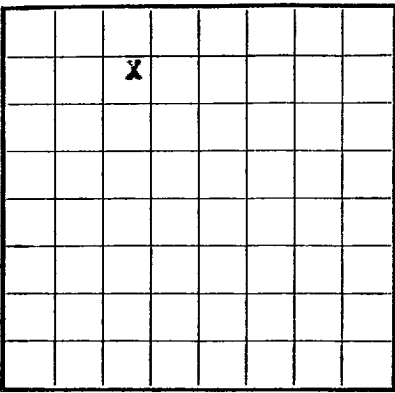


U. S. LAND OFFICE New Mexico  
SERIAL NUMBER 0433  
LEASE OR PERMIT TO PROSPECT \_\_\_\_\_



LOCATE WELL CORRECTLY

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

RECEIVED  
DEC 10 1956  
U. S. GEOLOGICAL SURVEY  
FARMINGTON, NEW MEXICO

LOG OF OIL OR GAS WELL

Company El Paso Natural Gas Company Address Box 997, Farmington, New Mexico  
Lessor or Tract Huerfano Unit Field W. Kutz State New Mexico  
Well No. 70 Sec. 8 T. 26N R. 10W Meridian NMGM County San Juan  
Location 890 ft. S. of N Line and 1600 ft. E. of W Line of Section 8 Elevation 6573'  
(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.

ORIGINAL SIGNED F. W. BOYD

Signed \_\_\_\_\_  
Date December 7, 1956 Title Petroleum Engineer

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

Commenced drilling 11-4-56, 19\_\_\_\_ Finished drilling 11-8-56, 19\_\_\_\_

OIL OR GAS SANDS OR ZONES  
(Denote gas by G)

No. 1, from 2110 to 2210 (G) No. 4, from \_\_\_\_\_ to \_\_\_\_\_  
No. 2, from \_\_\_\_\_ to \_\_\_\_\_ 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— |                |
| 5/8"        | 28.50           | 8 RD             | J-55 | 125'   | Howco        |                     |            |     | Surface        |
| 1 1/2"      | 15.50           | 8 RD             | J-55 | 2205'  | Howco        |                     |            |     | 2205' to 2210' |
| 1 1/4"      | 21.50           | 8 RD             | J-55 | 2138'  | Howco        |                     |            |     | 2138' to 2215' |

MUDDING AND CEMENTING RECORD

| Size casing | Where set | Number sacks of cement | Method used  | Mud gravity | Amount of mud used |
|-------------|-----------|------------------------|--------------|-------------|--------------------|
| 5/8"        | 135'      | 100                    | Circulated   |             |                    |
| 1 1/2"      | 2215'     | 150                    | Single stage |             |                    |

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 |
|------|------------|-------------------|----------|------|------------|-------------------|
|      |            | See Well History. |          |      |            |                   |

TOOLS USED

Rotary tools were used from 0 feet to 2215 feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet  
Cable tools were used from \_\_\_\_\_ feet to \_\_\_\_\_ feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet

DATES

11-24-56, 19\_\_\_\_ 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 1,522,000 A.O.F., 1688 MCF/D. Gallons gasoline per 1,000 cu. ft. of gas \_\_\_\_\_

Rock pressure, lbs. per sq. in. 396

EMPLOYEES

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

FORMATION RECORD

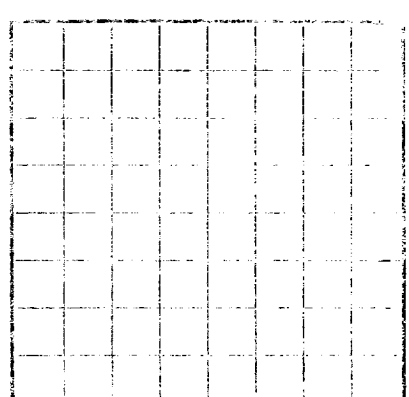
| FROM— | TO—  | TOTAL FEET | FORMATION                                                                       |
|-------|------|------------|---------------------------------------------------------------------------------|
| 0     | 1100 | 1100       | Tan to gry cr-grn ss interbedded w/gry sh.                                      |
| 1100  | 1229 | 129        | Ojo Alamo ss. White cr-grn s.                                                   |
| 1229  | 1794 | 565        | Kirtland form. Gry sh interbedded w/tight gry fine-grn ss.                      |
| 1794  | 2110 | 316        | Fruitland form. Gry carb sh, scattered coals coals and gry, tight, fine-grn ss. |
| 2110  | 2210 | 100        | Pictured Cliffs form. Gry, fine-grn, tight, varicolored soft ss.                |
| 2210  | 2215 | 5          | Lewis formation. Gry to white dense sh w/silty to shaly ss breaks.              |

LOG OF OIL OR GAS WELL

GEOLOGICAL SURVEY

DEPARTMENT OF THE INTERIOR

UNITED STATES



LOCATE WELL CORRECTLY

Company \_\_\_\_\_  
Treasurer or Agent \_\_\_\_\_  
Well No. \_\_\_\_\_  
Location \_\_\_\_\_  
Sec. \_\_\_\_\_ T. \_\_\_\_\_ R. \_\_\_\_\_  
County \_\_\_\_\_ State \_\_\_\_\_  
Address \_\_\_\_\_

ORIGINAL SIGNED F.W. BOYD

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 \_\_\_\_\_  
Date \_\_\_\_\_  
The summary on this page is for the condition of the well at abandonment.  
Completed drilling \_\_\_\_\_  
Finished drilling \_\_\_\_\_

OIL OR GAS SANDS OR NONES  
(Give how far)  
No. 1 from \_\_\_\_\_ to \_\_\_\_\_  
No. 2 from \_\_\_\_\_ to \_\_\_\_\_  
No. 3 from \_\_\_\_\_ to \_\_\_\_\_  
No. 4 from \_\_\_\_\_ to \_\_\_\_\_  
No. 5 from \_\_\_\_\_ to \_\_\_\_\_  
No. 6 from \_\_\_\_\_ to \_\_\_\_\_  
No. 7 from \_\_\_\_\_ to \_\_\_\_\_  
No. 8 from \_\_\_\_\_ to \_\_\_\_\_  
No. 9 from \_\_\_\_\_ to \_\_\_\_\_  
No. 10 from \_\_\_\_\_ to \_\_\_\_\_  
No. 11 from \_\_\_\_\_ to \_\_\_\_\_  
No. 12 from \_\_\_\_\_ to \_\_\_\_\_  
No. 13 from \_\_\_\_\_ to \_\_\_\_\_  
No. 14 from \_\_\_\_\_ to \_\_\_\_\_  
No. 15 from \_\_\_\_\_ to \_\_\_\_\_  
No. 16 from \_\_\_\_\_ to \_\_\_\_\_  
No. 17 from \_\_\_\_\_ to \_\_\_\_\_  
No. 18 from \_\_\_\_\_ to \_\_\_\_\_  
No. 19 from \_\_\_\_\_ to \_\_\_\_\_  
No. 20 from \_\_\_\_\_ to \_\_\_\_\_  
No. 21 from \_\_\_\_\_ to \_\_\_\_\_  
No. 22 from \_\_\_\_\_ to \_\_\_\_\_  
No. 23 from \_\_\_\_\_ to \_\_\_\_\_  
No. 24 from \_\_\_\_\_ to \_\_\_\_\_  
No. 25 from \_\_\_\_\_ to \_\_\_\_\_  
No. 26 from \_\_\_\_\_ to \_\_\_\_\_  
No. 27 from \_\_\_\_\_ to \_\_\_\_\_  
No. 28 from \_\_\_\_\_ to \_\_\_\_\_  
No. 29 from \_\_\_\_\_ to \_\_\_\_\_  
No. 30 from \_\_\_\_\_ to \_\_\_\_\_  
No. 31 from \_\_\_\_\_ to \_\_\_\_\_  
No. 32 from \_\_\_\_\_ to \_\_\_\_\_  
No. 33 from \_\_\_\_\_ to \_\_\_\_\_  
No. 34 from \_\_\_\_\_ to \_\_\_\_\_  
No. 35 from \_\_\_\_\_ to \_\_\_\_\_  
No. 36 from \_\_\_\_\_ to \_\_\_\_\_  
No. 37 from \_\_\_\_\_ to \_\_\_\_\_  
No. 38 from \_\_\_\_\_ to \_\_\_\_\_  
No. 39 from \_\_\_\_\_ to \_\_\_\_\_  
No. 40 from \_\_\_\_\_ to \_\_\_\_\_  
No. 41 from \_\_\_\_\_ to \_\_\_\_\_  
No. 42 from \_\_\_\_\_ to \_\_\_\_\_  
No. 43 from \_\_\_\_\_ to \_\_\_\_\_  
No. 44 from \_\_\_\_\_ to \_\_\_\_\_  
No. 45 from \_\_\_\_\_ to \_\_\_\_\_  
No. 46 from \_\_\_\_\_ to \_\_\_\_\_  
No. 47 from \_\_\_\_\_ to \_\_\_\_\_  
No. 48 from \_\_\_\_\_ to \_\_\_\_\_  
No. 49 from \_\_\_\_\_ to \_\_\_\_\_  
No. 50 from \_\_\_\_\_ to \_\_\_\_\_  
No. 51 from \_\_\_\_\_ to \_\_\_\_\_  
No. 52 from \_\_\_\_\_ to \_\_\_\_\_  
No. 53 from \_\_\_\_\_ to \_\_\_\_\_  
No. 54 from \_\_\_\_\_ to \_\_\_\_\_  
No. 55 from \_\_\_\_\_ to \_\_\_\_\_  
No. 56 from \_\_\_\_\_ to \_\_\_\_\_  
No. 57 from \_\_\_\_\_ to \_\_\_\_\_  
No. 58 from \_\_\_\_\_ to \_\_\_\_\_  
No. 59 from \_\_\_\_\_ to \_\_\_\_\_  
No. 60 from \_\_\_\_\_ to \_\_\_\_\_  
No. 61 from \_\_\_\_\_ to \_\_\_\_\_  
No. 62 from \_\_\_\_\_ to \_\_\_\_\_  
No. 63 from \_\_\_\_\_ to \_\_\_\_\_  
No. 64 from \_\_\_\_\_ to \_\_\_\_\_  
No. 65 from \_\_\_\_\_ to \_\_\_\_\_  
No. 66 from \_\_\_\_\_ to \_\_\_\_\_  
No. 67 from \_\_\_\_\_ to \_\_\_\_\_  
No. 68 from \_\_\_\_\_ to \_\_\_\_\_  
No. 69 from \_\_\_\_\_ to \_\_\_\_\_  
No. 70 from \_\_\_\_\_ to \_\_\_\_\_  
No. 71 from \_\_\_\_\_ to \_\_\_\_\_  
No. 72 from \_\_\_\_\_ to \_\_\_\_\_  
No. 73 from \_\_\_\_\_ to \_\_\_\_\_  
No. 74 from \_\_\_\_\_ to \_\_\_\_\_  
No. 75 from \_\_\_\_\_ to \_\_\_\_\_  
No. 76 from \_\_\_\_\_ to \_\_\_\_\_  
No. 77 from \_\_\_\_\_ to \_\_\_\_\_  
No. 78 from \_\_\_\_\_ to \_\_\_\_\_  
No. 79 from \_\_\_\_\_ to \_\_\_\_\_  
No. 80 from \_\_\_\_\_ to \_\_\_\_\_  
No. 81 from \_\_\_\_\_ to \_\_\_\_\_  
No. 82 from \_\_\_\_\_ to \_\_\_\_\_  
No. 83 from \_\_\_\_\_ to \_\_\_\_\_  
No. 84 from \_\_\_\_\_ to \_\_\_\_\_  
No. 85 from \_\_\_\_\_ to \_\_\_\_\_  
No. 86 from \_\_\_\_\_ to \_\_\_\_\_  
No. 87 from \_\_\_\_\_ to \_\_\_\_\_  
No. 88 from \_\_\_\_\_ to \_\_\_\_\_  
No. 89 from \_\_\_\_\_ to \_\_\_\_\_  
No. 90 from \_\_\_\_\_ to \_\_\_\_\_  
No. 91 from \_\_\_\_\_ to \_\_\_\_\_  
No. 92 from \_\_\_\_\_ to \_\_\_\_\_  
No. 93 from \_\_\_\_\_ to \_\_\_\_\_  
No. 94 from \_\_\_\_\_ to \_\_\_\_\_  
No. 95 from \_\_\_\_\_ to \_\_\_\_\_  
No. 96 from \_\_\_\_\_ to \_\_\_\_\_  
No. 97 from \_\_\_\_\_ to \_\_\_\_\_  
No. 98 from \_\_\_\_\_ to \_\_\_\_\_  
No. 99 from \_\_\_\_\_ to \_\_\_\_\_  
No. 100 from \_\_\_\_\_ to \_\_\_\_\_



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 pins or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing. It is recommended that the well be bailed out to 2145'. Perforated 2109-2194 with 4 1/2" casing. Pump with 2900 gallons. Injection rate 62.0 B.M. Maximum pressure and breakdown pressure 3250', average treating pressure 1350'.

HISTORY OF OIL OR GAS WELL

18-43084-2 U. S. GOVERNMENT PRINTING OFFICE

| FROM—                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | TO—                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | TOTAL FEET                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | FORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 15-22-36 Total depth 2215'. Casing out to 2145'. Perforated 2109-2194 with 4 1/2" casing. Pump with 2900 gallons. Injection rate 62.0 B.M. Maximum pressure and breakdown pressure 3250', average treating pressure 1350'.                                                                                                                                                                                                                                                                                                                   |  | 15-22-36 Total depth 2215'. Casing out to 2145'. Perforated 2109-2194 with 4 1/2" casing. Pump with 2900 gallons. Injection rate 62.0 B.M. Maximum pressure and breakdown pressure 3250', average treating pressure 1350'.                                                                                                                                                                                                                                                                                                                   |  | 15-22-36 Total depth 2215'. Casing out to 2145'. Perforated 2109-2194 with 4 1/2" casing. Pump with 2900 gallons. Injection rate 62.0 B.M. Maximum pressure and breakdown pressure 3250', average treating pressure 1350'.                                                                                                                                                                                                                                                                                                                   |  | 15-22-36 Total depth 2215'. Casing out to 2145'. Perforated 2109-2194 with 4 1/2" casing. Pump with 2900 gallons. Injection rate 62.0 B.M. Maximum pressure and breakdown pressure 3250', average treating pressure 1350'.                                                                                                                                                                                                                                                                                                                   |  |
| 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 pins or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing. |  | 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 pins or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing. |  | 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 pins or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing. |  | 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 pins or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing. |  |
| TOOLS USED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | TOOLS USED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | TOOLS USED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | TOOLS USED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| Shooting record                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | Shooting record                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | Shooting record                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | Shooting record                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |
| Plugs and adapters                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | Plugs and adapters                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | Plugs and adapters                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | Plugs and adapters                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
| Mudding and cementing record                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | Mudding and cementing record                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | Mudding and cementing record                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | Mudding and cementing record                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |