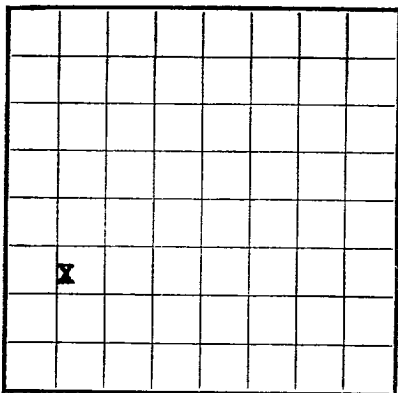


U. S. LAND OFFICE Santa FeSERIAL NUMBER 078194

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 Artec P.C. & Blanco M.V. State New Mexico
Well No. 7 Sec. 31 T. 30N.R. 10W. Meridian NMPM County San Juan
Location 1650 ft. N. of S. Line and 990 ft. E. of W. Line of Section 31 Elevation 5979'
(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 W. F. CowellDate July 24, 1956Title Petroleum Engineer

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

Commenced drilling May 19 1956 Finished drilling June 2 1956

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 2360 to 2446 (G) No. 4, from 4668 to 4870 (G)No. 2, from 4000 to 4160 (G) No. 5, fromNo. 3, from 4160 to 4668 (G) No. 6, from

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
10 3/4"	32.75#	P.E.	S.W.	161'	Howco			Surface
7 5/8"	25.5#	8.00	S.W.	485'	Howco			Prod. Tbg.
5 1/2"	18.75#	8.00	S.W.	485'	Howco			Prod. Tbg.
2"	8.75#	8.00	S.W.	485'	Howco			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"	172'	125	Circulated		
7 5/8"	4273'	600	Single Stage		
5 1/2"	4195-4922	125	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 4279 feet, and from 4279 feet to 4926 feet

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

DATES

----- 6-10-56 -----, 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 M.V. 4,715,000 P.C. 3,565,000 Gallons gasoline per 1,000 cu. ft. of gas -----Rock pressure, lbs. per sq. in. 1047 A.O.F. - M.V. 7874 MCF/D.PC 657 EMPLOYEES P.C. 4146 MCF/D.

-----, Driller -----, Driller

-----, Driller -----, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	1035	1035	Tan to gry cr-grn ss interbedded w/gry sh.
1035	1171	136	Ojo Alamo ss. White cr-grn s.
1171	2027	856	Kirtland form. Gry sh interbedded w/tight gry fine-grn ss.
2027	2360	333	Fruitland form. Gry carb sh, scattered coals coals and gry, tight, fine-grn ss.
2360	2446	86	Pictured Cliffs form. Gry, fine-grn, tight, varicolored soft ss.
2446	4000	1554	Lewis formation. Gry to white dense sh w/silty to shaly ss breaks.
4000	4160	160	Cliff House ss. Gry, fine-grn, dense sil ss.
4160	4668	508	Manefee form. Gry, fine-grn s, carb sh & coal.
4668	4870	202	Point Lookout form. Gry, very fine sil ss w/frequent sh breaks.
4870	4926	56	Mancos formation. Gry car b sh.

(OVER)

FORMATION RECORD—Continued

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOCATE WELL CORRECTLY X

A blank sheet of graph paper with a grid pattern. The grid consists of 10 columns and 8 rows of squares. The lines are thin and black, set against a white background. There are no margins or additional markings on the page.

6-5-56 Total Depth 4926'. Cleanout depth 4910'. Perforated lower point lookout intervals 4891-4892, 4884-4884, and 4884-4908 with 4 cpi. Water fractured per. With 19,100 gallons water and 98,000# sand. Maximum pressure 1100#. Maximum pressure 3600#, injection rate 73 bbls./min. Pump was sand screened out in formation.

No. 1 from No. 2 from

6-6-56 Total Depth 4926'. Temporarily bridge plug @ 4820'. Perforated lower point lookout intervals 4666-4680 and 4722-4735 with 4 cpi. Water fractured per. With 33,500 gallons water and 17,500# sand. Maximum pressure 1100#, injection rate 75 bbls./min. Pump was sand water.

No. 1 from No. 2 from

6-6-56 Total Depth 4926'. Temporarily bridge plug @ 4601'. Perforated pictured cilia intervals 2384-2396 and 2410-2422 with 4 cpi. Water fractured perforations with 53,400 gallons water and 60,000# sand. Maximum pressure 1350#, average treating pressure 1200#, injection rate 83.5 bbls./min. Pump with 5500 gallons water.

No. 1 from No. 2 from

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

U. S. GOVERNMENT PRINTING OFFICE: 1967 O - 350872-2

MUDGING AND CEMENTING RECORD															
Size casing		Weight set	Number sacks of cement	Method used	Kind gravity	Amount of mud used									

WEEK | Q10