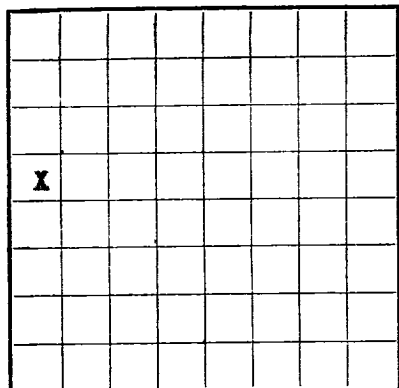


U. S. LAND OFFICE Santa Fe
SERIAL NUMBER SF-081299-A
LEASE OR PERMIT TO PROSPECT

LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Pan American Petroleum Corporation Address Box 487, Farmington, New Mexico
Lessor or Tract J. J. Lameri "A" Field Horseshoe Gallup State New Mexico
Well No. 4 Sec. 13 T. 30N R. 16W Meridian N.M.P.M. County San Juan
Location 2140 ft. [N] of 1 Line and 520 ft. [E] of W Line of Section 13 Elevation 5408
(Derrek 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 W. J. Lameri Date July 5, 1959
Title Area Engineer
The summary on this page is for the condition of the well at above date.
Commenced drilling July 5, 1959 Finished drilling July 19, 1959
OIL OR GAS SANDS OR ZONES

(Denote gas by G)
No. 1, from 2140 to 3614 No. 4, from 3614 to 3705
No. 2, from 3614 to 3705 No. 5, from 3705 to 3815
No. 3, from 3705 to 3815 No. 6, from 3815 to 3815
IMPORTANT WATER SANDS
No. 1, from 2140 to 3614 No. 3, from 3614 to 3705
No. 2, from 3614 to 3705 No. 4, from 3705 to 3815
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"	217	160	sacks of cement	Halliburton					1 Plug
5-1/2"	3813	130	sacks of cement	Halliburton					2 Plug

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8-5/8"	217	160	sacks of cement	Halliburton	1 Plug
5-1/2"	3813	130	sacks of cement	Halliburton	2 Plug

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 _____ feet to _____ feet, and from _____ feet to _____ feet
Cable tools were used from 0 feet to 3815 feet, and from _____ feet to _____ feet

DATES

Completed as pumping oil well Horseshoe Gallup Field July 5, 1959 Put to producing First new oil produced, 19____
Test pumped 67 barrels oil in 2-1/2 hours The production for the first 24 hours was _____ barrels of fluid of which _____ % was oil; _____ %
emulsion; _____ % water; and _____ % sediment. 169 Gravity, °Bé. 99.8
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
Coy Flemmons, Driller A. I. Old, Driller
V. F. McKee, Driller R. Mullin, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	217	217	Surface sands and shales.
217	460	243	Lewis shale.
460	2360	1900	Mesaverde sands, shales and coals.
2360	3530	1170	Mancos shale.
3530	3572	42	Gallup shales and sands.
3572	3678	106	Verde Gallup pay sands and shales.
3678	3815	137	Horseshoe Gallup pay sands and shales.
			(Tops from Electric log)
FROM—	TO—	TOTAL FEET	FORMATION

FORMATION RECORD—Continued

GEOL OGICAL SURVEY

ROBERT WELLS CORRECTION

A blank sheet of white graph paper featuring a uniform grid of thin black horizontal and vertical lines. The grid covers most of the page, leaving margins at the top, bottom, and sides. There are approximately 20 columns and 20 rows visible.

J. J. Lomond "A" Well No. 4 was spudded on June 6, 1959, and on June 8, 1959, 6-5/8" casing was set at 217' with 160 sacks of cement containing 2% chlorine chloride. After waiting on cement, casing and water shut off was tested with 400 pounds pressure for thirty minutes, which held with no drop in pressure. Reduced hole to 7-7/8" at 217' and resumed drilling operations.

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 "backtracked" 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

16-43094-2 U. S. GOVERNMENT PRINTING OFFICE

FROM-	TO-	TOTAL FEET	FORMATION
0	10	10	Gravelly sandstone, yellowish, medium bedded.
10	20	10	Gravelly sandstone, yellowish, medium bedded.
20	30	10	Gravelly sandstone, yellowish, medium bedded.
30	40	10	Gravelly sandstone, yellowish, medium bedded.
40	50	10	Gravelly sandstone, yellowish, medium bedded.
50	60	10	Gravelly sandstone, yellowish, medium bedded.
60	70	10	Gravelly sandstone, yellowish, medium bedded.
70	80	10	Gravelly sandstone, yellowish, medium bedded.
80	90	10	Gravelly sandstone, yellowish, medium bedded.
90	100	10	Gravelly sandstone, yellowish, medium bedded.