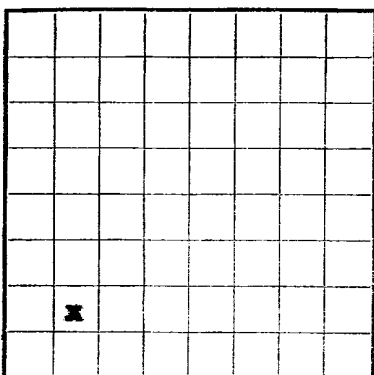




LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT 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 **E. H. Pipkin** Field **Basin Dakota** State **New Mexico**Well No. **11** Sec. **12** T. **27N** R. **11W** Meridian **N.M.P.M.** County **San Juan**Location **1110 ft. [N.] of S. Line and 880 ft. [E.] of W. Line of Section 12** Elevation **6011**
(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 **April 14, 1961** Title **Senior Petroleum Engineer**

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

Commenced drilling **March 15** 19 **61** Finished drilling **March 23** 19 **61**

OIL OR GAS SANDS OR ZONES

No. 1, from **6311** to **6335** No. 4, from _____ to _____

No. 2, from _____ to _____ No. 5, from _____ to _____

No. 3, from _____ to _____ No. 6, from _____ to _____

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	Perforations	Purpose
8-5/8"	29.0	8.0	API	277	API	API		Surface
4-1/2"	9.5	8.0	API	641	API	API		Well string

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8-5/8"	290	200	Halliburton	1 Plug.	
4-1/2"	6440	525	Halliburton	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 _____ feet to _____ feet, and from _____ feet to _____ feet

Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

Completed as shut in Basin Dakota Field DATES Shut in for pipeline connection.

Development Well. April 9, 19 61 Put to producing April 9, 19 61

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 _____

Rock pressure, lbs. per sq. in. **1304**

EMPLOYEES

_____, Driller _____, Driller

J. D. Roe, Driller **J. G. Brinkley**, Driller**R. C. Casey**, Driller **C. Lockhart**, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	728	728	Surface sands and shales.
728	813		Ojo Alamo sand.
813	1799		Kirtland, Farmington and Fruitland sands shales and coals.
1799	1977		Pictured cliffs sands and shales.
1977	3368		Lewis shale.
3368	4473		Mesaverde sands and shales.
4473	5328		Mancos shale.
5328	6151		Gallup sands and shales.
6151	6205		Greenhorn sandy shale.
6205	6308		Graneros sands and shales.
6308	6430		Dakota sand and shales.

(Note from E log)

(OVER)

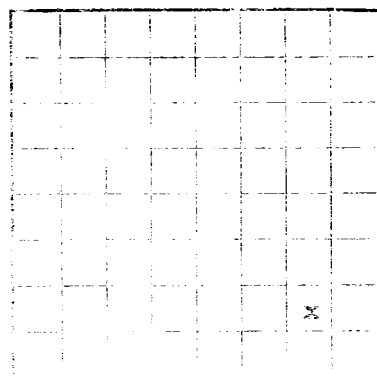
LOG OF OIL OR GAS WELL

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
UNITED STATES

U.S. LAND OFFICE
SPECIAL NUMBER
LEASE OR PERMIT TO PRODUCE

Revised Bureau Form No. 14-5388-1
Approved by the Department of the Interior

Form 14-5388-1



LOCAL E. AND N. COORDINATES

Company Name, Address, City, State, and Zip
Owner or Lessee Name, Address, City, State, and Zip
Well No. and Name
Location of well, including line and section
The information given here is a complete and correct record of the well and all work done thereon
Signed _____
Title _____

Spudded well on March 10, 1961. On March 11, 1961, 8-5/8" casing was set at 290' with 200 sacks cement with 2 percent calcium chloride. Circulated 20 sacks of cement. Waited on cement 12 hours. Test casing with 300 psi for 30 minutes. Test ok. Reduced hole from 12-1/4" to 7-7/8" at 290' and resumed drilling. Total depth 6440. 4-1/2" casing set at 6440' with stage tool at 2075. First stage cemented with 275 sacks of cement with 1-1/2 pounds per sack followed by 100 sacks cement. Second stage cemented with 150 sacks 6% gel. After waiting 16 hours, tested with 1600 psi. Test ok. Completion operations were begun. No. 1 from 6441' to 6442'. No. 4 from 6442' to 6443'. Spotted 500 gallons 15% acid. Perforated shots 6311-35 with 4 shots per foot. Fracked with 70,000 gallons acetone-soluble potassium chloride and 5 pounds AC-4 per 1000 gallons and 40,000 pounds sand. Breakdown pressure 2700 psi. Maximum treating pressure 3000 psi. Average injection rate 24 barrels per minute. Produced 1800 barrels per day and 1000 barrels per month from April 1961 to April 1962.

HISTORY OF OIL OR GAS WELL

MUDLOGGING AND CEMENTING RECORD			
Casing size	Pressure	Number sacks of cement	Mud grade
8-5/8"	200	200	15% gel
4-1/2"	100	100	15% gel
PLUGS AND ADAPTERS			
Heavy plug—Material			Depth set
Adapter—Material			
SHOOTING RECORD			
Size	Shell used	Explosives used	Quantity
			Date
			Depth set
			Depth cleared out
TOOLS USED			
Rotary tools were used from _____ feet to _____ feet and from _____ feet to _____ feet			
Cable tools were used from _____ feet to _____ feet and from _____ feet to _____ feet			
DATES			
Completed as run in casing _____ feet to _____ feet			
The production for the first 24 hours was _____ barrels of fluid of which _____% was oil; _____% emulsion; _____% water; and _____% sediment			
If gas well, cut ft. per 24 hours _____			
Rock pressure, lbs. per sq. in. _____			
EMPLOYEES			
Driller _____			
Driller _____			
FORMATION RECORD			
FROM	TO	TOTAL FEET	FORMATION
0	700	700	surface sands and shales
700	812	1512	0 to 1000 sand
812	1200	2712	shales and coals
1200	1300	4012	shales and coals
1300	1350	5362	shales and coals
1350	1400	6762	shales and coals
1400	1500	8262	shales and coals
1500	1600	9862	shales and coals
1600	1700	11562	shales and coals
1700	1800	13262	shales and coals
1800	1900	15062	shales and coals
1900	2000	16862	shales and coals
2000	2100	18662	shales and coals
2100	2200	20462	shales and coals
2200	2300	22262	shales and coals
2300	2400	24062	shales and coals
2400	2500	25862	shales and coals
2500	2600	27662	shales and coals
2600	2700	29462	shales and coals
2700	2800	31262	shales and coals
2800	2900	33062	shales and coals
2900	3000	34862	shales and coals
3000	3100	36662	shales and coals
3100	3200	38462	shales and coals
3200	3300	40262	shales and coals
3300	3400	42062	shales and coals
3400	3500	43862	shales and coals
3500	3600	45662	shales and coals
3600	3700	47462	shales and coals
3700	3800	49262	shales and coals
3800	3900	51062	shales and coals
3900	4000	52862	shales and coals
4000	4100	54662	shales and coals
4100	4200	56462	shales and coals
4200	4300	58262	shales and coals
4300	4400	60062	shales and coals
4400	4500	61862	shales and coals
4500	4600	63662	shales and coals
4600	4700	65462	shales and coals
4700	4800	67262	shales and coals
4800	4900	69062	shales and coals
4900	5000	70862	shales and coals
5000	5100	72662	shales and coals
5100	5200	74462	shales and coals
5200	5300	76262	shales and coals
5300	5400	78062	shales and coals
5400	5500	79862	shales and coals
5500	5600	81662	shales and coals
5600	5700	83462	shales and coals
5700	5800	85262	shales and coals
5800	5900	87062	shales and coals
5900	6000	88862	shales and coals
6000	6100	90662	shales and coals
6100	6200	92462	shales and coals
6200	6300	94262	shales and coals
6300	6400	96062	shales and coals
6400	6500	97862	shales and coals
6500	6600	99662	shales and coals
6600	6700	101462	shales and coals
6700	6800	103262	shales and coals
6800	6900	105062	shales and coals
6900	7000	106862	shales and coals
7000	7100	108662	shales and coals
7100	7200	110462	shales and coals
7200	7300	112262	shales and coals
7300	7400	114062	shales and coals
7400	7500	115862	shales and coals
7500	7600	117662	shales and coals
7600	7700	119462	shales and coals
7700	7800	121262	shales and coals
7800	7900	123062	shales and coals
7900	8000	124862	shales and coals
8000	8100	126662	shales and coals
8100	8200	128462	shales and coals
8200	8300	130262	shales and coals
8300	8400	132062	shales and coals
8400	8500	133862	shales and coals
8500	8600	135662	shales and coals
8600	8700	137462	shales and coals
8700	8800	139262	shales and coals
8800	8900	141062	shales and coals
8900	9000	142862	shales and coals
9000	9100	144662	shales and coals
9100	9200	146462	shales and coals
9200	9300	148262	shales and coals
9300	9400	150062	shales and coals
9400	9500	151862	shales and coals
9500	9600	153662	shales and coals
9600	9700	155462	shales and coals
9700	9800	157262	shales and coals
9800	9900	159062	shales and coals
9900	10000	160862	shales and coals

FORMATION RECORD—Continued