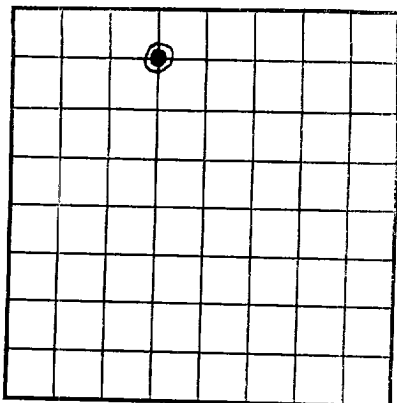




LOCATE WELL CORRECTLY

U. S. LAND OFFICE Las Cruces  
SERIAL NUMBER 060422  
LEASE OR PERMIT TO PROSPECT Lea  
S. A. BowmanUNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## LOG OF OIL OR GAS WELL

Company Culbertson & Irwin, Inc. Address Box 1071, Midland, Texas  
Lessor or Tract S. A. Bowman Field East Lusk State New Mexico  
Well No. 2 Sec. 28 T. 19 R. 32-E Meridian NMPM County Lea  
Location 660 ft. N of N Line and 1980 ft. E of W Line of Sec. 28 Elevation 5579  
(Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed [Signature]Date November 9, 1942Title Prod. Supt.

The summary on this page is for the condition of the well at above date.

Commenced drilling October 1, 19 42 Finished drilling October 25, 19 42

## OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 2625 to 2638 No. 4, from \_\_\_\_\_ to \_\_\_\_\_  
No. 2, from 2765 to 2771 No. 5, from \_\_\_\_\_ to \_\_\_\_\_  
No. 3, from \_\_\_\_\_ to \_\_\_\_\_ No. 6, from \_\_\_\_\_ to \_\_\_\_\_

## IMPORTANT WATER SANDS

No. 1, from 300 to 350 No. 3, from \_\_\_\_\_ to \_\_\_\_\_  
No. 2, from 500 to 600 No. 4, from \_\_\_\_\_ to \_\_\_\_\_

## CASING RECORD

| Size casing  | Weight per foot | Threads per inch   | Make              | Amount      | Kind of shoe     | Cut and pulled from | Perforated |     | Purpose      |
|--------------|-----------------|--------------------|-------------------|-------------|------------------|---------------------|------------|-----|--------------|
|              |                 |                    |                   |             |                  |                     | From—      | To— |              |
| <u>8 5/8</u> | <u>23</u>       | <u>Slip Jt.</u>    | <u>Amco</u>       | <u>928</u>  | <u>Tex. Pat.</u> | <u>None</u>         |            |     | <u>Salt</u>  |
| <u>5 1/2</u> | <u>14</u>       | <u>Spiral Weld</u> | <u>8 Bd Ygst.</u> | <u>8560</u> | <u>Tex. Pat.</u> | <u>None</u>         |            |     | <u>Prod.</u> |
|              |                 |                    |                   |             |                  |                     |            |     |              |
|              |                 |                    |                   |             |                  |                     |            |     |              |
|              |                 |                    |                   |             |                  |                     |            |     |              |
|              |                 |                    |                   |             |                  |                     |            |     |              |

## MUDDING AND CEMENTING RECORD

| Size casing  | Where set   | Number sacks of cement | Method used     | Mud gravity | Amount of mud used |
|--------------|-------------|------------------------|-----------------|-------------|--------------------|
| <u>8 5/8</u> | <u>928</u>  | <u>50</u>              | <u>Pressure</u> | <u>13</u>   | <u>40</u> ex.      |
| <u>5 1/2</u> | <u>2550</u> | <u>50</u>              | <u>Pressure</u> | <u>13</u>   | <u>100</u> ex.     |
|              |             |                        |                 |             |                    |
|              |             |                        |                 |             |                    |
|              |             |                        |                 |             |                    |

## PLUGS AND ADAPTERS

Heaving plug—Material None Length \_\_\_\_\_ Depth set \_\_\_\_\_  
Adapters—Material None Size \_\_\_\_\_

## SHOOTING RECORD

| Size                                    | Shell used      | Explosive used | Quantity    | Date | Depth shot | Depth cleaned out |
|-----------------------------------------|-----------------|----------------|-------------|------|------------|-------------------|
| <u>acidized with 1500 gal. 15% acid</u> | <u>2765-71'</u> | <u>no</u>      | <u>shot</u> |      |            |                   |
|                                         |                 |                |             |      |            |                   |
|                                         |                 |                |             |      |            |                   |
|                                         |                 |                |             |      |            |                   |

## TOOLS USED

Rotary tools were used from \_\_\_\_\_ feet to \_\_\_\_\_ feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet  
Cable tools were used from Surface feet to 2771' feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet

## DATES

11/3/, 1942 Put to producing November 3, 1942The production for the first 24 hours was 200 barrels of fluid of which 50 % was oil; no % emulsion; 50 % water; and no % sediment. Gravity, °Bé. 24If gas well, cu. ft. per 24 hours None Gallons gasoline per 1,000 cu. ft. of gas NoneRock pressure, lbs. per sq. in. None

## EMPLOYEES

Fred Sandwich, Driller Henry Donnelly, Driller  
Harlan Johnson, Driller \_\_\_\_\_, Driller

## FORMATION RECORD

| FROM—          | TO—         | TOTAL FEET | FORMATION                        |
|----------------|-------------|------------|----------------------------------|
| <u>Surface</u> | <u>125</u>  | <u>125</u> | <u>Red Bed</u>                   |
| <u>125</u>     | <u>200</u>  | <u>75</u>  | <u>Red Bed and Sand</u>          |
| <u>200</u>     | <u>265</u>  | <u>65</u>  | <u>Red Rock</u>                  |
| <u>265</u>     | <u>375</u>  | <u>110</u> | <u>Red Rock and Sand</u>         |
| <u>375</u>     | <u>450</u>  | <u>75</u>  | <u>Red Bed</u>                   |
| <u>450</u>     | <u>550</u>  | <u>100</u> | <u>Red Rock</u>                  |
| <u>550</u>     | <u>600</u>  | <u>50</u>  | <u>Red Bed</u>                   |
| <u>600</u>     | <u>690</u>  | <u>90</u>  | <u>Red Rock</u>                  |
| <u>690</u>     | <u>800</u>  | <u>110</u> | <u>Red Bed</u>                   |
| <u>800</u>     | <u>938</u>  | <u>138</u> | <u>Anhydrite</u>                 |
| <u>938</u>     | <u>980</u>  | <u>42</u>  | <u>Salt</u>                      |
| <u>980</u>     | <u>1030</u> | <u>50</u>  | <u>Anhydrite</u>                 |
| <u>1030</u>    | <u>1035</u> | <u>5</u>   | <u>Blue Shale</u>                |
| <u>1035</u>    | <u>1065</u> | <u>30</u>  | <u>Red Rock and Salt</u>         |
| <u>1065</u>    | <u>1135</u> | <u>70</u>  | <u>Salt, Shells and Red Rock</u> |
| <u>1135</u>    | <u>1195</u> | <u>60</u>  | <u>Salt and Potash</u>           |
| <u>1195</u>    | <u>1265</u> | <u>70</u>  | <u>Salt, Red Rock and Potash</u> |
| <u>1265</u>    | <u>1340</u> | <u>75</u>  | <u>Salt and Red Bed</u>          |
| <u>1340</u>    | <u>1375</u> | <u>35</u>  | <u>Salt</u>                      |
| <u>1375</u>    | <u>1480</u> | <u>105</u> | <u>Salt and Potash</u>           |
| <u>1480</u>    | <u>1590</u> | <u>110</u> | <u>Salt</u>                      |
| <u>1590</u>    | <u>1640</u> | <u>50</u>  | <u>Salt and Potash</u>           |
| <u>1640</u>    | <u>2000</u> | <u>360</u> | <u>Salt</u>                      |
| <u>2000</u>    | <u>2220</u> | <u>220</u> | <u>Salt and Potash</u>           |
| <u>2220</u>    | <u>2250</u> | <u>30</u>  | <u>Anhydrite</u>                 |

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

HISTORY OF OIL OR GAS WELL

U. S. GOVERNMENT PRINTING OFFICE 6-6745

|      |         |     |                                |
|------|---------|-----|--------------------------------|
| 2850 | 2870    | 120 | Salt                           |
| 2890 | 2895    | 25  | Artydrite and salt             |
| 2895 | 2895    | 160 | Artydrite                      |
| 2895 | 2895    | 7   | Lime                           |
| 2895 | 2875    | 15  | Artydrite and sand             |
| 2875 | 2865    | 10  | Artydrite, blue shale and sand |
| 2865 | 2865    | 50  | Sand--show oil 2825-26         |
| 2865 | 2860    | 25  | Sand and shale                 |
| 2860 | 2870    | 10  | Artydrite                      |
| 2870 | 2700    | 30  | Sandy lime                     |
| 2700 | 2705    | 5   | Lime                           |
| 2705 | 2725    | 20  | Sandy lime                     |
| 2725 | 2731    | 6   | Grey lime                      |
| 2731 | 2745    | 9   | Lime and sand                  |
| 2745 | 2755    | 12  | Lime                           |
| 2755 | 2771 TD | 13  | Sandy lime--show oil 2765-71.  |

show of oil encountered in Yates section from 2625-38'. Above show tested 1 BOPH, 32 gravity corrected, on bailing test.

Drilled 8' hole to 2733 and returned hole at this point to 4 1/4" and drilled ahead to 2746' SIM. Ran 5 1/2" OD seamless 14' casing with packer on bottom and set on shoulder at 2733' to shut off show of oil in Yates section above. Drilled ahead to 2771' and encountered show of heavy oil and water at 2765-71'. Pulled casing up to 2550' and cemented with 50 ex. of cement, preceded by heavy mud. Let stand 72 hrs., drilled plug and swabbed hole down to run electric survey. Swabbed and bailed hole to clean up before running tubing to make test on natural production.

Ran 2" MUE end. The, tubing with packer 7' off bottom, 6' of perforation below packer, to test natural production of well. Did not set packer but left tubing 8' off bottom. Ran rods and pumped well on spudder for 24-hrs., 1 3/4" common working barrel, 46' stroke and 20 SIM. After pumping down well pumped 6.5 BPH 50' water.

11/2-42--pulled rods and standing valve, lowered tubing to bottom, set packer and prepared to solidize. Set packer at 2764' with perforation 265-71' and realized below packer with 1800 gal. of acid by Halliburton. Extra pump holding pressure on casing to prevent backer. Maximum pressure of 1500' LP and 1500' GP when acid hit formation. Maintained 300' differential pressure between tubing and casing while pumping acid in formation. Pressure at the end of treatment 15 200' and GP 500'. Swabbed well thru tubing to recover spent acid and then ran rods to take pumping test after solidizing. Well pumped 100 bbls. of oil and 100 bbls. of water on 24-hr. pumping test, 34' stroke and 18 SIM.