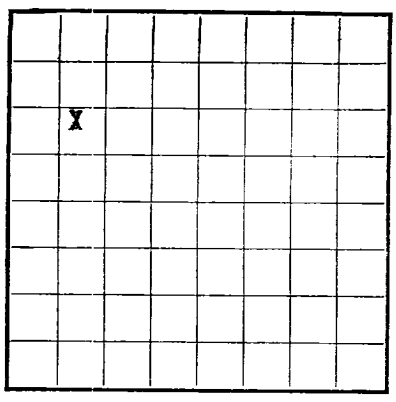
Form 9-330

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

U. S. LAND OFFICE New Mexico
SERIAL NUMBER NM 01138
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 "C" Field Tapacito-Pictured Cliffs State New Mexico

Well No. 2 Sec. 15 T. 25N R. 3W Meridian N.M.P.M. County Rio Arriba

Location 1750 ft. [N.] of N Line and 1070 ft. [E.] of W Line of Section 15 Elevation 7333
(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

Date December 5, 1958 Title Field Engineer

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

Commenced drilling November 12, 19 58 Finished drilling November 21, 19 58

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 3783 to 3807 (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 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	205	Guide				Surface
4-1/2"	9.5	8RT	National	3972	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"	213'	160 sacks cement	Halliburton No. 1 Plug		
4-1/2"	3954	250 sacks cement	Halliburton No. 2 Plug		

FOLD MARK

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 3954 feet, and from feet to feet

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

DATES

Completed as Tapacito-Pictured Cliffs Field Development Gas Well 19 Put to producing Shut in for pipeline connection November 25, 19 58

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 15,400,000 Gallons gasoline per 1,000 cu. ft. of gas

Rock pressure, lbs. per sq. in. 1033 Shut in casing pressure 9 days.

EMPLOYEES

E. E. Estes, Driller John Wright, Driller

F. J. Buck, Driller Jackie White, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	3548	3548	Undifferentiated sands & shales.
3548	3780	232	Kirtland-Fruitland
3780	3810	30	Pictured Cliffs sand
3810	3954	144	Lewis shale.
			(Tops from E log)

16—43094-4

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION

HISTORY OF OIL OR GAS WELL

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

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.

Fred Phillips "C" Well No. 2 was spudded on November 12, 1958, and 8-5/8" casing was landed at 215 feet with 160 sacks cement. 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.

4-1/2" casing was set at 3964' with 150 sacks 6% gel cement with two pounds Tuf Plug per sack followed by 100 sacks neat cement. Tested 4-1/2" casing with 3000 pounds pressure for thirty minutes, which held with no drop in pressure. Top cement 3240' by temperature survey.

Swabbed casing dry. Spotted 200 gallons 15% mud clean out acid. Loaded hole with water and tested 4-1/2" casing with 3000 pounds pressure, which held with no drop in pressure. Perforated with four shots per foot 3783 - 3807'. Sand-water fracked with 25,000 gallons water and 30,000 pounds sand. Formation broke at 1450 pounds. Average treating pressure 2000 pounds, average injection rate 46 barrels per minute. Landed 2" tubing at 3807'. Completed as shut-in Tapacito-Pictured Cliffs Field Development Gas Well November 25, 1958. Preliminary test 15,400 MCFPD, Pitot Tube Measurement.

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