

Form 9-330

Santa Fe

U. S. LAND OFFICE

SERIAL NUMBER 079363

LEASE OR PERMIT TO PROSPECT

14-08-001-1051

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 997, Farmington, New Mexico  
Lessor or Tract San Juan 28-6 Unit Field Blanco State New Mexico  
Well No. 24 Sec. 10 T. 27N R. 6W Meridian NMPM County Rio Arriba  
Location 1804 ft. xxx of N Line and 903 ft. xxx of E Line of Section 10 Elevation 6296'  
(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 December 15, 1955 Title Petroleum Engineer

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

Commenced drilling October 18 1955 Finished drilling November 4 1955

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 3071 to 3138 G No. 4, from 5226 to 5349 G  
No. 2, from 4673 to 4825 G No. 5, from 5349 to 5407 T.D.  
No. 3, from 4825 to 5226 G No. 6, from 5407 to 5407 T.D.

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 | Out and pulled from | Perforated | Purpose      |
|-------------|-----------------|------------------|------|--------|--------------|---------------------|------------|--------------|
| 13 3/8"     | 48#             | 8 RD             | J-55 | 162'   | Howco        |                     |            | Surface      |
| 9 5/8"      | 36#             | 8 RD             | J-55 | 3160'  | Baker        |                     |            | Intermediate |
| 7"          | 28#             | 8 RD             | J-55 | 1338'  | Baker        |                     |            | Prod. Csg.   |
| 2"          | 4.7#            | 8 RD             | J-55 | 5356'  |              |                     |            | Prod. Tubg.  |

MUDDING AND CEMENTING RECORD

| Size casing | Where set | Number sacks of cement | Method used  | Mud gravity | Amount of mud used |
|-------------|-----------|------------------------|--------------|-------------|--------------------|
| 13 3/8"     | 175'      | 275                    | Circulated   |             |                    |
| 9 5/8"      | 3170'     | 250                    | Single Stage |             |                    |
| 7"          | 5407'     | 400                    | 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

Gas Drilled

Rotary tools were used from 0 feet to 3170 feet, and from 3170 feet to 5407 feet  
Cable tools were used from \_\_\_\_\_ feet to \_\_\_\_\_ feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet

DATES

11-13-55, 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 3,579,000 Gallons gasoline per 1,000 cu. ft. of gas \_\_\_\_\_

Rock pressure, lbs. per sq. in. 1082

EMPLOYEES

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

FORMATION RECORD

| FROM— | TO—       | TOTAL FEET | FORMATION  |
|-------|-----------|------------|--|
| 0     | 990       | 990        | Tan cr-grn ss w/thin ss breaks.  |
| 990   | 1220      | 230        | Vareigated sh w/thin ss breaks.  |
| 1220  | 2304      | 1084       | Tan to gry cr-grn ss interbedded w/gry sh.                                       |
| 2304  | 2475      | 171        | Ojo Alamo ss. White cr-grn s.  |
| 2475  | 2788      | 313        | Kirtland form. Gry sh interbedded w/tight gry fine-grn ss.                       |
| 2788  | 3071      | 283        | Fruitland form. Gry carbh sh, scattered coals coals and gry, tight, fine-grn ss. |
| 3071  | 3138      | 67         | Pictured Cliffs form. Gry, fine-grn, tight, varicolored soft ss.                 |
| 3138  | 4673      | 1535       | Lewis formation. Gry to white dense sh w/silty to shaly ss breaks.               |
| 4673  | 4825      | 152        | Cliff House ss. Gry, fine-grn, dense sil ss.                                     |
| 4825  | 5226      | 401        | Menefee form. Gry, fine-grn s, carb sh & coal.                                   |
| 5226  | 5349      | 123        | Point Lookout form. Gry, very fine sil ss w/frequent sh breaks.                  |
| 5349  | 5407 T.D. | 58         | Mancos formation. Gry carb sh.   |

(OVER)

**FORMATION RECORD—Continued**

| FROM— | TO—  | TOTAL FEET | FORMATION   |
|-------|------|------------|---|
| 1000  | 1000 | 0          | Top of section.                                     |
| 900   | 1000 | 100        | Gravelly sandstone, yellowish brown, medium bedded. |
| 800   | 1000 | 200        | Sandstone, yellowish brown, medium bedded.          |
| 700   | 1000 | 300        | Sandstone, yellowish brown, medium bedded.          |
| 600   | 1000 | 400        | Sandstone, yellowish brown, medium bedded.          |
| 500   | 1000 | 500        | Sandstone, yellowish brown, medium bedded.          |
| 400   | 1000 | 600        | Sandstone, yellowish brown, medium bedded.          |
| 300   | 1000 | 700        | Sandstone, yellowish brown, medium bedded.          |
| 200   | 1000 | 800        | Sandstone, yellowish brown, medium bedded.          |
| 100   | 1000 | 900        | Sandstone, yellowish brown, medium bedded.          |
| 0     | 1000 | 1000       | Base of section.                                    |

### HISTORY OF OIL OR GAS WELL

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.

Nov. 8, 1955. T.D. 5407'. Cleanout depth 5384'.

Water fractured Point Lookout formation. Intervals treated 5198' - 5204', 5206' - 5214, 5228' - 5246', & 5286' - 5310' (thru perf. 4 holes/ft.)

Treated down casing with 60,100 gallons water and 60,000# regular ~~weight~~ sand.

Breakdown pressure 1350 psi, maximum treating pressure 1100 psi, average treating pressure 1050 psi. Injection rate 63.6 bbls./min. Flush 9200 gallons.

No gage natural.

SECRET//NOFORN

Nov. 9, 1955. T.D. 5407'. P.B. Depth 4950'. Water fractured Cliff House formation.

Intervals treated 4674' - 4700', 4750' - 4760', 4766' - 4776', 4786' - 4810',  
4834' - 4840', & 4890' - 4896', (thru perf. 4 holes/ft.) Treated down casing

with 57,200 gallons water and 60,000# sand. Breakdown pressure 1050 psi, maximum treating pressure 1500 psi. Average treating pressure 1100 psi. Average injection rate 41.5 bbls./min. Flushed with 8600 gallons water. No gages natural.

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## 2. APPROVAL OF THE ALBION

1993-1994