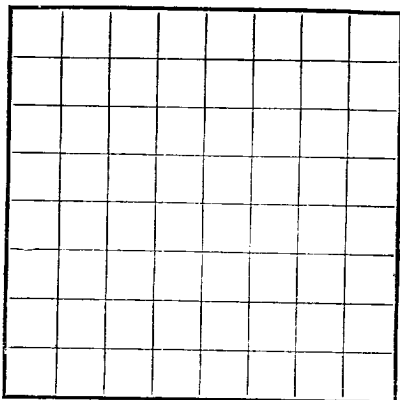


FEB 10 1958

U. S. LAND OFFICE **Las Cruces**
SERIAL NUMBER **LC-069111**
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-Parcell** Field **Wildcat** State **New Mexico**
Well No. **1** Sec. **31** T. **18S** R. **30E** Meridian **N.M.P.M.** County **Eddy**
Location **1980** ft. ~~xxx~~ of **N** Line and **660** ft. ~~xxx~~ of **W** Line of **Section 31** Elevation **3434'**
(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 **January 31, 1958** Title **Robert J. Leonard, Pres.**

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

Commenced drilling **November 11**, 19**57** Finished drilling **January 16**, 19**58**

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from **2846** to **2860** No. 4, from **ILLEGIBLE**
No. 2, from to No. 5, from
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—	
8-5/8"	24#		New	350'					
7"	20#		New	2919'					
2-3/8"	4.20 (Turbine)		New	2850'					
HISTORY OF OIL OR GAS WELL									

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8-5/8"	350'	100 sz Neat (DENTON)			
7"	2850'	100 sz Poz-Mix - (DENTON)			

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
Treated perfs. 2846-60' with 20,000 gal's and 30,000# sand.						
RESULT: Increased production from 6 gal's per hour to 45 BOPD.						

TOOLS USED

Rotary tools were used from feet to feet, and from feet to feet
Cable tools were used from **0** feet to **4497** feet, and from feet to feet

DATES

11-1, 19**57** Put to producing **1-31**, 19**58**

The production for the first 24 hours was **45** barrels of fluid of which **100** % 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

Spencer, Driller **Walker**, Driller
Caughran, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	10	10	Sand
10	20	10	Caliche
20	60	40	Red Beds
60	90	30	Caliche
90	95	5	Sand
95	235	140	Anhydrite
235	297	62	Red Beds
297	310	13	Anhydrite
310	325	15	Anhydrite & Red Rock
325	935	610	Salt
935	960	25	Salt & Anhydrite
960	975	15	Anhydrite
975	1130	155	Salt
1130	1800	670	Anhydrite
1800	2050	250	Lime
2050	2060	10	Anhydrite & Lime
2060	2393	333	Anhydrite & Lime
2393	2399	6	Sand & Lime
2399	2424	25	Anhydrite & Red Sand
2424	2448	24	Red Sand
2448	2467	19	Lime, grey
2467	2800	333	Lime
2800	2810	10	Lime and sand
2810	2819	9	Lime, grey
2819	2833	14	Lime, sandy - 2833-45' - SHOW OIL
2833	2874	41	Lime

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION
2877	2888	14	Sand
2888	2901	13	Lime & Bentonite
2901	2983	82	Lime
2983	3045	62	Lime, Sandy
3045	3068	23	Sand
3068	3092	24	Lime
3092	3131	39	Sand
3131	3140	9	Sandy Lime
3140	3148	8	Sandy Lime
3148	3160	12	Sandy Lime
3160	3241	81	Sand
3241	3707	466	Sand
3707	3723	16	Sand
3723	3755	32	Lime
3755	3835	80	Sandy Lime
3835	3862	27	Lime
3862	3897	35	Lime, black
3897	3903	6	Lime
3903	3906	3	Sandy Lime, black
3906	3914	8	Sand & Lime
3914	3937	23	Black Lime
3937	3946	9	Lime
3946	3955	9	Sandy Lime, black
3955	4055	7	Black Lime
4055	4066	11	Sand
4066	4070	4	Lime, black
4070	4073	3	Lime, sandy
4073	4100	27	Sand
4100	4117	17	Lime, black
4117	4125	8	Sand
4125	4144	19	Lime, sandy
4144	4165	21	Sandy Lime & chert
4165	4173	8	Lime, sandy
4173	4236	63	Sand
4236	4243	7	Lime
4243	4252	9	Dark Lime
4252	4259	7	White Lime
4259	4264	5	Sand
4264	4271	7	White Lime & Sand
4271	4277	6	Buff Lime w/porosity
4277	4285	8	Red Lime
4285	4302	17	Sandy Lime
4302	4318	16	Lime and sand
4318	4328	10	White Lime
4328	4344	16	Sandy Lime
4344	4355	11	Sand
4355	4365	10	Sand, white lime
4365	4373	8	Sand
4373	4381	8	Lime
4381	4406	25	Gray Lime
4406	4414	8	Lime
4414	4420	6	Sandy Lime
4420	4428	8	White Sandy Lime
4428	4437	9	Sandy Lime
4437	4460	23	Sandy Gray Lime
4460	4488	28	Gray & white Lime
4488	4494	6	Lime
(PBD 2885)			
2888	2891	3	Lime
2891	2901	10	Sand
2901	2983	82	Lime & Bentonite
2983	3045	62	Lime, Sandy
3045	3068	23	Sand
3068	3092	24	Lime
3092	3131	39	Sand
3131	3140	9	Sandy Lime
3140	3148	8	Sandy Lime
3148	3160	12	Sandy Lime
3160	3241	81	Sand
3241	3707	466	Sand
3707	3723	16	Sand
3723	3755	32	Lime
3755	3835	80	Sandy Lime
3835	3862	27	Lime
3862	3897	35	Lime, black
3897	3903	6	Lime
3903	3906	3	Sandy Lime, black
3906	3914	8	Sand & Lime
3914	3937	23	Black Lime
3937	3946	9	Lime
3946	3955	9	Sandy Lime, black
3955	4055	7	Black Lime
4055	4066	11	Sand
4066	4070	4	Lime, black
4070	4073	3	Lime, sandy
4073	4100	27	Sand
4100	4117	17	Lime, black
4117	4125	8	Sand
4125	4144	19	Lime, sandy
4144	4165	21	Sandy Lime & chert
4165	4173	8	Lime, sandy
4173	4236	63	Sand
4236	4243	7	Lime
4243	4252	9	Dark Lime
4252	4259	7	White Lime
4259	4264	5	Sand
4264	4271	7	White Lime & Sand
4271	4277	6	Buff Lime w/porosity
4277	4285	8	Red Lime
4285	4302	17	Sandy Lime
4302	4318	16	Lime and sand
4318	4328	10	White Lime
4328	4344	16	Sandy Lime
4344	4355	11	Sand
4355	4365	10	Sand, white lime
4365	4373	8	Sand
4373	4381	8	Lime
4381	4406	25	Gray Lime
4406	4414	8	Lime
4414	4420	6	Sandy Lime
4420	4428	8	White Sandy Lime
4428	4437	9	Sandy Lime
4437	4460	23	Sandy Gray Lime
4460	4488	28	Gray & white Lime
4488	4494	6	Lime

JOES - Queen - 23991
S/A - 3337

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.