

A 10x10 grid with a handwritten 'X' in the 7th column and 3rd row from the top-left corner.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

U. S. LAND OFFICE Ute Mountain Tribal
SERIAL NUMBER 14-20-604-89
LEASE OR PERMIT TO PROSPECT _____

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company Pan American Petroleum Corporation Address Box 487, Farmington, New Mexico
Lessor or Tract Ute Mountain Tribal Land Field Verde-Gallup State New Mexico
Well No. 4 Sec. 33 T. 31N R. 15W Meridian N.M.P.M. County San Juan
Location 1705 ft. { N. } of S. Line and 1980 { E. } of W. Line of Section 33 Elevation 5493
(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 _____
R. M. Bauer, Jr.

Date January 30, 1959 Title Field Engineer

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

Commenced drilling November 7, 1958 Finished drilling December 22, 1958

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 3005 to 3100 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. 2, from _____ to _____

No. 3, from _____ to _____

No. 4, from _____ to _____

CASING RECORD

[illegible]

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8-5/8"	211	160 sacks	Halliburton	No. 2 plug	
5-1/2"	3005	700 sacks	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 0 feet to 3100 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 Verde- Gallup Field January 28, 1959		Date first new oil to tanks: Put to producing January 26, 1959	
The production for the first 24 hours was _____ barrels of fluid of which _____% was oil; _____% emulsion; _____% water; and _____% sediment.		68 Gravity, °Bé. 94.12	
If gas well, 5.68 cu. ft. per 24 hours		40.2° Gallons gasoline per 1,000 cu. ft. of gas	
Rock pressure, lbs. per sq. in. _____			

EMPLOYEES

....., Driller	, Driller
H. F. Carroll	T. D. Coleman
....., Driller	, Driller
T. G. Priddy	Cotton Gipson

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	532	532	Surface sands & shale.
532	1390	858	Benefee sands, shales, & coals.
1390	1753	363	Point Lookout sand.
1753	2743	990	Mancos shale.
2743	3100	357	Gallup sands & shales. (Tops from E. log)

the Mountain Top 144 Well No. 4 was spudded on December 7, 1958, and on December 8, 1958, 8-5/8" casing was set at 211' with 160 sacks of 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. Reduced hole to 7-7/8" and resumed drilling operations.

ran 5-1/2" casing with formation pack-off shoe on bottom and DV tool at 2705'. Landed casing at 2996'. Failed to establish circulation on bottom. Pulled casing and re-ran. Hit bridge at 2938' and was unable to circulate out bridge. Pulled casing and went in with bit and drill pipe and cleaned out bridges at 2750', 2904', 2966', and 2986'. Circulated from 3028' with bit and returns to condition hole. Re-ran 5-1/2" casing and hit bridge at 2835'. Unable to work thru bridge. Pulled casing. Ran drill pipe and cleaned out bridges to 3028' and reconditioned hole. Re-ran 5-1/2" casing and set at 3005' with conventional guide shoe and limit collar. Cemented first stage with 50 sacks 6% gel cement with two pounds Tur Plug per sack. Test casing with 2500 pounds pressure for thirty minutes, which held it in no drop in pressure. Opened ports of stage tool set at 2713' and circulated out traces of cement. Cemented second stage with 650 sacks 6% gel cement with two pounds Tur Plug per sack. No returns during displacement of last 175 sacks. Test casing with 2500 pounds pressure for thirty minutes, which held it in no drop in pressure. Top cement by temperature survey 520'. Drilled out stage collar and released rotary rig.

Sand-oil fracked with 40,300 gallons oil and 40,000 pounds sand, breakdown pressure 1000 pounds. Average treating pressure 1500 pounds, average injection rate 57 barrels per minute. Clean out to total depth of 3100'. 4" OD liner set at 3096' with Baker Bu. Lox shoe on bottom, top of liner at 2917' with inverted Texas pattern shoe on top. Liner slotted 3010-3096. 2" tubing landed at 3036'. Ran rods and pump. Released completion unit.

Completed as pumping all well Verde
Gallup Field January 28, 1959. Potential test
run ped 67 barrels oil in 24 hours.

Dist 3
MOO MOO MOO