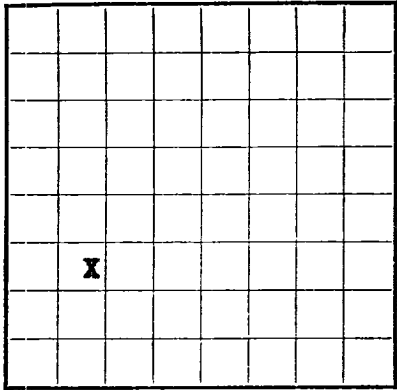


U. S. LAND OFFICE **Santa Fe**
SERIAL NUMBER **078096**
LEASE OR PERMIT TO PROSPECT _____

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company **El Paso Natural Gas Company** Address **Box 990, Farmington, New Mexico**
Lessor or Tract **Mudge** Field **Basin Dakota** State **New Mexico**
Well No. **26** Sec. **21** T. **31-N** R. **11-W** Meridian **N.M.P.M.** County **San Juan**
Location **1450** ft. **N.** of **8** Line and **1190** ft. **E.** of **W** Line of **Section 21** Elevation **5941**
(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.
Original Signed **D W Meehan**
Signed _____

Date **August 21, 1961** Title **Petroleum Engineer**

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

Commenced drilling **6-27-**, 19 **61** Finished drilling **7-15-**, 19 **61**

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from **6840** to **6966 (G)** No. 4, from _____ to _____
No. 2, from **6966** to **7164 (G)** No. 5, from _____ to _____
No. 3, from _____ to _____ 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	8-9	J-55	15000	Reamer	Surface			Surface
7 5/8"	27.0	8-9	J-55	15000	Reamer	Intermediate			Intermediate
4 1/2"	11.6	8-9	J-55	7222	Reamer	Prod. string			Prod. string
2 3/8"	4.7	8-9	J-55	15000	Reamer	tubing			tubing

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
10 3/4"	292	220	circulated		
7 5/8"	2701	300	single stage		
4 1/2"	7225	410	two 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
6900-08; 6928-36;		Brac Dakota w/66,894	gallons water, 70,000# sand	I.R.	47.3	
6970-78; 6983-91;		BNM. 3700# max pr, tr pr	3300-3700#	BNP 1650#	Flush	
7026-34; 7042-50;		5250 gallons				
7057-65;						

TOOLS USED

Rotary tools were used from **0** feet to **2697** feet, and from **2697** feet to **4812** feet
Cable tools drilled from **4812** feet to **7222** feet, and from _____ feet to _____ feet

DATES

7-20-, 19 **61** 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 **3,238,000** Gallons gasoline per 1,000 cu. ft. of gas _____

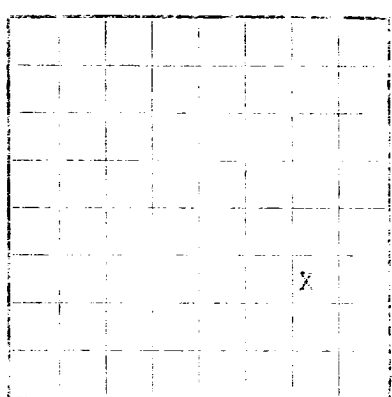
Rock pressure, lbs. per sq. in. **2142 (casing)** A.O.F. - **3591 MCF/D**

EMPLOYEES

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

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	4122	4122	Tan to gry cr-grn ss interbedded w/gry sh.
4122	4200	78	Cliff House ss. Gry, fina-grn, dense sil ss.
4200	4823	623	Manatee form. Gry, fine-grn s, carb sh & coal.
4823	4948	125	Point Lookout form. Gry, fery fine sil ss w/frequent sh breaks.
4948	6082	1134	Mancos form. Gry carb sh.
6082	6788	706	Gallup form. Lt gry to brn calc carb micac glauco very fine gry ss w/irreg interbed sh.
6788	6840	52	Greenhorn form. Highly calc gry sh w/thin lmt.
6840	6966	126	Graneros form. Dk gry shale, fossil & carb w/prite incl.
6966	7164	198	Dakota form. Lt to dk gry foss carb sl calc sl silty ss w/prite incl thin sh bands clay & shale breaks.
7164	7222	58	Morrison form. Interbed grn brn & red waxy sh & fr to cr grn sand.
LEEDS	30	ADJUST LOG	FORMATION



LOG OF OIL OR GAS WELL

Company, El Paso Natural Gas Company
Location, El Paso, Texas
Well No., 21-31-31-1
Date of completion, 1931
The information given in this log is a complete and correct record of the work done in the well and of the results of the tests made in the well.

Oil or gas sands or zones
The summary on this page is for the purpose of showing the location of the well at intervals of 100 feet.

Important water sands
No. 1, from 100 to 150 feet
No. 2, from 150 to 200 feet
No. 3, from 200 to 250 feet

Casing record
No. 1, from 100 to 150 feet
No. 2, from 150 to 200 feet
No. 3, from 200 to 250 feet

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 full, and if any casing was changed or left in the well, give its size and position. 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.

FORMATION RECORD			
FROM-	TO-	TOTAL FEET	FORMATION
1150	1200	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
1200	1250	50	White sand.
1250	1300	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
1300	1350	50	White sand.
1350	1400	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
1400	1450	50	White sand.
1450	1500	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
1500	1550	50	White sand.
1550	1600	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
1600	1650	50	White sand.
1650	1700	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
1700	1750	50	White sand.
1750	1800	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
1800	1850	50	White sand.
1850	1900	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
1900	1950	50	White sand.
1950	2000	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
2000	2050	50	White sand.
2050	2100	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
2100	2150	50	White sand.
2150	2200	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
2200	2250	50	White sand.
2250	2300	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
2300	2350	50	White sand.
2350	2400	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
2400	2450	50	White sand.
2450	2500	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
2500	2550	50	White sand.
2550	2600	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
2600	2650	50	White sand.
2650	2700	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
2700	2750	50	White sand.
2750	2800	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
2800	2850	50	White sand.
2850	2900	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
2900	2950	50	White sand.
2950	3000	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
3000	3050	50	White sand.
3050	3100	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
3100	3150	50	White sand.
3150	3200	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
3200	3250	50	White sand.
3250	3300	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
3300	3350	50	White sand.
3350	3400	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
3400	3450	50	White sand.
3450	3500	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
3500	3550	50	White sand.
3550	3600	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
3600	3650	50	White sand.
3650	3700	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
3700	3750	50	White sand.
3750	3800	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
3800	3850	50	White sand.
3850	3900	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
3900	3950	50	White sand.
3950	4000	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
4000	4050	50	White sand.
4050	4100	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
4100	4150	50	White sand.
4150	4200	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
4200	4250	50	White sand.
4250	4300	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
4300	4350	50	White sand.
4350	4400	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
4400	4450	50	White sand.
4450	4500	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
4500	4550	50	White sand.
4550	4600	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
4600	4650	50	White sand.
4650	4700	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
4700	4750	50	White sand.
4750	4800	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
4800	4850	50	White sand.
4850	4900	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.
4900	4950	50	White sand.
4950	5000	50	Marion formation. Interbedded fine sand and red waxed sh. 5 to 10 ft. sand.