Form 9-330

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

U. S. LAND OFFICE Santa Fe
SERIAL NUMBER 079232
LEASE OR PERMIT TO PROSPECT

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

Company El Paso Natural Gas Company Address Box 997, Farmington, New Mexico
Lessor or Tract Bolack Field Blanco M.V. Ext. State New Mexico
Well No. 16-C Sec 33 T 27N R. 8W Meridian N.M.P.M. County San Juan
Location 910 ft. {N. / S.} of N Line and 990 ft. {E. / W.} of E Line of Section 33 Elevation 6751 (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. C. Johnston
Date July 18, 1958 Title Petroleum Engineer

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

Commenced drilling April 18, 1958 Finished drilling 5-15, 1958

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 2762 to 2839 (G) No. 4, from 5022 to 5176 (G)
No. 2, from 4326 to 4434 (G) No. 5, from to
No. 3, from 4434 to 5022 (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	32.75	R. E.	S. W.	162'	Howco				Surface
7 5/8	26.4	8 Rd.	J-55	2906	Baker				Intermediate
5 1/2	15.5	8 Rd.	J-55	2402	Baker				Prod. Liner
5 1/2	15.5	8 Rd.	J-55	219					Liner
2"	4.7	8 Rd.	J-55	5234					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	200	Circulated		
7 5/8	2918	250	Single Stg		
5 1/2	2878-5278	300	Single Stg		
5 1/2	2659-2878	100	Single Stage		

MARK

FOLD

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 2932 feet, and from 2932 feet to 5283 feet (Gas Drilled)
Cable tools were used from 0 feet to 175 feet, and from feet to feet

DATES

6-23, 1958 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 1,395,000 Gallons gasoline per 1,000 cu. ft. of gas
Rock pressure, lbs. per sq. in. 1037 A.O.F. 1547 MCF/D

EMPLOYEES

, Driller , Driller
, Driller , Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	1847	1847	Tan to gry cr-grn ss interbedded w/gry sh.
1847	2067	220	Ojo Alamo ss. White cr-grn s.
2067	2550	483	Kirtland form. Gry sh interbedded w/tight gry fine-grn ss.
2550	2762	212	Fruitland form. Gry carb sh, scattered coals, coals and gry, tight, fine-grn ss.
2762	2839	77	Pictured Cliffs form. Gry, fine-gn, tight, varicolored soft ss.
2839	4326	1487	Lewis formation. Gry to white dense sh w/silty to shaly ss breaks.
4326	4434	108	Cliff House ss. Gry, fine-grn, dense sil ss.
4434	5022	588	Menefee form. Gry, fine-grn s, carb sh & coal.
5022	5176	154	Point Lookout form. Gry, very fine sil ss w/ frequent sh breaks.
5176	5283	107	Mancos formation. Gry carb sh.

16—43094-4

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.

5-18-58 Perf. 4870-80; 4940-50; 4988-5000; 5022-44; 5056-66; 5076-86; 5094-5118; 5128-40; 5148-66 w/2 DJft. Fraced w/70,000 gal. water & 70,000# sand. Avg. I.R. 50 BPM. No formation break down pr. Max. pr. 3000#, tr. prl 2100-2300-2600-3000#. Dropped 6 sets of 35 balls for 7 stages.

5-18-58 Set ret. at 4700'. Perf. P. C. 2764-80; 2790-2800; 2810-24 w/2 DJ/ft. Sand frac. w/40,000# sand & 40,000 gal. water. BD pr. 2500#, tr. pr. 1300-2200-2300-3000#. Avg. I.R. 55 BPM. Dropped 4 sets of 20 balls for 5 stage frac.

5-22-58 Refrac. P. C. thru perf. int. 2767-80; 2790-2800; 2810-24 w/2 DJ/ft. treated w/42,084 gal. water & 40,000# sand. Flush w/5870 gal. I.R. 54 BPM. Max. pr. 3000#, BD pr. 3000#, tr. pr. 1500, 1800, 2500, 2100#. Dropped 1 set of 20 balls.

5-23-58 Reperf. P. C. w/4 sh/ft. int. 2767-72; 2774-80; 2790-94; 2796-2800; 2810-16; 2818-24 w/6 sh/ft. 2772-74; 2794-96; 2816-18. Performed Lane Wells Vibra-frac.

6-17-58 Reperf. M. V. 4870-80; 4940-50; 4988-5000; 5022-40; 5056-66; 5076-86; 5094-5118; 5128-40; 5148-66; 5198-5210 w/2 DJ/ft. Fraced w/67,200 gals. water & 75,000# sand. Avg. I.R. 53 BPM. No formation BD, max. pr. 3200#, tr. pr. 1700-2100-2600-2800-3200. Flushed 84,009 gal. Dropped 11 sets of 50 balls.