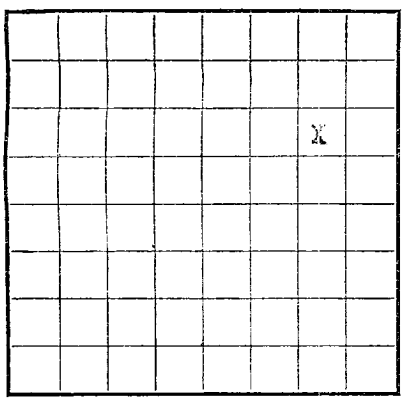
Budget Bureau No. 42-R355.4.
Approval expires 12-31-60.

Form 9-330

U. S. LAND OFFICE Santa Fe
SERIAL NUMBER SF-046563
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 Feasel Field Angels Peak Dakota State New Mexico
Well No. 1 Sec. 33 T. 28N R. 10W Meridian N.M.P.M. County San Juan
Location 1850 ft. {N.} of N Line and 790 ft. {E.} of E Line of Section 33 Elevation 6005
(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 K. M. Bauer, Jr.

Date July 13, 1959 Title Area Engineer

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

Commenced drilling May 18, 1959 Finished drilling June 9, 1959

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 6445 to 6496 (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
9-5/8"	36	8	[illegible]	448'	Guide				Surface
5-1/2"	14	8	[illegible]	6607	Guide				Oil String

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
9-5/8"	448'	250 sacks of cement	Mountain States	1 plug.	
5-1/2"	6607	700 sacks of cement	Halliburton	2 stage	

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 6607 feet, and from feet to feet

DATES

Completed as shut in gas well Angels Peak Dakota Field June 21, 1959. Put to producing ~~Shut in for pipeline connection~~ 19
Preliminary Test 3758 MCFD The production for the first 24 hours was barrels of fluid of which June 21 % was oil; 99 % 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. 3,758,000

1917 EMPLOYES casing pressure 8 days.

, Driller , Driller
Lee Naylor, Driller Blair Wilson, Driller
T. B. Gage Don Sanford

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	448	448	Surface sands & shales.
448	1043	595	Animas sands & shales.
1043	1123	80	Ojo Alamo sands.
1123	1700	577	Kirtland-Farmington sands & shales.
1700	1963	263	Fruitland sands, shales & coals.
1963	2060	97	Pictured Cliffs sands & shales.
2060	3525	1465	Lewis shales & sands.
3525	3620	95	Cliffhouse sands & shales.
3620	4275	655	Menefee sands, shales & coals.
4275	4450	175	Point Lookout sands & shales.
4450	5496	1046	Mancos shale.
5496	6264	768	Gallup shales & sands.
6264	6330	66	Greenhorn shale.
6330	6385	55	Graneros shales & sands.
6385	6443	58	Dakota sands & shales.
6443	6607	164	Dakota sand sands & shales.
			(Tops from Electric log)

(OVER)

16—43094-4

FOLD MARK

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.

Fred Feasel "F" Well No. 1 was spudded on May 18, 1959, and on May 20, 1959, 9-5/8" casing was landed at 436' with 250 sacks cement. After waiting on cement, casing and water shut off were tested with 600 pounds pressure for thirty minutes which held with no drop in pressure. Reduced hole to 6-3/4" at 448' and resumed drilling operations.

Total depth 6607. On June 12, 1959, 5-1/2" casing was set at 6607 feet in 2 stages with staging tool set at 2200 feet. Cemented first stage with 350 sacks 6% gel cement and 1-1/2 pounds Tuf Plug per sack followed by 100 sacks neat. Cemented second stage with 250 sacks 4% gel cement mixed with one pound Tuf Plug per sack. After waiting on cement, tested casing with 3000 psi for thirty minutes with no drop in pressure. Continued completion operations.

On June 17, 1959, spotted 500 gallons mud clean out agent down well bore and perforated intervals 6445-6495 with two shots per foot. Sand water fraced with 40,000 gallons water mixed with 40,000 pounds sand at an average input rate of 53 barrels per minute and a breakdown pressure of 2200-1700 psi. 2-3/8" tubing set at 6148 feet. Completed as a shut in Angels Peak Dakota field gas well June 21, 1959. On preliminary test flowed [illegible] MCF per day pitot tube measurement.

Form 9-330

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U. S. LAND OFFICE Santa Fe
SERIAL NUMBER SF-046563
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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 Feasel Field Angels Peak State New Mexico
Well No. 1 Sec. 33 T. 28 R. 16 Meridian County San Juan
Location 1850 ft. {N.} of S. Line and 790 ft. {E.} of W. Line of Section 33 Elevation 6005
(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 [illegible]
Date July 13, 1959 Title Area Engineer

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

Commenced drilling May 18, 1959 Finished drilling June 9, 1959

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

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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
9-7/8"	32.3	8rd	CFBI	44	Guide				Surface
5-1/2"	14	8rd	CFBI	6607	Guide				Oil String

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
9-5/8"	448'	250 sacks of cement	Mountain States	1 plug.	
5-1/2"	6607	700 sacks of cement	Halliburton	2 stage	

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 feet to feet, and from feet to feet
Cable tools were used from 0 feet to 6607 feet, and from feet to feet

DATES

Completed as shut in gas well August 21, 1959.
Dakota Field June 21, 1959.
Preliminary test 3755 MCFD
Put to producing ~~Put to for pipeline connection~~ 19
The production for the first 24 hours was barrels of fluid of which 24% was oil; 59% 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. 3,755, shut in 8 days.

EMPLOYEES

1917, Driller, Driller
Lee Taylor, Driller Sinclair Wilson, Driller
T. B. Sage, Driller Sanford, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	448	448	Surface sands & shales.
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4450	5496	1046	Mancos shale.
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6264	6330	66	Greenhorn shale.
6330	6385	55	Graneros shales & sands.
6385	6443	58	Dakota sands & shales.
6443	6607	164	Dakota sands & shales.
			(Taken from Electric log)

16—43094-4