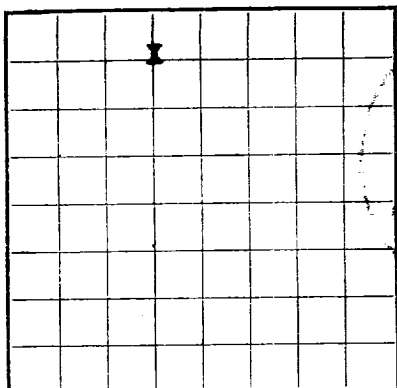
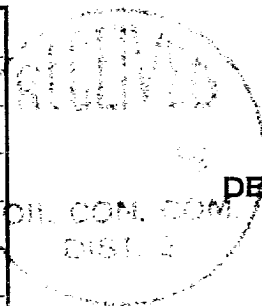


U. S. LAND OFFICE **New Mexico**
SERIAL NUMBER **NM 04407**
LEASE OR PERMIT TO PROSPECT _____

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. W. Adkins "B"** Field **Horseshoe-Gallup State New Mexico**
Well No. **2** Sec. **14** T. **30N** R. **16W** Meridian **N.M.P.M.** County **San Juan**
Location **660** ft. **N** of **N** Line and **1900** ft. **E** of **N** Line of **Section 14** Elevation **5426**
(Denote 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 **R. M. Bauer, Jr.**
Title **Area Engineer**Date **May 3, 1959**

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

Commenced drilling **April 20**, 19**59** Finished drilling **April 29**, 19**59**

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from **2400** to **2430** No. 4, from _____ to _____
No. 2, from **2488** to **2518** 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—	
8-5/8"	22.7	Slip Joint	Amoco	206	Guide				Surface
5-1/2"	14	SRT	National	2580	Guide				Oil String

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8-5/8"	216	160 sacks of cement	Halliburton No. 1 Plug		
5-1/2"	2572	130 sacks of cement	Halliburton No. 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 **2573** 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 May 4, 1959
The production for the first 24 hours was **14.88** barrels of fluid of which **99.8**% was oil; _____%
emulsion; _____% water; and _____% sediment. Gravity, °Bé. **42.1°** API
Potential test **May 3, 1959** flowed **62** barrels oil in 1 hour out of casing thru **3"** line.
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 **A. Y. Old**, Driller
R. L. Ledlow, Driller _____, Driller
T. J. Beck **Orivill Cook**

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	216	216	Surface sands & shales.
216	1050	834	Mesaverde sands & shales.
1050	2348	1298	Mancos shales.
2348	2400	52	Gallup sand & shale.
2400	2488	88	Verde-Gallup pay sand & shale.
2488	2573	85	Horseshoe Gallup pay sand & shale.
			(Tops from E log)

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 balling or bailing.

J. W. Altman BH Well No. 2 was spudded on April 20, 1959 and 5-5/8" casing was set at 216' with 160 sacks of cement containing 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. Reduced hole to 7-7/8" at 217' and resumed drilling operations.

5-1/2" casing was set at 2572' with 80 sacks of cement with 1-1/2 pounds of Plug per sack followed by 50 sacks neat cement. Released rotary rig on April 29, 1959. Moved to completion unit and tested casing with 3000 pounds pressure for fifteen minutes, which held with no drop in pressure.

Spotted 250 gallons breakdown acid. Perforated lower gallop with two shots per foot 2688-2518. Sand-oil fracked lower gallop with 30,200 gallons oil and 45,000 pounds sand. First 10,000 gallons at 1 pound per gallon with remainder at 1-3/4 pounds per gallon. Breakdown pressure 1300 pounds. Maximum treating pressure 1500 pounds, minimum treating pressure 1200 pounds. Average treating pressure 1360 pounds. Average injection rate 60 barrels per minute. Perforated upper gallop with two shots per foot 2700-2730. Set bridge plug at 2760'. Sand-oil fracked upper gallop with 28,800 gallons oil and 30,000 pounds sand. Breakdown pressure 1500 pounds, maximum treating pressure 1900 pounds, minimum treating pressure 1500 pounds, average treating pressure 1700, average injection rate 60 barrels per minute. Retarded bridge plug and cleaned out to 2541'. Completed as pumping oil well Horsehead-Gallup field May 7, 1959. Potential test May 3, 1959, flowed 62 barrels oil in one hour or at rate of 168 barrels oil per day. Well flowed out of casing thru 3" line. Gas oil ratio not yet available. All activity 42.1° API. 2" tubing was set at 2528'. Ran rods and pump and released completion unit on May 7, 1959.