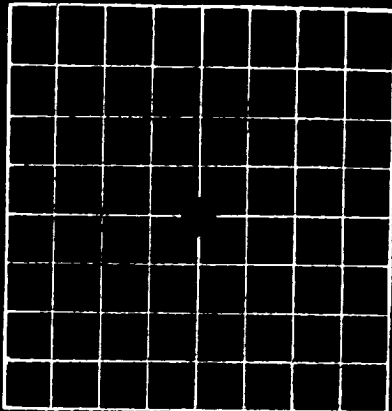




U. S. LAND OFFICE **L.S. 10008**
 SERIAL NUMBER **682435 (b)**
 LEASE OR PERMIT TO PRODUCE **H. H. Howers**

DEPARTMENT OF THE INTERIOR
 GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company **Purcell Oil Refining Co.** Address **McCombs, Texas**
 Lessor or Tract **General Howers** Field **Hobbs** State **New Mexico**
 Well No. **1-3** Sec. **20** T. **14** R. **3** Meridian **14** County **Chaves**
 Location **330** ft. **N** of **Line** and **330** ft. **E** of **Line** of **1/4** **Sec. 20** Elevation **2000** (Track 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.

Date **January 2, 1933** Signed _____ Title **Division Capt.**

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

Commenced drilling **Dec. 27, 1932** 19 _____ Finished drilling **Jan. 22, 1933** 19 _____

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from **4174** to **4225** 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	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated		Purpose
							From	To	
15 1/2	70	5	Metl.	250'	Tool. Pat.				
9 5/8	55	11 1/2	"	2795	"				
7"	24	10	"	3998	"				

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
15 1/2	250'	225	Lumped		
9 5/8	2820	650	"		
7"	4015	300	"		

PLUGS AND ADAPTERS

Heaving plug - Material _____ Length _____ Depth set _____
 Adapters - Material _____ Size _____

SHOOTING RECORD

Shot	Shot used	Explosive used	Quantity	Bar	Depth shot	Depth cleaned out

TOOLS USED

Rotary tools were used from **Surface** feet to **4225** feet, and from _____ feet to _____ feet
 Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

Jan. 23, 1933 19 _____ Put to producing **Feb. 1, 1933** 19 _____
 The production for the first 24 hours was **13.15** 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

Neel Martin _____ Driller **W. H. Crosslyn** _____ Driller
W. H. Howers _____ Driller _____ Driller

FORMATION RECORD

FROM	TO	TOTAL FEET	FORMATION
0	120	120	Surface clay
120	242	122	Surface shale
242	1315	1073	Red beds
1315	1365	50	Sand and red bed
1365	1610	245	Red beds & shells
1610	1730	120	Anhydrite
1730	1800	70	Red bed, sand & shells
1800	2530	730	Salt & potash
2530	2665	135	Salt & anhydrite & potash
2665	2820	155	Anhydrite
2820	2870	50	Anhydrite & lime
2870	2925	55	Lime
2925	3015	90	Anhydrite
3015	4015	1000	Anhydrite
4015	4225	210	Lime
Total	4174		