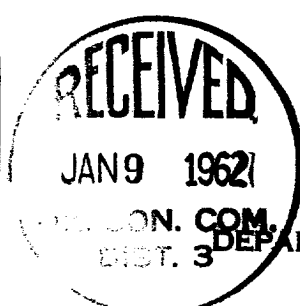




U. S. LAND OFFICE Santa Fe
SERIAL NUMBER 078194
LEASE OR PERMIT TO PROSPECT _____

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 Indvick Field Basin Dakota State New Mexico
 Well No. 21 Sec. 31 T. 30N R. 10W Meridian N.M.P.M. County San Juan
 Location 940 ft. $\left\{ \begin{array}{c} \text{N.} \\ \text{S.} \end{array} \right\}$ of 8 Line and 1850 ft. $\left\{ \begin{array}{c} \text{E.} \\ \text{W.} \end{array} \right\}$ of W Line of Section 31 Elevation 6096
 (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 ORIGINAL SIGNED E. S. OBERLY

Date December 29, 1961 Title Petroleum Engineer

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

Commenced drilling 10-17- 1961 Finished drilling 11-3- 1961

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 6705 to 6821 (a) No. 4, from _____ to _____

No. 2, from 6821 to 7056 (a) 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

[illegible]

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
10 3/4"	296	280	circulated		
4 1/2"	7050	835	3 stage		

PLUGS AND ADAPTERS

Heaving plug—Material _____ Length _____ Depth set _____

[illegible]

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
6824-28; 6832-36; 6844-48;		Frac Dakota w/60,000	gal water, 60,000#		sand. Flush 4200#;	
6872-76; 6886-94; 6948-56;		I.R. 41 BFM. Max pr 4000#;	BBP 1700#;		tr pr 3600-3700-3750#.	
6960-64; 6968-76;		6 drops of 16 balls.				

TOOLS USED

Rotary tools were used from 0 feet to 70.6 feet, and from _____ feet to _____ feet

Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

....., 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 2,345,678 Gallons gasoline per 1,000 cu. ft. of gas _____

Rock pressure, lbs. per sq. in.	
---------------------------------	--

2027 (cslg) A.O.F. 3429 NCF/D
EMPLOYEES

EMPLOYEES

_____, Driller

_____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	2464	2464	Tan to gry cr-grn ss interbedded w/gry sh.
2464	4719	2255	Pictured Cliffs forma. Gry, fine-grn, tight, varicolored soft ss.
4719	5926	1207	Point Lookout form. Gry, very fine sil ss w/frequent sh breaks.
5926	6649	723	Gallup form. Lt gry to brn calc carb micac glauco very fine gry ss w/irreg interbed sh.
6649	6705	56	Greenhorn form. Highly calc gry sh w/thin lmst.
6705	6821	116	Graneros form. Lk gry shale, fossil & carb w/prite incl.
6821	7056	235	Bakota form. Lt to dk gry foss carb sl calc sl silty ss w/prite incl thin sh bands clay & shale breaks.
FROM—	TO—	TOTAL FEET	FORMATION

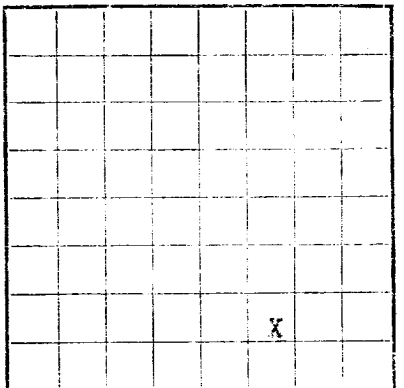
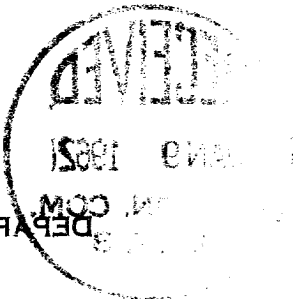
[OVER]

EDUCATION RECORD—Continued

16-48094-5

U.S. LAND OFFICE
 SERIAL NUMBER
 ISSUED OR PERMIT TO PROSPECT

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

[illegible]

Commenced drilling 10-17-1941 Finished drilling 11-7-1941
The summary on this page is for the condition of the well at above date.
Date December 22, 1941 Title Petroleum Division

(Derecho de uso)

OIL OR GAS SANDS OR ZONES

No. 1. from	to	1881	No. 1. from	to	1881
No. 2. from	to	1882	No. 2. from	to	1882
No. 3. from	to		No. 3. from	to	
No. 4. from	to		No. 4. from	to	
No. 5. from	to		No. 5. from	to	
No. 6. from	to		No. 6. from	to	

IMPORTANT WATER SANDS

No. 1, from	to	No. 8, from	to
No. 2, from	to	No. 4, from	to

CASING RECORD

Casing		Weight per foot	Threads per inch	Makes	Amount	Kind of shoe	Cut and pulled from	Perforated	Purpose
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 the date 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.									

MUDDING AND CEMENTING RECORD

Case Number	Witness Ref	Number acres of concern	Method used	Wind gravity	Amount of material used
11/15	102	100	3 cases		
11/15	103	50	1 case		

PLUGS AND ADAPTERS

Adapters—Material	Size
Hearing plug—Material	Length
	Depth set

SHOOTING RECORD

[illegible]

TOOLS USED

Cable tools were used from	feet to	feet, and from	feet to
Theory tools were used from	feet to	feet, and from	feet to

DATE

Rock pressure, lbs. per sq. in.	10
Oil gas well, cu. ft. per 24 hours	10
emulsion; % water and % sediment	10
The production for the first 24 hours was	10
Put to producing	10

EMPLOYEES

Driller	Driller		
Driller	Driller		

FORMATION RECORD

FROM-	TO-	TOTAL FEET	FORMATION
2404	2401	3	tan to grey or grey as incandescent w/ grey sh.
2404	2399	5	incandescent white to tan. grey, lime-grey, light.
2403	2397	6	incandescent soft ss.
2403	2393	4	light to tan. grey, very fine.
2403	2391	2	as w/ frequent ss. pressure.
2403	2387	4	rolling form. in grey to tan soft sand. also
2403	2383	4	change very fine grey as w/ frequent ss. pressure.
2403	2379	4	greenish form. slightly calc. grey sh w/ thin
2403	2375	4	greenish form. in grey shale, fossil & calc.
2403	2371	4	w/ white incl.
2403	2367	4	incandescent form. in to grey to tan. also
2403	2363	4	shaly as w/ white incl. also at base of clay
2403	2359	4	shale breaks.