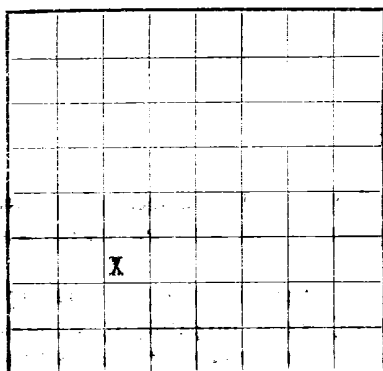
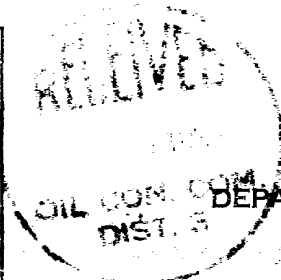




LOCATE WELL CORRECTLY

U. S. LAND OFFICE Santa Fe
SERIAL NUMBER OF-046563
LEASE OR PERMIT TO PROSPECT _____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 MGW Field Angels Peak Dakota State New Mexico
Well No. 1 Sec. 2 T. 27N R. 10W Meridian N.M.P.M. County San Juan
Location 1850 ft. [N.] of 5 Line and 1850 ft. [E.] of W Line of Section 2 Elevation 5985
(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.ORIGINAL SIGNED BY
Signed R. M. Bauer, Jr.Date October 15, 1959 Title Area Engineer

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

Commenced drilling August 13, 19 59 Finished drilling August 30, 19 59OIL OR GAS SANDS OR ZONES
(Denote gas by G)No. 1, from 6360 to 6392 (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		Purpose
							From—	To—	
<u>9-5/8"</u>	<u>32.3</u>	<u>8RT</u>	<u>National</u>	<u>359</u>	<u>Guide</u>				<u>Surface</u>
<u>(4-1/2"</u>	<u>9.5</u>	<u>8RT</u>	<u>National</u>	<u>6361</u>	<u>Guide</u>				<u>Oil String)</u>
<u>(4-1/2"</u>	<u>11.6</u>	<u>8RT</u>	<u>National</u>	<u>217</u>	<u>Guide</u>				<u>Oil String)</u>

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
<u>9-5/8"</u>	<u>367</u>	<u>248 sacks of cement</u>	<u>Rocky Mountain 2 plug</u>		
<u>4-1/2"</u>	<u>6552</u>	<u>750 sacks of cement</u>	<u>Baker 2 stage</u>		

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 6560 feet, and from _____ feet to _____ feet

DATES

Completed as shut in gas well Angels Peak Put to producing Shut in for pipeline connection:
Dakota Field _____, 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 _____
Preliminary test 3006
Rock pressure, lbs. per sq. in. 2006 (Shut in casing pressure 25 days)IP — 284.8 MCFPD on 3/4" choke after 15 hours. Driller Charles Lockhart ACF — 3139 MCFPD Choke pressure 230psi Driller J. C. Brinkley
John D. Roe R. C. Cary

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
<u>0</u>	<u>367</u>	<u>367</u>	<u>Surface sands & shale.</u>
<u>367</u>	<u>970</u>	<u>603</u>	<u>Animas sands & shales.</u>
<u>970</u>	<u>1105</u>	<u>135</u>	<u>Ojo Alamo sands.</u>
<u>1105</u>	<u>1655</u>	<u>550</u>	<u>Kirtland-Farmington sands & shales.</u>
<u>1655</u>	<u>1910</u>	<u>255</u>	<u>Fruitland sands, shales & coals.</u>
<u>1910</u>	<u>2000</u>	<u>90</u>	<u>Pictured Cliffs sands & shales.</u>
<u>2000</u>	<u>3480</u>	<u>1480</u>	<u>Lewis shales & sands.</u>
<u>3480</u>	<u>3565</u>	<u>85</u>	<u>Cliffhouse sands & shales.</u>
<u>3565</u>	<u>4230</u>	<u>665</u>	<u>Manefee sands, shales & coals.</u>
<u>4230</u>	<u>4370</u>	<u>140</u>	<u>Point Lookout sands & shales.</u>
<u>4370</u>	<u>5410</u>	<u>1040</u>	<u>Mancos shale.</u>
<u>5410</u>	<u>6190</u>	<u>780</u>	<u>Gallup sands & shales.</u>
<u>6190</u>	<u>6240</u>	<u>50</u>	<u>Greenhorn shale.</u>
<u>6240</u>	<u>6302</u>	<u>62</u>	<u>Graneros shale & sand.</u>
<u>6302</u>	<u>6358</u>	<u>56</u>	<u>Dakota sand & shale.</u>
<u>6358</u>	<u>6560</u>	<u>202</u>	<u>Dakota pay sand, shale & coal.</u>
			<u>(Tops from E log)</u>

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

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.

Red Passat new well No. 1 was spudded on 8-13-59 and on 8-15-59 9-5/8" casing was set at 367' with 190 sacks cement containing 2% calcium chloride. Cement did not circulate. Re-cemented thru 1" outside casing with 56 sacks of cement containing 2% calcium chloride. Circulated approximately 20 sacks of cement. After waiting on cement, tested casing and water shut off with 500 psi for 30 minutes, which held with no indication of pressure drop. Reduced hole to 7-7/8" at 367' and resumed drilling operations.

4-1/2" casing was set at 6552' with 2-stage cement tool at 2167'. Cemented first stage with 400 sacks of red cement containing 1-1/2 pounds Tuf-Ping per sack followed by 100 sacks neat cement. Tested casing with 3000 psi for thirty minutes which held with no indication of pressure drop. After waiting on first stage cement, cemented second stage with 250 sacks 4 1/2 gel cement. Tested casing with 3000 psi for thirty minutes, which held with no indication of pressure drop. Drilled 2-stage cement tool at 2156, drilled cement 6515-6518'. Tested casing with 1000 psi for thirty minutes which held with no indication of pressure drop. Left tubing and bit in hole. Released rotary rig.

Spotted 250 gallons breakdown acid on bottom. Tested casing with 3000 psi for 15 minutes, which held with no indication of pressure drop. Perforated with four shots per foot 6/87-6/94. Attempted to sand-water frac. Breakdown pressure 2200 to 1900. Pumped into formation at 25 barrels per minute with 2950 psi. Started sand and flushed per gallon and banded off when sand reached perforations. Stopped sand and flushed casing at 1-1/2 barrels per minute with 3000 psi. Spotted 250 gallons MCA and pumped 2 barrels into perforations. Ran ring gauge with bridge plug set at 6 7/8". Tested bridge plug with 3000 psi for 15 minutes, which held with no indication of pressure drop. Spotted 250 gallons breakdown acid. Perforated Dakota with 2 shots per foot 6/90-6/92. Sand-water fracked with 35,000 gallons water and 35,000 pounds sand. Breakdown pressure 2500 psi. Average leakage pressure 2000 psi. Average injection rate 32 barrels per minute. Landed 2" tubing at 6335'. Released pulling unit.

Completed as far as well known field at October 19, 1888.
October 19, 1888.