-in Pressure 1395#, Hyd. Pressure 4725#.
- No. 5 8897-8988, Tool open 1 hour. Strong blow decreasing to fair blow 15 min. died in 22 min. Shut-in Pressure 15 min. 3335#, Initial Flow Pressure 1175#, Final Flow Pressure 3335#, Hyd. Pressure 4755#. Recovered 7368' fluid, 250' drilling mud, 750' water cushion, 6368' salty sulfur water.



# DEVIATION SURVEY

| <u>DEPTH</u> | <u>DEGREE - INCLINATION</u> |
|--------------|-----------------------------|
| 150'         | 1/2                         |
| 1200         | 1/4                         |
| 2170         | 1/4                         |
| 2385         | 1/2                         |
| 2880         | 1/2                         |
| 3283         | 1/2                         |
| 3590         | 1/2                         |
| 3960         | 3/4                         |
| 4170         | 1/2                         |
| 4590         | 1/2                         |
| 4660         | 1/2                         |
| 4870         | 3/4                         |
| 5220         | 1/2                         |
| 5370         | 1/4                         |
| 5640         | 1/2                         |
| 5750         | 1/4                         |
| 5950         | 1/2                         |
| 6050         | 3/4                         |
| 6160         | 3/4                         |
| 6220         | 1/3                         |
| 6330         | 3/4                         |
| 6440         | 1                           |
| 6500         | 1/2                         |
| 6600         | 1-1/4                       |
| 6700         | 3/4                         |
| 6820         | 3/4                         |
| 6880         | 3/4                         |
| 6925         | 1                           |
| 7025         | 3/4                         |
| 7070         | 1/2                         |
| 7221         | 1/2                         |
| 7260         | 3/4                         |
| 7340         | 1/2                         |
| 7390         | 1                           |
| 7475         | 1/2                         |
| 7530         | 1/2                         |
| 7635         | 1/2                         |
| 7705         | 3/4                         |
| 7850         | 3/4                         |
| 7960         | 1                           |
| 8080         | 1                           |
| 8550         | 1-1/4                       |
| 8590         | 1-1/4                       |
| 8690         | 1-1/2                       |
| 8800         | 1                           |

