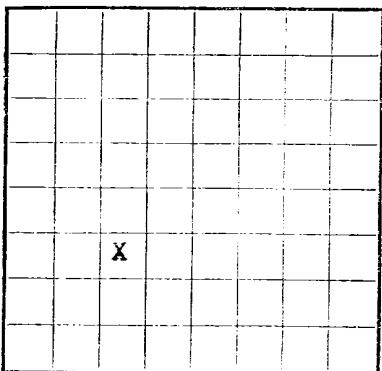


U. S. LAND OFFICE **Santa Fe**
SERIAL NUMBER **079594**
LEASE OR PERMIT TO PROSPECT



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 **San Juan 27-5 Unit** Field **So. Blanco P.C. Ext. 2** State **New Mexico**
Well No. **51 (PM)** Sec. **28** T. **27N** R. **5W** Meridian **N.M.P.M.** County **Rio Arriba**
Location **1660** from **(N)** of **S** Line and **1600** from **(E)** of **W** Line of **Section 28** Elevation **6467**
(Derriek 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 J.J. TILLERSON**
Date **June 15, 1960** Title **Petroleum Engineer**

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

Commenced drilling **3-31**, 19**60** Finished drilling **4-11**, 19**60**

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from **3165** to **3263 (G)** No. 4, from **5355** to **5500 (G)**
No. 2, from **4930** to **4985 (G)** No. 5, from _____ to _____
No. 3, from **4985** to **5355 (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		Purpose
							From—	To—	
10 3/4	32.75	P.B.	S.W.	162	Howco				Surface
7 5/8	26.4	8 Rd.	J-55	3344	Baker				Prod. Csg.
5 1/2	15.5	8 Rd.	J-55	2308	Baker				Prod. Liner
2	4.7	6 Rd.	J-55	5420					Prod. Tbg.
1 1/4	2.4	10 Rd.	Grade B	3244					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	210		Circulated		
7 5/8	3355	122	122	Single Stage		
5 1/2	3297-5605	500		Single Stage & Sq.		

PLUGS AND ADAPTERS

Heaving plug—Material _____ Length _____ Depth set _____
Adapters—Material _____ Size **Gilbertson Shorty Packer at 3378'**

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 **3357** feet, and from **3357** feet to **5608** feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

4-19, 19**60** 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 **P.C. 903,000**
M.V. 2033,000 Gallons gasoline per 1,000 cu. ft. of gas _____

Rock pressure, lbs. per sq. in. **P.C. 1011; M.V. 1088** A.O.F. = **P.C. 908; M.V. 2198 MCF/D**

EMPLOYEES

_____, Driller _____, Driller
_____, Driller _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	2269	2269	Tan to gry cr-grn ss interbedded w/gry sh.
2269	2742	473	Ojo Alamo ss. White cr-grn s.
2742	2945	203	Kirtland form. Gry sh interbedded w/tight gry fine-grn ss.
2945	3165	220	Fruitland form. Gry carb sh, scattered coals, coals and gry, tight, fine-grn ss.
3165	3263	98	Pictured Cliffs form. Gry, fine-grn, tight, varicolored soft ss.
3263	4930	1667	Lewis formation. Gry to white dense sh w/silty to shaly ss breaks.
4930	4985	55	Cliff House ss. Gry, fine-grn, dense sil ss.
4985	5355	370	Manefee form. Gry, fine-grn s, carb sh & coal.
5355	5500	145	Point Lookout form. Gry, very fine sil ss w/frequent sh breaks.
5500	5608		Mancos formation. Gry carb sh.



FORMATION RECORD—Continued[illegible]

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.

Water frac Pictured Cliffs perf. int. 3192-3203; 3234-3244; 3252-3260 w/38,641
gallons water and 35,000# sand. EDP 1700#, max. pr. 2900#, avg. tr. pr. 1775#.
I.R. 46.5 BPM. Flush 12,376 gallons. Dropped 1 set of 20 balls, 1 set of 10
balls and 1 set of 5 balls - 4 stages.

Frac. Point Lookout perf. int. 5353-5362; 5370-5378; 5384-5390; 5396-5404; 5454-5462; 5468-5474 w/62,550 gallons water and 60,000# sand. BHP 1600#, max. pr. 2500#, avg. tr. pr. 2060#. I.R. 43 BHM. Flush 10,000 gallons water. Dropped 2 sets of 15 balls and 1 set of 3 balls - 4 stages.