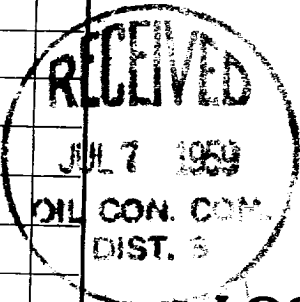


U. S. LAND OFFICE Santa Fe
SERIAL NUMBER SF 081299-A
LEASE OR PERMIT TO PROSPECT _____



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company Pan American Petroleum Corporation Address Box 487, Farmington, New Mexico
Lessor or Tract J. J. Lomax "A" Field Horseshoe-Gallup State New Mexico
Well No. 1 Sec. 14 T. 30N R. 16W Meridian N.M.P.M. County Santa Fe
Location 770 ft. S of E Line and 550 ft. W of E Line of Section 14 Elevation 559(GL)

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 R. M. Bauer, Jr. ORIGINAL SIGNED BY
Date April 22, 1959 Title Area Engineer

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

Commenced drilling April 3, 19 59 Finished drilling April 13, 19 59

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

No. 1, from 3036 to 3036 No. 4, from _____ to _____
No. 2, from 3100 to 3122 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>22.7</u>	<u>5</u>	<u>Slip Joint Arise</u>	<u>20</u>	<u>Guide</u>				<u>Surface</u>
<u>5-1/2"</u>	<u>14</u>	<u>8</u>	<u>National</u>	<u>317</u>	<u>Guide</u>				<u>Drilling</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>215</u>	<u>160 sacks cement</u>	<u>Halliburton No. 1 plug</u>		
<u>5-1/2"</u>	<u>3180</u>	<u>130 sacks cement</u>	<u>Halliburton No. 2 plug</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 3183 feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

Completed as pumping oil well Horseshoe
Gallup Field April 21, 1959
Potential test April 21, 1959 flowed 62 barrels of fluid of which 99.8 % was oil; _____ %
barrels production from the first 24 hours was 60.19 emulsion; _____ % water; and .2 % sediment. Gravity, °Bé. 40.5
If gas well, cu. ft. per 24 hours _____ Gallons gasoline per 1,000 cu. ft. of gas _____
Rock pressure, lbs. per sq. in. _____ Gas-oil ratio too small to measure

EMPLOYEES

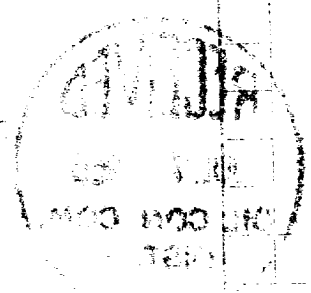
J. R. Green, Driller T. J. Beck, Driller
A. Y. Old, Driller R. L. Ledlow, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
<u>0</u>	<u>214</u>	<u>214</u>	<u>Surface sands & shales.</u>
<u>214</u>	<u>1675</u>	<u>1461</u>	<u>Point Lookout sands & shales.</u>
<u>1675</u>	<u>2948</u>	<u>1273</u>	<u>Mancos shale.</u>
<u>2948</u>	<u>3006</u>	<u>58</u>	<u>Gallup sands & shales.</u>
<u>3006</u>	<u>3100</u>	<u>94</u>	<u>Verde Gallup sands & shales.</u>
<u>3100</u>	<u>3183</u>	<u>83</u>	<u>Horseshoe-Gallup sands & shales.</u> (Tops from E log.)

*Potential test April 20, 1959 flowed 62 barrels in one hour. 30 to 60 days after potential test June 18, 1959 pumped 60.19 barrels.

UNITED STATES DEPARTMENT OF THE INTERIOR



Grid table with 10 columns and 10 rows, likely for recording well data.

LOG OF OIL OR GAS WELL

Perforated lower callup with four shots per foot 3100-3122. Attempted to sand-oil frac, but failed to breakdown with 3000 pounds pressure. Spotted 250 gallons of oil frac, but failed to breakdown with 3000 pounds pressure. Spotted 250 gallons of oil frac, but failed to breakdown with 3000 pounds pressure.

5-1/2" casing was landed at 3180' with 60 sacks of gal cement with 1-1/2 pounds per sack, followed by 50 sacks of cement. Ran electrical log, sonic log and directional survey at 3150'. Released rotary rig. Moved in completion unit and tested casing with 3000 pounds for thirty minutes which held with no drop in pressure.

8-5/8" casing was set at 217' with 160 sacks of regular cement, with 2% calcium chloride. After waiting on cement, casing and water shut-off were tested with 400 pounds pressure for thirty minutes, which held with no drop in pressure. Resumed drilling operations.

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of re-drilling, 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 falling.

HISTORY OF OIL OR GAS WELL

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Main data table with columns for FROM, TO, TOTAL FEET, and FORMATION. Includes sub-sections for SHOOTING RECORD, TOOLS USED, and FORMATION RECORD.