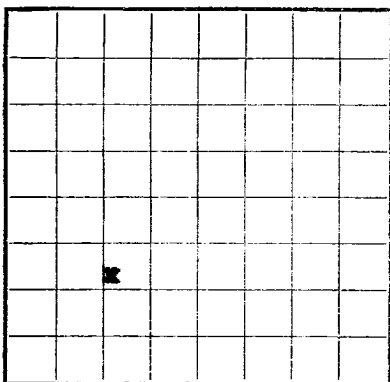
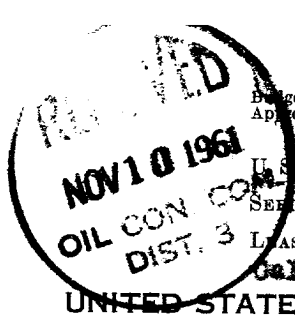




LOCATE WELL CORRECTLY

U.S. LAND OFFICE
Santa Fe
SERIAL NUMBER 37-280723
LEASE OR PERMIT TO PROSPECT
Gallegos Canyon Unit
UNITED STATESDEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Pan American Petroleum Corporation Address Box 480, Farmington, New Mexico
Lessor or Tract Gallegos Canyon Unit Field Basin Dakota State New Mexico
Well No. 111 Sec. 20 T. 24N R. 12W Meridian N.M.P.M. County Santa Fe
Location 1450 ft. N of S Line and 1635 ft. E of W Line of Section 20 Elevation 5466 (RDB)
(Derrick foot 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. Bayer, Jr. ORIGINAL SIGNED BY
Date November 9, 1961 Title Senior Petroleum Engineer

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

Commenced drilling October 15, 1961 Finished drilling October 27, 1961

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 5977 to 5984 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>8-5/8"</u>	<u>20.75</u>	<u>8</u>	<u>API</u>	<u>100'</u>	<u>Guide</u>	<u>5977</u>			<u>5977-5984</u>
<u>4-1/2"</u>	<u>13.5</u>	<u>8</u>	<u>CPAI</u>	<u>6129'</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>8-5/8"</u>	<u>337'</u>	<u>250</u>	<u>Halliburton 1 plug</u>		
<u>4-1/2"</u>	<u>6100'</u>	<u>835</u>	<u>Halliburton 2 plug</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 6100 feet, and from _____ feet to _____ feet

DATES

Completed as shut in gas well Basin Dakota Put to producing Shut in waiting on pipeline connection
Field November 6, 1961 November 6, 1961

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 Rock pressure _____ ps. per sq. in. 5079

2000 (SEE EMPLOYEES) Potential test to be reported on Sundry
Notice when available.

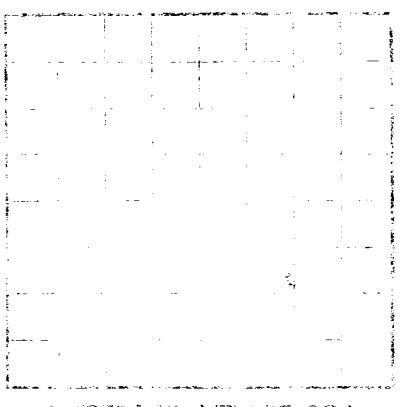
_____, Driller _____, Driller

G. M. Benton, Driller Arthur Miller, Driller

Carl Winters, Driller H. E. Weisgerber, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
<u>0</u>	<u>1362</u>	<u>1362</u>	<u>Undifferentiated surface sands and shales.</u>
<u>1362</u>	<u>1520</u>	<u>158</u>	<u>Pictured Cliffs sand and shale.</u>
<u>1520</u>	<u>2921</u>	<u>1401</u>	<u>Lewis shale.</u>
<u>2921</u>	<u>4100</u>	<u>1179</u>	<u>Mesaverde sand and shale.</u>
<u>4100</u>	<u>5025</u>	<u>925</u>	<u>Mancos shale.</u>
<u>5025</u>	<u>5795</u>	<u>770</u>	<u>Gallup sand and shale.</u>
<u>5795</u>	<u>5890</u>	<u>95</u>	<u>Greenhorn sand and shale.</u>
<u>5890</u>	<u>6100</u>	<u>210</u>	<u>Dakota sand and shale.</u>
			<u>(Tops from "B" log)</u>



LOG OF OIL OR GAS WELL

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ALICEAFCO JEWETT CO.

02.15.01 02.15.01

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 "detached," or left in the well, give the date and location. If the well has been dynamited, give date, 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.

Date	Depth	Amount	Kind of Plug	Casing
Drilled 12-1/4" hole on October 15, 1961.				Sat 8-5/8" casing at 37' with 250 sacks of cement containing 2 percent colloidum retarder. Circulated 50 sacks of cement, after waiting on cement, tested 8-5/8" casing with 500 psi for 30 minutes, which held with no indication of pressure drop. Reduced hole to 7-7/8" and resumed drilling operations.
Total depth 6100'. Plug back depth 6080'. Set 4-1/2" casing at 6100' with DV tool at 1672'. First stage cemented 285 sacks 4 percent Col Incor cement containing 1-1/2% pounds per bag followed by 75 sacks Incor neat cement. Tested 3000 psi for 15 minutes, which held with no indication of pressure drop. Waited on cement 4 hours. Second stage cemented 475 sacks 4 percent Col Incor cement. Circulated 45 sacks of cement. After waiting on cement 16 hours tested 4-1/2" casing with 3000 psi for 15 minutes, which held with no indication of pressure drop. Bailed in tool at 1634'. Tested 4-1/2" casing with 1500 psi for 30 minutes which held with no indication of pressure drop.				
The summary on this page is for the condition of the well as above date				
Red formations 308'. Spotted 1000 gallons 7-1/2 percent HCA mud. Water - perforated Dakota with 8 shots per foot 5977-5981'. Sand water treated with 39,000 gallons of water containing 1 percent calcium chloride and 20 pounds WAC-6 additive per 1000 gallons and 20,000 pounds of sand. The information given herein is a complete and correct record of the well and is without exception true and correct. Average injection rate 41 barrels per minute. Location 7-1/2" Line at 1634'. Completed in 2 1/2 hrs with hard Dakota field November 6, 1961. Preliminary test November 6, 1961. Flowed 3 hours and limited 5079 MCF per day with tubing pressure 1700 psi. Average flowing pressure 1700 psi, average static pressure 2450 psi. Location 7-1/2" Line at 1634'. Elevation 1634'. Ground level 5455'. Address				

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HISTORY OF OIL OR GAS WELL

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