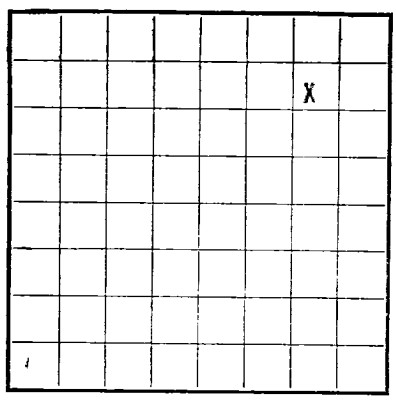
Form 9-330

Budget Bureau No. 42-R355.4.
Approval expires 12-31-60.

U. S. LAND OFFICE Santa Fe
SERIAL NUMBER NE/4 NM-01139
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 Fred Phillips Gas Unit "A" Field Tapacito-Pictured Cliffs State New Mexico
Well No. 1 Sec. 10 T. 25N R. 3W Meridian N.M.P.M. County Rio Arriba
Location 990 ft. {N./S.} of N Line and 990 ft. {E./W.} of E Line of Section 10 Elevation 7217' (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 ORIGINAL SIGNED BY L. O. Speer, Jr.

Date October 1, 1957 Title Field Superintendent

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

Commenced drilling August 11, 1957 Finished drilling September 14, 1957

OIL OR GAS SANDS OR ZONES

(*Denote gas by G*)

No. 1, from 3727 to 3758 (G) 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 none 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 From—	Perforated To—	Purpose
8-5/8"	22.7	Slip Joint	Armco	165'	Guide				Surface
5-1/2"	14#	8RT	National	3855'	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"	171'	110 sacks of cement	Halliburton 2 Plug		
5-1/2"	3840'	100 sacks of cement	Halliburton 2 Plug		

MARK

FOLD

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 3840 feet, and from feet to feet
Cable tools were used from feet to feet, and from feet to feet

DATES

September 14, 1957 Put to producing Shut in, 19

The production for the first 24 hours was barrels of fluid of which % 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. Preliminary test 8100 MCFD 8,100,000

EMPLOYEES

F. J. Buck, Driller Fred Simonton, Driller
E. E. Estes, Driller Cottom Gipon, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	3483	3483	Undifferentiated sands & shales.
3483	3715	232	Kirtland Fruitland
3715	3758	43	Pittured Cliffs sand
3758	3840	82	Lewis shale.

16—43094-4

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION

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

HISTORY OF OIL OR GAS WELL

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.

This well was spudded on August 11, 1957, and on August 12, 1957, 8-5/8" casing was set at 171' with 110 sacks of cement, and after waitingon cement for 24 hours, casing and water shut off were tested with no drop in pressure.

5-1/2" casing was set at 3840' with 100 sacks of cement, and after waiting on cement for 17 days, casing and water shut off were tested with 1500 pounds pressure for 15 minutes (special test) held with no drop in pressure.

This well was perforated with four shots per foot 3727-58, and these formations were then sand-water fracked with 30,000 gallons water and 40,000 pounds sand. Formation broke at 1650 pounds pressure. Average injection rate 49 barrels per minute. After blowing well to clean out after frac, preliminary test 6100 MCFPD.