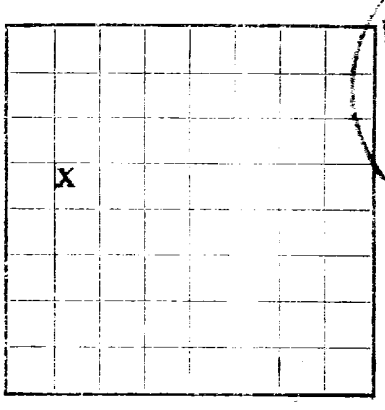
Form 9-330

Budget Bureau No. 42-R355.4.
Approval expires 12-31-60.

U. S. LAND OFFICE SF
SERIAL NUMBER 078372-A
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 Products Co. Address Box 1565, Farmington, New Mexico
Lessor or Tract Frontier Field Undesignated State New Mexico
Well No. 3-A(CD) Sec. 4 T. 27N R. 11W Meridian N.M.P.M. County San Juan
Location 2310 ft. [N.] of N Line and 790 ft. [E.] of W Line of Section 4 Elevation 6112
(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 BY: JOHN J. STROJ

Date April 4, 1960 Title Petroleum Engineer

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

Commenced drilling August 24, 1959 Finished drilling September 10, 1959

OIL OR GAS SANDS OR ZONES

(*Denote gas by G*)

No. 1, from 5882' to 5982' No. 4, from ____ to ____
No. 2, from 5956' to 5956' No. 5, from ____ to ____
No. 3, from 6524' to 6558' (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
10-3/4"	28.57#	D.S.	SW	161	Texas Pat.				Surf. Csg.
7"	20.00#	8 Rd.	J-55	6731	Texas Pat.		5956	6356	Prod. Csg.

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
10-3/4"	176	125	Circulated		
7"	6742	200--1st Stage	Pump & Plug		
		100--2nd Stage	Stage Collar		

PLUGS AND ADAPTERS

Heaving plug—Material ____ Length ____ Depth set ____
Adapters—Material Model "D" Prod. Pkr. Size 2-3/8" X 7"
@ 6360'

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 6742 feet, and from ____ feet to ____ feet
Cable tools were used from ____ feet to ____ feet, and from ____ feet to ____ feet

DATES

Put to producing No potential yet on Gallup--still Recovering Load Oil, 1960
January 21, 1960

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 2,537 MCF / thru 3/4" choke Gallons gasoline per 1,000 cu. ft. of gas ____
Shut-in Rock pressure, lbs. per sq. in. 1920 psia AOF - 2,644 MCFPD

EMPLOYEES

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

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	815	815	Intbd. ss. & sh.
815	898	83	Ojo Alamo ss. White, coarse grained sand.
898	1737	839	Kirtland Form. Gy. sh. inbd. w/tight gy. FG ss.
1737	1939	202	Fruitland Form. Gy. carb. sh., seat. coals, coals & gy. tight FG ss.
1939	2095	156	Pictured Cliffs Form. Gy., FG tight, varicolored soft ss.
2095	2867	772	Lewis Form. Gy. to white ds. sh. w/silty to shaley ss. breaks.
2867	4405	1538	Mesa Verde Form. Gy., FG, ds. silty ss., carb. shale and coal.
4405	4650	245	Point Lookout Form. Gy., v/fn. silty ss. w/freq. shale breaks.
4650	5521	871	Mancos Form. Gy. carb. shale.
5521	5993	472	Gallup Form. Lt. gy. to brn. calc. carb. micaceous glauconitic. Very fn. to med. gr. ss. w/irreg. inbd. shale.
5993	6358	365	Sanastee Form. Dk. gy. calc. v/fn. to fn. gy. ss. w/calc. veins, w/irreg. inbd. dk. gy. sd.
6358	6399	41	Greenhorn Form. Highly calc. gy. sh. w/thin ls.
6399	6527	128	Graneros Form. Dk. gy. sh., fossil & carb. w/pyrite inclusions.

[OVER]

16—43064-4

FOLD | MARK

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION
6527	6690	163	Dakota Form. Lt. to dk. gy. foss. carb. sl/calc. sl/silty ss. w/pyrite inclusion, thin sh. bands clay and shale breaks.
6690	6744	54	Morrison Form. Ltbd. gy. brn. and red waxy sh. & fn. to cse. gr. sand.

TOPS ARE FROM ELECTRIC LOGS AND RADIOACTIVITY LOGS.

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.

CORES

9-6-59 5914' - 5953' Rec. 39'

SAND OIL FRACTURE

9-16-59 SOF perfs. 6542-6558 with 50,000 gals. oil and 50,000# (20-40) sand; flush with 10,920 gals. oil: Injection Rate: 52.5 bpm.; Maximum treating pressure 2300 psi.; Breakdown pressure 2450 psi.; Average treating pressure 2100 psi. Dropped 68 rubber balls one time.

9-22-59 Re-SOF 6542'-6558 with 26,000 gals. oil and 26,000# sand; flush with 6300 gals. oil; Injection Rate: 36.0 bpm.; Maximum treating pressure 3650 psi.; Breakdown pressure 3300 psi.; Average treating pressure 3100 psi.

9-26-59 SOF perfs. 5934'-5956' with 57,000 gals. oil and 50,000# sand; flush with 10,000 gals. oil; Injection Rate: 51.6 bpm.; Maximum treating pressure 2450 psi.; Breakdown pressure 2300 psi.; Average treating pressure 2200 psi. Dropped 33 rubber balls one time. Perm. type production packer at 6460'.

9-27-59 SOF perfs. 5866'-5882' with 52,000 gals. oil and 33,000# sand; flush with 1260 gals. oil; Injection Rate: 54.5 bpm; Maximum treating pressure 3500 psi.; Breakdown pressure 2350 psi.; Average treating pressure 2400 psi. Dropped 39 rubber balls one time.