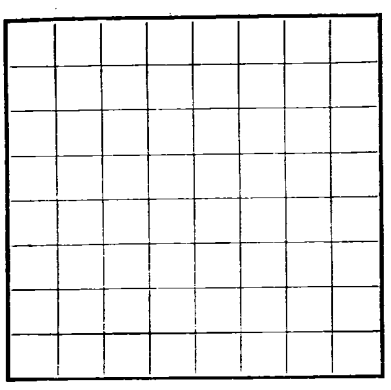
Budget Bureau No. 42-R355.4.
Approval expires 12-31-60.

Form 9-330

U. S. LAND OFFICE Santa Fe
SERIAL NUMBER 079391
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 990, Farmington, New Mexico
Lessor or Tract San Juan 27-5 Unit Field Bas.Dak.Blanco MV State New Mexico
Well No. 70 (MD) Sec. 8 T. 27N R. 5W Meridian N.M.P.M. County Rio Arriba
Location 1650 ft. [N.] of N Line and 1850 ft. [W.] of E Line of Sec. 8 Elevation 6627
(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 D. W. Meehan
Title Petroleum Engineer

Date July 12, 1962

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

Commenced drilling 5-3, 19 62 Finished drilling 5-26, 1962

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 5100 to 5271 (G) No. 4, from 7709 to 7911 (G)
No. 2, from 5271 to 5582 (G) No. 5, from to
No. 3, from 5582 to 5758 (G) No. 6, from to

IMPORTANT WATER SANDS

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

RECEIVED
JUL 18 1962
OIL CON. COM.
DIST. 3

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"	36	8 rd	J-55	291	HOWCO				Surface
5 1/2"	15.5	8 rd	J-55	5851	Baker				Prod. casing
4 1/2"	11.6	8 rd	J-55	2068	Baker				Prod. casing
2 1/16"	3.25	8 rd	J-55	7811	Baker				Prod tubing
1 1/4"	2.3	8 rd	J-55	5741	Baker				Prod. tubing

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
9 5/8"	303	200	circulated		
4½ & 5½"	7911	460	3 stage		

MARK

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 frac on back						

TOOLS USED

Rotary tools were used from 0 feet to 7911 feet, and from feet to feet
Cable tools were used from feet to feet, and from feet to feet

DATES

Dakota 7-4-62
M.V. 6-26-62, 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 MV - 1,512,000 Dak. - 4,583,000 Gallons gasoline per 1,000 cu. ft. of gas

Rock pressure, lbs. per sq. in. MV-1096 csg. D -2505 tbg. A.O.F. - M-1644 D-5455 MCF/D

EMPLOYEES

, Driller , Driller
, Driller , Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	2845	2845	Tan to gry cr-grn ss interbedded w/gry sh.
2845	2946	101	Ojo Alamo ss. White cr-grn s.
2946	3155	209	Kirtland form. Gry sh interbedded w/tight gry fine-grn ss.
3155	3420	265	Fruitland form. Gry carb sh, scattered coals, coals and gry, tight, fine-grn ss.
3420	3484	64	Pictured Cliffs forms. Gry, fine-grn, tight, varicolored soft ss.
3484	5100	1616	Lewis form. Gry, fine-grn dense sil ss.
5100	5271	171	Cliff House ss. Gry, fine-grn, dense sil ss
5271	5582	311	Menefee form. Gry, fine-grn s, carb sh & coal.
5582	5758	176	Point Lookout form. Gry, very fine sil ss. w/frequent sh breaks.
5758	6584	826	Mancos form. Gry carb sh.
6584	7530	946	Gallup form. Lt gry to brn g calc carb micac glauco very fine gry ss w/irreg interbed sh.
7530	7576	46	Greenhorn form. Highly calc gry sh w/thin lmst.
7576	7709	133	Graneros form. Dk gry shale, fossil & carb w/prite incl.
7709	7911	202	Dakota form. Lt to dk gry foss carb sl calc sl silty ss w/prite incl thin sh bands & clay &shale breaks.

[OVER]

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION

Perf 7604-10; 7620-26 (2 SPF); 7628-50 (1 SPF) Frac w/45,800 gallons water, 34,000# sand. Flush w/7000 gallons. BDP 2600#, ATP 3200#, I.R. 34.2 BPM. Max pr 3500#. Dropped 2 sets of 12 balls

Perf 7726-38 (1 SPF); 7822-38 (2 SPF);7770-76; 7786-92 (2 SPF) Frac w/51,000 gallons water, 26,000# sand. Flush w/7000 gallons water. I.R. 38.6 BPM. MP 3700#, BD 2150#, tr pr 3000-3100-3400-3700-3600#. Dropped 3 sets of 12 balls.

5620-26;5652-58;5671-77;5710-16 (2 SPF); Frac w/44,000 gallons water, 41,000# sand. BDP 2000#, I.R. 58.3 BPM. Flush 6000 gallons. MP 2100#, tr pr 1700-1800-1900-2100-2200#. Dropped 3 sets of 12 balls.

5170-76;5190-96;5220-26;5251-57 (2 SPF); Frac w/50,700 gal water, 41,000# sand. Flush 5100 gallons water. I.R. 54 BPM. Max pr 2500#, BDP 1900#, tr pr 1900-1800-2000-2500-2200#. Dropped 3 sets of 12 balls.

Re-perfed 5170-76;5190-96;5220-26;5251-57 (2 SPF) Frac w/46,000 gallons water, 34,000# sand. Flush 5250 gallons. I.R. 50 BPM. Max pr 2700#, BDP 1600#, tr pr 2500-2700#. Dropped 3 sets of 12 balls.