

U. S. LAND OFFICE New MexicoSERIAL NUMBER 012032

LEASE OR PERMIT TO PROSPECT

UNITED STATES

DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

## LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company El Paso Natural Gas Company Address Box 990, Farmington, New Mexico  
Lessor or Tract San Juan 31-6 Unit Field Blanco Mesa Verde State New Mexico  
Well No. 20 Sec. 3 T. 30-N-R-6-W Meridian N.M.P.M. County Rio Arriba  
Location 800 ft. N of 3 Line and 1450 ft. E of 2 Line of Section 3 Elevation 6445'  
(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 D. W. Meehan Original Signed D. W. MeehanDate July 28, 1961Title Petroleum Engineer

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

Commenced drilling 6-13, 1961 Finished drilling 6-22, 1961

## OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 5272 to 5380 (G) No. 4, from \_\_\_\_\_ to \_\_\_\_\_  
No. 2, from 5380 to 5618 (G) No. 5, from \_\_\_\_\_ to \_\_\_\_\_  
No. 3, from 5618 to 5826 (G) 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— |                       |
| 9 5/8"      | 267             | 8 rd             | J-55 | 300    |              |                     |            |     | circulated            |
| 7"          | 3593            | 130              |      |        |              |                     |            |     | single stage          |
| 4 1/2"      | 3463-5896       | 300              |      |        |              |                     |            |     | single stage & cement |
| 1 1/4"      | 2.4             | 10 rd            | J-55 | 5666   |              |                     |            |     | Prod tubing           |

## MUDGING AND CEMENTING RECORD

| Size casing | Where set | Number sacks of cement | Method used           | Mud gravity | Amount of mud used |
|-------------|-----------|------------------------|-----------------------|-------------|--------------------|
| 9 5/8"      | 267       | 300                    | circulated            |             |                    |
| 7"          | 3593      | 130                    | single stage          |             |                    |
| 4 1/2"      | 3463-5896 | 300                    | single stage & cement |             |                    |

## 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 |
|------------------|--------------------------------------------------------------------|----------------|----------|------|------------|-------------------|
| 518-26; 5636-44; | Frac Mesa Verde with 44,800 gallons water, 57,500 sand. Flush 8200 |                |          |      |            |                   |
| 548-56; 5660-70  | gallons. I.B. 32 MM. max pr 3400, HSP 2000, tr pr 1600-1750-       |                |          |      |            |                   |

## TOOLS USED

Rotary tools were used from \_\_\_\_\_ feet to \_\_\_\_\_ feet, and from 3593 feet, and from 3593 Gas Drilled 5896 feet  
Cable tools were used from \_\_\_\_\_ feet to \_\_\_\_\_ feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet

## DATES

Tubing run 6-26-61, 1961 Put to producing \_\_\_\_\_, 19\_\_\_\_\_  
S. I. 7-6- \_\_\_\_\_  
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 3,236,000

Gallons gasoline per 1,000 cu. ft. of gas \_\_\_\_\_

Rock pressure, lbs. per sq. in. 1166

## EMPLOYEES

A.O.F. - 3382 MCT/D

\_\_\_\_\_, Driller \_\_\_\_\_, Driller  
\_\_\_\_\_, Driller \_\_\_\_\_, Driller

## FORMATION RECORD

| FROM— | TO—  | TOTAL FEET | FORMATION                                                        |
|-------|------|------------|------------------------------------------------------------------|
| 0     | 5272 | 5272       | Not logged                                                       |
| 5272  | 5380 | 108        | Cliff House ss. Gry, fine-grn, dense silt ss.                    |
| 5380  | 5618 | 238        | Manatee form. Gry, fine-grn s, carb sh & coal.                   |
| 5618  | 5826 | 208        | Point Lookout form. Gry, very fine silt ss w/frequent sh breaks. |
| 5826  | 5896 | 70         | Manatee form. Gry carb sh.                                       |
| FROM— | TO—  | TOTAL FEET | FORMATION                                                        |

FORMATION RECORD—Continued

U.S. LAND OFFICE  
New Mexico  
01222  
SERIAL NUMBER  
PLEASE OR PERMIT TO PROSPECT

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

# LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

A blank sheet of graph paper with a grid pattern. The grid consists of 10 columns and 8 rows of squares. There are no markings or text on the page.

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

Signed \_\_\_\_\_  
Operator \_\_\_\_\_ D. W. Menden

Location Sec. 15 of T. 22 N. and R. 10 E. of E. 1/4 of Sec. 36  
Well No. 20 Sec. 3 T. 22 N. R. 10 E. Meridian N.M.P.M. County Rio Arriba  
Lessor or Trust San Juan 31-6 Unit Field Blanco Mesa Verde State New Mexico  
Company El Paso Natural Gas Company Address Box 300, Farmington, New Mexico

Date: 10/1/88

Commenced drilling ~~6-15~~ 19~~14~~ Finished drilling ~~6-25~~ 19~~14~~

**OIL OR GAS SANDS OR ZONES**

(Dreht das pl G)

|             |      |    |          |             |    |
|-------------|------|----|----------|-------------|----|
| No. 1, from | 5215 | to | 5207 (b) | No. 4, from | to |
| No. 2, from | 5206 | to | 5205 (b) | No. 5, from | to |
| No. 3, from | 5204 | to | 5203 (c) | No. 6, from | to |

# IMPORTANT WATER SITES

No. 1, from \_\_\_\_\_ to \_\_\_\_\_ No. 3, from \_\_\_\_\_ to \_\_\_\_\_  
No. 2, from \_\_\_\_\_ to \_\_\_\_\_ No. 4, from \_\_\_\_\_ to \_\_\_\_\_

## CASING RECORD

| Case No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Size<br>per foot | Height<br>per foot | Threads per<br>inch | Material | Amount | Kind of shoe | Cut and drilled from | From—<br>To— | Porterford | Purpose |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------|---------------------|----------|--------|--------------|----------------------|--------------|------------|---------|
| 1/5.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 2.8              | 3.5                |                     |          |        |              |                      |              |            |         |
| <p>It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, casing, and cementing. If there were any changes made in the casing, state fully, and if any casing was lost or damaged, state the location and amount. If the well has been dynamited, state date, size, position, and depth of shot. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.</p> |                  |                    |                     |          |        |              |                      |              |            |         |
| <p>UNIFORMITY OF OIL OR GAS WELL</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                  |                    |                     |          |        |              |                      |              |            |         |

# HISTORY OF OIL OR GAS WELL

U. S. GOVERNMENT PRINTING OFFICE 16-43094-2

RECORDING AND CEMENTING RECORD

| Case No. | W hole set | Number - each of component | Method used | Mud gravity | Amount of mud used |
|----------|------------|----------------------------|-------------|-------------|--------------------|
| 10       | 100        | 100                        | 100         | 100         | 100                |
| 11       | 100        | 100                        | 100         | 100         | 100                |
| 12       | 100        | 100                        | 100         | 100         | 100                |
| 13       | 100        | 100                        | 100         | 100         | 100                |
| 14       | 100        | 100                        | 100         | 100         | 100                |
| 15       | 100        | 100                        | 100         | 100         | 100                |
| 16       | 100        | 100                        | 100         | 100         | 100                |
| 17       | 100        | 100                        | 100         | 100         | 100                |
| 18       | 100        | 100                        | 100         | 100         | 100                |
| 19       | 100        | 100                        | 100         | 100         | 100                |
| 20       | 100        | 100                        | 100         | 100         | 100                |

## PLUGS AND ADAPTERS

| Adapters—Material     | Size | Length | Depth set |
|-----------------------|------|--------|-----------|
| Heaving plug—Material |      |        |           |

## SHOOTING RECORD

| Size               | Striell used | Explosives used | Quantity                                          | Date | Depth shot | Depth cleaned out |
|--------------------|--------------|-----------------|---------------------------------------------------|------|------------|-------------------|
| 21-25-26 in.       |              |                 | 2 no west Verge with 1000 gallons water           |      |            | 2000              |
| 28-30-32-34-36 in. |              |                 | 1 no. 30 WVA. max 2500, min 2000, at or 1500-1750 |      |            |                   |

## TOOLS USED

|                             |         |                |      |
|-----------------------------|---------|----------------|------|
| Rotary tools were used from | feet to | feet, and from | feet |
| Cable tools were used from  | feet to | feet, and from | feet |

DATE

|         |                                           |    |                  |    |
|---------|-------------------------------------------|----|------------------|----|
| 8.1.1.3 | The production for the first 24 hours was | 10 | Put to producing | 10 |
| 8.1.1.3 | barrels of fluid of which % was oil;      | 10 |                  | 10 |
| 8.1.1.3 |                                           | 10 |                  | 10 |

|                                                                |                                                           |
|----------------------------------------------------------------|-----------------------------------------------------------|
| If gas well, in how many hours<br>emulsion; and<br>No sediment | Gravity, °Bé<br>Gallons gasoline per 1,000 cu. ft. of gas |
|----------------------------------------------------------------|-----------------------------------------------------------|

|                               |      |           |                     |
|-------------------------------|------|-----------|---------------------|
| Rock pressure, the per ad in. | 1163 | EMPLOYEES | A.O.P. - 3385 MCT/P |
| 3,505,000                     |      |           |                     |

EMPHLOYEES

|               |               |  |  |
|---------------|---------------|--|--|
| Dr. H. C. ... | Dr. H. C. ... |  |  |
| Dr. H. C. ... | Dr. H. C. ... |  |  |

FORMATION RECORD

| FROM - | TO - | TOTAL FEET | FORMATION                                        |
|--------|------|------------|--------------------------------------------------|
| 5850   | 5800 | 50         | Barren form. Gray sand sh.                       |
| 5018   | 5000 | 18         | v/frequent sh. beds.                             |
| 5018   | 5000 | 18         | Point lookout form. Gray, very fine sil sh       |
| 5000   | 5000 | 0          |                                                  |
| 5015   | 5000 | 15         | Medium form. Gray, fine-grained, hard sh & s     |
| 5015   | 5000 | 15         | Cliff form. ss. Gray, fine-grained, dense sil sh |
| 5015   | 5000 | 15         | ss. loess                                        |