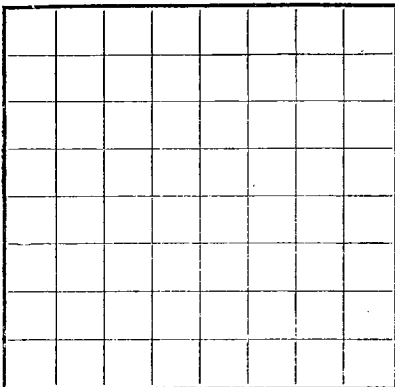


U. S. LAND OFFICE **New Mexico**
SERIAL NUMBER **0610**
LEASE OR PERMIT TO PROSPECT



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company **LEONARD OIL COMPANY** Address **Box 708, Roswell, New Mexico**
Lessor or Tract **Federal-Hagerty** Field **West Henshaw** State **New Mexico**
Well No. **4** Sec. **18** T**16S** R. **30E** Meridian **N.M.P.M.** County **Eddy**
Location **660** ft. **N.** of **Sx** Line and **1980** ft. **E.** of **W** Line of **Section 18** Elevation **3752'**
(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 **Robert J. Leonard**
Date **12-11-57** Title **President**

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

Commenced drilling **November 21**, 19**57** Finished drilling **December 7**, 19**57**

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from **None** to 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 **380** to **400** 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—	
9-5/8"	32#			418'					Surface String

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
9-5/8"	418	150 sx	(Denton)		
		(P/A - two cement plugs - 25 sx - 1075-1010)			
		25 sx - 496- 431)			

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 **2845** 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.

EMPLOYEES

R. L. Hoover, Driller **W. H. Smith**, Driller
J. D. Smith, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	50	50	Surface
50	252	202	Red Beds
252	320	68	Red Beds
320	418	98	Anhydrite & Gyp
418	628	210	Red Sand & Anhydrite Shells
628	973	345	Salt & Anhydrite
973	1215	242	Gyp & Anhydrite Shells
1215	1702	487	Anhydrite & Gyp
1702	1990	288	Anhydrite
1990	2025	35	Lime & Anhydrite
2025	2064	39	Anhydrite & Gyp
2064	2470	406	Anhydrite
2470	2498	28	Lime
2498	2585	87	Sandy Lime
2585	2700	115	Anhydrite
2700	2750	50	CORE #1 - (See attached sample log)
2750	2795	45	Lime
2795	2845	50	CORE #2 - (See attached sample log)
	TD		
			T/S 550'
			T/Y 1142'
			T/Q 1946'
			T/Prem 2676'
			T/SA 2722'

FORMATION RECORD—Continued

FROM -	TO -	TOTAL FEET	FORMATION

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.

HISTORY OF OIL OR GAS WELL

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