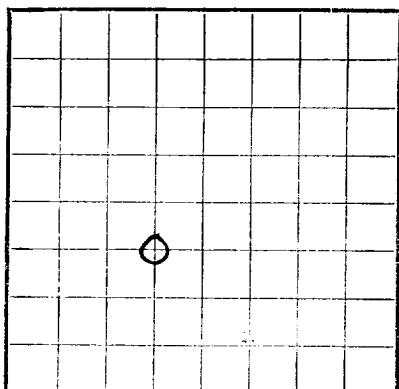


U. S. LAND OFFICE **Santa Fe**
SERIAL NUMBER **SF 078477**
LEASE OR PERMIT TO PROSPECT

LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company **Western Natural Gas Company** Address **823 Midland Tower, Midland, Texas**
Lessor or Tract **Nordhaus-Federal** Field **Undesignated** State **New Mexico**
Well No. **6** Sec. **19** T. **25N** R. **7W** Meridian **NMPM** County **Rio Arriba**
Location **1825'** ft. [N.] of **8** Line and **1850** ft. [E.] of **N** Line of **Sec. 19** Elevation **6535.52** GL
(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 *John B. Turner*Date **2-26-57**Title **Office Manager**

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

Commenced drilling **12-13-**, 19 **56** Finished drilling **12-24-**, 19 **56**

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from **2134** to **2216** **G** No. 4, from _____ to _____
No. 2, from _____ to _____ 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	Thread per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated	Purpose
8 5/8	24	8	New	106	Guide	-		Surface
5 1/2	15.3	8	New	2252	Flange & Casing		2134	Production

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8 5/8	106	80	Pump & plug	-	
5 1/2	2252	150	Pump & plug	-	

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

TOOLS USED

Rotary tools were used from **0** feet to **2252** feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

_____, 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 _____ Gallons gasoline per 1,000 cu. ft. of gas _____

Rock pressure, lbs. per sq. in. _____ **Absolute open flow - 12,070 MDPFD on 3 hr flow thru 3/4" choke.**

EMPLOYEES

Seven day pressure buildup - 640.8 psig
_____, Driller _____, Driller
_____, Driller _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	1590	1590	Sand with shale breaks
1590	1900	310	Shale with thin sand stringers
1900	2130	230	Sand, shale, & coal, broken
2130	2252	122	Sand with thin shale breaks (Pictured Cliffs)
			Top Pictured Cliffs 2130'

(OVER)

16-48094-3

FORMATION RECORD—CONTINUED

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION
			100' to 120' Sandstone
			120' to 140' Sandstone
			140' to 160' Sandstone
			160' to 180' Sandstone
			180' to 200' Sandstone
			200' to 220' Sandstone
			220' to 240' Sandstone
			240' to 260' Sandstone
			260' to 280' Sandstone
			280' to 300' Sandstone
			300' to 320' Sandstone
			320' to 340' Sandstone
			340' to 360' Sandstone
			360' to 380' Sandstone
			380' to 400' Sandstone
			400' to 420' Sandstone
			420' to 440' Sandstone
			440' to 460' Sandstone
			460' to 480' Sandstone
			480' to 500' Sandstone
			500' to 520' Sandstone
			520' to 540' Sandstone
			540' to 560' Sandstone
			560' to 580' Sandstone
			580' to 600' Sandstone
			600' to 620' Sandstone
			620' to 640' Sandstone
			640' to 660' Sandstone
			660' to 680' Sandstone
			680' to 700' Sandstone
			700' to 720' Sandstone
			720' to 740' Sandstone
			740' to 760' Sandstone
			760' to 780' Sandstone
			780' to 800' Sandstone
			800' to 820' Sandstone
			820' to 840' Sandstone
			840' to 860' Sandstone
			860' to 880' Sandstone
			880' to 900' Sandstone
			900' to 920' Sandstone
			920' to 940' Sandstone
			940' to 960' Sandstone
			960' to 980' Sandstone
			980' to 1000' Sandstone

16-43094-2 U. S. GOVERNMENT PRINTING OFFICE

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 at any casing was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, position, and number of shots. If plugs or bridges were put into test for water, state kind of material used, position, and results of pumping or bailing.

The 5 1/2" casing was perforated w/ 4 jet shots per foot at 2134-58, 2170-84, 2192-2216. Treated formation as follows: breakdown w/ 250 gallons mud acid; frac in stages; 17500 gal water at 1500'; dumped 105 rubber balls; 9000 gallons water @ 1650'; dumped 105 rubber balls; 8076 gallons water @ 1750'; finished w/ 2300 gallons water. Total, water - 36876 gals, sand 56000'. Average injection rate 45.5 BPM. After being shut in 34 hours well gauged 4400 MCF. Run 2201' (106 jcs) new 1" standard black Tec line pipe for siphon line, set at 2209'. Well shut in for connection.

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

History of Well

1. Name of well

2. Location

3. Date of completion

4. Name of operator