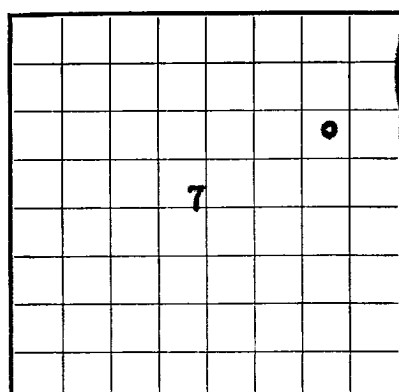
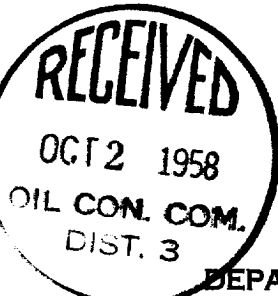


U. S. LAND OFFICE **Santa Fe**  
SERIAL NUMBER **ST 078510**  
LEASE OR PERMIT TO PROSPECT

LOCATE WELL CORRECTLY

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## LOG OF OIL OR GAS WELL

Company **Southern Union Gas Company** Address **1001 Burt Bldg., Dallas, Texas**  
Lessor or Tract **Osward** Field **Blanco MV** State **New Mexico**  
Well No. **2** Sec. **7** T. **31N** R. **8W** Meridian **N.M.P.M.** County **San Juan**  
Location **1765** ft. **N** of **N** Line and **1140** ft. **E** of **E** Line of **Section 7** Elevation **6441**  
(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.

Date **September 29, 1958** Signed **L. S. Musumalik** Title **Exploration Engineer**

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

Commenced drilling **8-15-**, 19**58** Finished drilling **9-6-**, 19**58**

## OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from **5280** to **5602 (G)** No. 4, from \_\_\_\_\_ to \_\_\_\_\_  
No. 2, from **5624** to **5842 (G)** No. 5, from \_\_\_\_\_ to \_\_\_\_\_  
No. 3, from \_\_\_\_\_ to \_\_\_\_\_ No. 6, from \_\_\_\_\_ to \_\_\_\_\_

## IMPORTANT WATER SANDS

No. 1, from \_\_\_\_\_ to \_\_\_\_\_ No. 3, from \_\_\_\_\_ to \_\_\_\_\_  
No. 2, from \_\_\_\_\_ to \_\_\_\_\_ 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— |                    |
| 10-3/4      | 32.75           | 8RD              | H-40 | 218'   |              |                     |            |     | Surface Production |
| 7-5/8       | 25.4            | 8RD              | H-40 | 1225'  |              |                     |            |     |                    |
| 5-1/2       | 19.5            | 8RD              | H-40 | 1225'  |              |                     |            |     |                    |
| 2"          | 5.00            |                  |      |        |              |                     |            |     |                    |

## MUDDING AND CEMENTING RECORD

| Size casing | Where set | Number sacks of cement | Method used | Mud gravity | Amount of mud used |
|-------------|-----------|------------------------|-------------|-------------|--------------------|
| 10-3/4      | 201' KB   | 200                    | Halliburton |             |                    |
| 7-5/8       | 3530' KB  | 200                    | Halliburton |             |                    |
| 5-1/2       | 3300-5915 | 275                    | Halliburton |             |                    |
| 2"          | 5800'     |                        |             |             |                    |

## PLUGS AND ADAPTERS

Heaving plug—Material \_\_\_\_\_ Length \_\_\_\_\_ Depth set \_\_\_\_\_  
Adapters—Material \_\_\_\_\_ Size \_\_\_\_\_

## SHOOTING RECORD

| Size                                                                                                                                                                                                     | Shell used | Explosive used | Quantity | Date | Depth shot | Depth cleaned out |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------|----------|------|------------|-------------------|
| Perf. 5810-5842, 5624-5746, fraced with 25,000 gals. water, 100,000# sand, IR 33.8 BPM, dropped 180 rubber balls. Perf. 5280-5324, 5540-5602, fraced with 61,000 gals. water, 60,000# sand, IR 33.4 BPM. |            |                |          |      |            |                   |

## TOOLS USED

Rotary tools were used from **-0-** feet to **3530 v/mud** feet, and from **3530** feet to **5920 v/gas** feet  
Cable tools were used from \_\_\_\_\_ feet to \_\_\_\_\_ feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet

## DATES

**9-13-**, 19**58** Put to producing \_\_\_\_\_, 19\_\_\_\_  
The production for the first 24 hours was \_\_\_\_\_ barrels of fluid of which \_\_\_\_\_% was oil; \_\_\_\_\_% emulsion; \_\_\_\_\_% water; and \_\_\_\_\_% sediment. Gravity, °Bé. \_\_\_\_\_  
If gas well, cu. ft. per 24 hours **6341 MCF** Gallons gasoline per 1,000 cu. ft. of gas \_\_\_\_\_  
Rock pressure, lbs. per sq. in. **1029#/7 days**

## EMPLOYEES

**Gardner Bros. Drig. Co.**, Driller **Sam Rives**, Driller  
**B. J. Webb**, Driller **M. M. Barnes**, Driller

## FORMATION RECORD

| FROM—                                                                | TO—     | TOTAL FEET | FORMATION          |
|----------------------------------------------------------------------|---------|------------|--------------------|
| -0-                                                                  | 201     | 201        | Sand & clay        |
| 201                                                                  | 428     | 227        | Shale              |
| 428                                                                  | 696     | 268        | Shale & lime       |
| 696                                                                  | 3257    | 2561       | Sand & shale       |
| 3257                                                                 | 3446    | 189        | Sand, shale & coal |
| 3446                                                                 | 3583    | 137        | Sand & shale       |
| 3583                                                                 | 3689    | 106        | Shale              |
| 3689                                                                 | 3697    | 8          | Sand & shale       |
| 3697                                                                 | 3764    | 67         | Shale              |
| 3764                                                                 | 5920 TD | 2156       | Sand & shale       |
| TOPS: Pictured Cliffs 3325<br>Cliff House 5270<br>Point Lookout 5570 |         |            |                    |

FORMATION RECORD—CONTINUED

