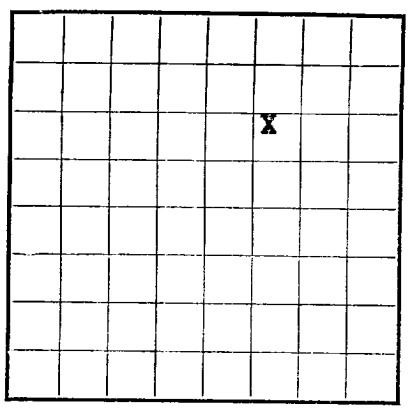
Form 9-330

Budget Bureau No. 42-R-355.3.
Approval expires 12-31-55.

U. S. LAND OFFICE New Mexico
SERIAL NUMBER 013688
LEASE OR PERMIT TO PROSPECT



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

LOG OF OIL OR GAS WELL

Company El Paso Natural Gas Company Address Box 997, Farmington, New Mexico
Lessor or Tract Atlantic Field Blanco State New Mexico
Well No. 7 Sec. 23 T. 31N R. 10W Meridian NMPM County San Juan
Location 1650 ft. {N.} of N Line and 1700 ft. {W.} of E Line of Section 23 Elevation 6395'
(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 October 15, 1954 Title Petroleum Engineer

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

Commenced drilling April 18, 1954 Finished drilling September 9, 1954

OIL OR GAS SANDS OR ZONES

(*Denote gas by G*)

No. 1, from 3148 to 3190 (G) No. 4, from 5437 to 5485 (G)
No. 2, from 4906 to 5053 (G) No. 5, from ____ to ____
No. 3, from 5053 to 5437 (G) 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 From—	Perforated To—	Purpose
9 5/8	25.4	SW	Armco	177	Armco				Surface
7"	23	8 RD	Youngstown	4865	Baker				Prod. Csg.
2 1/2"	6.50	8 RD	Youngstown	5415					Prod. Tbg.

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
9 5/8	188	125	Circulated		
7	4865	500	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 4865 feet, and from 4865 feet to 5445 feet
Cable tools were used from 4911 feet to 5485 feet, and from ____ feet to ____ feet

Gas Drilling
Directional Hole

DATES

September 12, 1954 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 5,816,000 Gallons gasoline per 1,000 cu. ft. of gas ____

Rock pressure, lbs. per sq. in. 1034

EMPLOYEES

____, Driller ____, Driller
____, Driller ____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	420	420	Tan cr-grn ss w/thin sh breaks.
420	1558	1138	Variegated sh w/thin ss breaks.
1558	2458	900	Tan to gry cr-grn ss interbedded w/gry sh.
2458	2543	85	Ojo Alamo ss. White cr-grn s.
2543	2804	261	Kirtland formation. Gry sh interbedded w/tight gry fine-grn ss.
2804	3148	344	Fruitland formation. Gry carb sh, scattered coals coals and gry, tight, fine-grn ss.
3148	3190	42	Pictured Cliffs formation. Gry, fine-grn, tight, varicolored soft ss.
3190	4906	1716	Lewis formation. Cry to white dense sh w/silty to shaly ss breaks.
4906	5053	147	Cliff House ss. Gry, fine-grn, dense sil ss.
5053	5437	384	Menefee formation. Cry, fine-grn s, carb sh and coal.
5437	5485 T.D.	48	Point Lookout formation. Gry, very fine sil ss w/frequent sh breaks.

Tops

Ojo Alamo	2458
Kirtland	2543
Fruitland	2804
Pictured Cliffs	3148
Lewis	3190
Cliff House	4906
Menefee	5053
Point Lookout	5437

Tops from the C.H. down are in the whipstocked hole.

FOLD | MARK

[OVER]

16—43094-3

FORMATION RECORD—Continued

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION

16—43094-2 U. S. GOVERNMENT PRINTING OFFICE

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.

3-31-54, T.D. 5040', interval treated 4865-5040 (Directional Hole.).
Set Baker retainer at 4832' and treated Cliff House form. with 9,816 gallons #2 diesel oil and 6,100# sand. Breakdown pressure 1600#, maximum pressure 3,800#. Injection rate 6 barrels per minute. Flushed with 16 barrels oil. Natural gage 150 MCF. Gage 17 hours after treatment 1,500 MCF.

9-5-54, T.D. 5485' w/s hole, interval 5405-5485'.
Sand-oil fracture P. L. directional hole with 5630 gallons oil, and 3100# sand. BDP 1700#, Maximum pressure 1800#, Injection rate 302 gallons per minute. Natural gage 160 MCF, Gage 24 hours after 2530 MCF. Well bridged off, mixing was stopped no flush was pumped in.

9-5-54 T.D. 5485' w/s hole, interval treated 5400-5485'.
Sand-oil fracture Point Lookout directional hole with 8750 gallons oil and 4000# sand. BDP 1700#, maximum pressure 1800#. Injection rate 435 gallons per minute. Natural gage 2530 MCF. Gage 7 hours after 2530 MCF.

9-11-54 T.D. 5445', straight hole, interval treated 5370-5445'.
Sand-oil fracture Point Lookout straight hole with 12,530 gallons oil, 5,300# sand. BDP 1400#. Maximum pressure 1800#, injection rate 6.2 barrels per minute. Natural gage 60 MCF, gage after 2305 MCF.