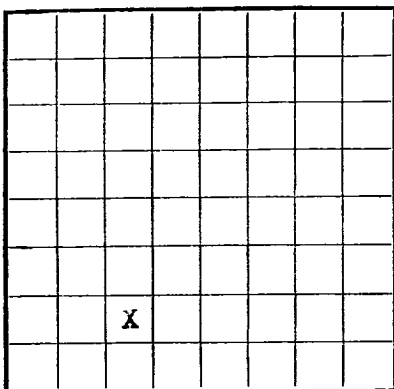


U. S. LAND OFFICE Santa Fe
SERIAL NUMBER 078194
LEASE OR PERMIT TO PROSPECT

LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company El Paso Natural Gas Company Address Box 997, Farmington, New Mexico
Lessor or Tract Ludwick Field Blanco State New Mexico
Well No. 12 Sec. 19 T. 30N R. 10W Meridian NMPM County San Juan
Location 990 ft. N. of S. Line and 1550 ft. E. of W. Line of Section 19 Elevation 6225
(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

Date October 24, 1956Title Petroleum Engineer

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

Commenced drilling 6-27-56, 19..... Finished drilling 9-21-56, 19.....

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 2670 to 2791 (G) No. 4, from 4991 to 5200 (G)
No. 2, from 4327 to 4457 (G) No. 5, from
No. 3, from 4457 to 4991 (G) No. 6, from

IMPORTANT WATER SANDS

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

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	P.E.	S.W.	161'	Howes				Surface
7"	23	8 RD	J-55	509'	Howes				Prod. Csg.
7"	20	8 RD	J-55	409'	Howes				Prod. Csg.
5 1/2	18.5	8 RD	J-55	198'	Howes				Prod. Csg.
2"	4.7	8 RD	J-55	509'	Howes				Prod. Tbg.

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
10 3/4	173'	190	Circulated		
7"	4578'	300	2 stages (150 sks. cement on each stage.)		
5 1/2	4499-5235	120	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 175 feet to 4578 feet, and from 4578 feet to 5237 feet
Cable tools were used from 0 feet to 175 feet, and from feet to feet

DATES

..... 9-26-56, 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 4,518,000 A.O.F., 7,021 MCF/D. Gallons gasoline per 1,000 cu. ft. of gasRock pressure, lbs. per sq. in. 1122

EMPLOYEES

....., Driller Driller
....., Driller Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	1341	1341	Tan to gry cr-grn ss interbedded w/gry sh.
1341	1450	109	Ojo Alamo ss. White cr-grn s.
1450	2322	872	Kirtland form. Gry sh interbedded w/tight gry fine-grn ss.
2322	2670	348	Fruitland form. Gry carb sh, scattered coals coals and gry, tight, fine-grn ss.
2670	2791	121	Pictured Cliffs form. Gry, fine-grn, tight, varicolored soft ss.
2791	4327	1536	Lewis formation. Gry to white dense sh w/silty to shaly ss breaks.
4327	4457	130	Cliff House ss. Gry, fine-grn, dense sil ss.
4457	4991	534	Manefee form. Gry, fine-grn s, carb sh & coal.
4991	5200	209	Point Lookout form. Gry, very fine sil ss w/frequent sh breaks.
5200	5237	37	Mancos formation. Gry carb sh.

