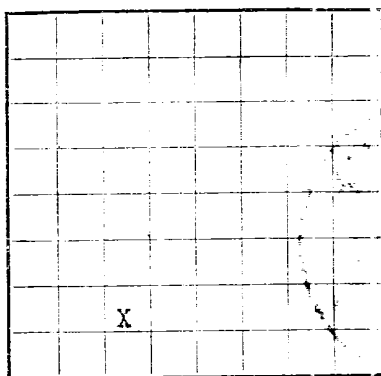


U. S. LAND OFFICE Santa Fe
SERIAL NUMBER SF 077382
LEASE OR PERMIT TO PROSPECT



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RECEIVED
NOV 10 1959

U. S. GEOLOGICAL SURVEY
FARMINGTON, NEW MEXICO

LOG OF OIL OR GAS WELL

Company Pan American Petroleum Corporation Address Box 487, Farmington, New Mexico
Lessor or Tract USA Hargrave "J" Field Angels Peak Dakota State New Mexico
Well No. 1 Sec. 3 T. 27N R. 10W Meridian N.M.P.M. County San Juan
Location 790 ft. N. of S. Line and 1850 ft. E. of W. Line of Section 3 Elevation 6128
(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 August 19, 1959 Title Area Engineer

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

Commenced drilling June 17, 1959 Finished drilling July 23, 1959

OIL OR GAS SANDS OR ZONES
(Denote gas by G)

No. 1, from 6542 to 6586 (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>363</u>	<u>Guide</u>				<u>Surface</u>
<u>4-1/2</u>	<u>11.6</u>	<u>8RT</u>	<u>National</u>	<u>230</u>	<u>Guide</u>				<u>Oil String</u>
<u>4-1/2</u>	<u>9.5</u>	<u>8RT</u>	<u>National</u>	<u>6575</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>369</u>	<u>200 sacks cement</u>	<u>Halliburton 1 plug</u>		
<u>4-1/2</u>	<u>6785</u>	<u>700 sacks cement</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 301 feet to 6790 feet, and from _____ feet to _____ feet
Cable tools were used from 0 feet to 301 feet, and from _____ feet to _____ feet

Completed as shut-in Angels Peak Dakota

Field well August 9, 1959 Put to producing Shut in for pipeline connection.

Preliminary Test 5526 bbls per 24 hours was _____ barrels of fluid of which August 9, 1959 % was oil, _____ %

emulsion; _____ % water; and _____ % sediment. Gravity, °Bé. _____

If gas well, _____ cu. ft. per 24 hours 5526 Gallons gasoline per 1,000 cu. ft. of gas _____

Rock pressure, lbs. per sq. in. 1998 Shut-in casing pressure 9 days.

EMPLOYEES

Lee Naylor _____, Driller Clair Wilson _____, Driller
T. G. Gage _____, Driller Glen Sanford _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
<u>0</u>	<u>1047</u>	<u>1047</u>	<u>Surface sands & shales, including Animas sand & shale.</u>
<u>1047</u>	<u>1190</u>	<u>143</u>	<u>Ojo Alamo sand.</u>
<u>1190</u>	<u>1767</u>	<u>577</u>	<u>Kirtland shales & sands, including Farmington sand.</u>
<u>1767</u>	<u>2025</u>	<u>258</u>	<u>Fruitland sands, shales & coals.</u>
<u>2025</u>	<u>2145</u>	<u>120</u>	<u>Pictured Cliffs sands & shales.</u>
<u>2145</u>	<u>3573</u>	<u>1428</u>	<u>Lewis shales & sands.</u>
<u>3573</u>	<u>4710</u>	<u>1137</u>	<u>Mesaverde sands & shales.</u>
<u>4710</u>	<u>5566</u>	<u>856</u>	<u>Mancos shale.</u>
<u>5566</u>	<u>6353</u>	<u>787</u>	<u>Gallup sands & shales.</u>
<u>6353</u>	<u>6415</u>	<u>62</u>	<u>Greenhorn sandy shale.</u>
<u>6415</u>	<u>6480</u>	<u>65</u>	<u>Graneros shale & sand.</u>
<u>6480</u>	<u>6536</u>	<u>56</u>	<u>Dakota sands & shales.</u>
<u>6536</u>	<u>6725</u>	<u>189</u>	<u>Dakota pay sands & shales.</u>
<u>6725</u>	<u>6790 (E)</u>	<u>65</u>	<u>Morrison shales & sands.</u>
			<u>(Tops from E log)</u>

Potential Test August 12, 1959 flowed 2305 MCFD through 3/4" choke after three hours. Absolute open flow potential 2618 MCFD.

FORMATION

—KOH—

—OL

TOTAL

FORMATION

HISTORY OF OIL OR GAS WELL

U. S. GOVERNMENT PRINTING OFFICE 10-48094-2

10/6/71 10:37 AM

Completed as shut-in Angels Peak Dakota field well. Preliminary test 5526 MCPLD.