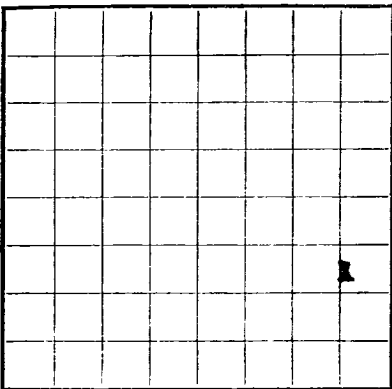


N. 10. 3. 5. 421

U. S. LAND OFFICE **HM-04175**

~~Lease~~ NUMBER **231616**

LEASE OR PERMIT TO PROSPECT



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RECEIVED
FEB 6 1961
D. C. C.
ARTESIA OFFICE

LOG OF OIL OR GAS WELL

Company Humble Oil & Refining Company Address Box 2347, Hobbs, New Mexico
Lessor or Tract Abo Chalk Bluff Draw Unit Field Empire Abo State New Mexico
Well No. 20 Sec. 17 T. -18-S. 27E Meridian NMPM County Eddy
Location 1650 ft. N of S Line and 330 ft. E of E Line of Section 17 Elevation 3437
(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 Arvin D. Eady

Date January 27, 1961 Title Agent

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

Commenced drilling 11-17-60, 1960 Finished drilling 12-7-60, 1960
Completion Date: 1-14-61

OIL OR GAS SANDS OR ZONES
(Denote gas by G)

No. 1, from Dry 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 _____ 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—	
<u>8 5/8</u>	<u>24</u>	<u>8</u>	<u>Unk</u>	<u>1502</u>	<u>House</u>	<u>*</u>			<u>Surf zone</u>
<u>4 1/2</u>	<u>9.5</u>	<u>8</u>	<u>Unk</u>	<u>5940</u>	<u>House</u>	<u>*</u>			<u>Surf zone</u>
<u>* 3612-3626; 3672-3682;</u>									
<u>* 3690-3696; 3702-3716; 3526-3534; 3548-3562.</u>									

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
<u>8 5/8</u>	<u>1516</u>	<u>800</u>	<u>Howco</u>		
<u>4 1/2</u>	<u>5934</u>	<u>800</u>	<u>Howco</u>		
<u>Squeezed perfs 3526-3534 & 3548-3562 w/ 150 sx reg neat cement.</u>					
<u>Set cement plug 3600-3600 w/ 75 sx cement to top of adapter.</u>					

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 5970 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 Dry Hole % 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

_____, Driller _____, Driller
A. O. Blackledge _____, Driller H. L. Seutler _____, Driller
Adam Locke _____, Driller _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
<u>0</u>	<u>521</u>	<u>521</u>	<u>Anhy & redbeds</u>
<u>521</u>	<u>1504</u>	<u>983</u>	<u>Anhy & gyp</u>
<u>1504</u>	<u>1522</u>	<u>18</u>	<u>Anhy & lime</u>
<u>1522</u>	<u>4556</u>	<u>3034</u>	<u>Lime</u>
<u>4556</u>	<u>4780</u>	<u>224</u>	<u>Lime & dolo</u>
<u>4780</u>	<u>5510</u>	<u>730</u>	<u>Dolo</u>
<u>5510</u>	<u>5547</u>	<u>37</u>	<u>Dolo & Lime</u>
<u>5547</u>	<u>5970 TD</u>	<u>423</u>	<u>Lime</u>
FORMATION TOPS:			
		<u>San Andres</u>	<u>1155</u>
		<u>Yaso</u>	<u>2924</u>
		<u>Bone Spring</u>	<u>4212</u>
		<u>Top Abo Reef</u>	<u>5282</u>
		<u>Base Abo Reef</u>	<u>5545</u>

FORMATION RECORD—Continued

[illegible]

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.