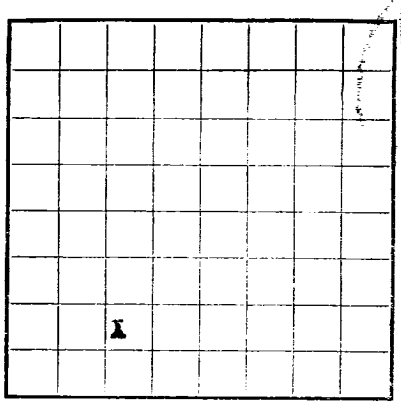
Form 9-330

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

U. S. LAND OFFICE Santa Fe
SERIAL NUMBER SF 078019
LEASE OR PERMIT TO PROSPECT
E. H. Pickin



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Sun American Petroleum Corporation Address Box 420, Farmington, New Mexico
Lessor or Tract E. H. Pickin Field Basin Dakota State New Mexico
Well No. 9 Sec. 35 T. 29N R. 11W Meridian N.M.P.M. County San Juan
Location 790 ft. {N.} of S Line and 1735 ft. {E.} of W Line of Section 35 Elevation 5226 (K.B.)
(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. Sauer, Jr.

Date February 23, 1961 Title Senior Petroleum Engineer

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

Commenced drilling January 22, 1961 Finished drilling February 14, 1961

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 6356 to 6369 No. 4, from to
No. 2, from 6365 to 6368 No. 5, from to
No. 3, from 6392 to 6396 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
8-5/8"	20	8rd	[illegible]	521	Guide				Surface
4-1/2"	9.5	8rd	3-55	6392	Guide				Oil String

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8-5/8"	520'	350 sacks of cement	B J Service 1 plug.		
4-1/2"	6475'	525 sacks of cement	Baker 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 0 feet to 6475 feet, and from feet to feet
Cable tools were used from feet to feet, and from feet to feet

DATES

Completed February 14, 1961 as Shut In Basin Dakota Field Development Well. (Shut In for pipeline connection)
Put to producing February 14, 1961

The production for the first 24 hours was barrels of fluid of which % was oil; % emulsion; % water; and % sediment. Gravity, °Bé.

Preliminary Test If gas well, cu. ft. per 24 hours MCF Gallons gasoline per 1,000 cu. ft. of gas
Rock pressure, lbs. per sq. in. 5216

Potential test will be reported on Sundry Notice when available.

EMPLOYEES

/s/ John D. Roe, Driller /s/ J. C. Binkley, Driller
/s/ Charles Lockhart, Driller /s/ R. C. Cary, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	521	521	Surface sands and shales.
521	660	139	Kirtland sands and shales including Farmington sands.
660	1565	905	Fruitland sands, shales, and coals.
1565	1890	325	Pictured Cliffs sands.
1890	3336	1446	Lewis shale.
3336	4490	1154	Mesaverde sands and shales.
4490	5385	895	Mancos shale.
5385	5940	555	Gallup sands and shales.
5940	6245	305	Greenhorn sands and shales.
6245	6305	60	Graneros sands and shales.
6305	6352	47	Dakota sands and shales.
6352	6475	123	Dakota gay sands and shales.
			(Tops from E Log)

[OVER]

16—48094-4

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION

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.

Spudded 12-1/4" hole on January 22, 1961, and drilled to 520'. Set 8-5/8" casing at 520' with 350 sacks cement containing 2 percent calcium chloride. Circulated 25 sacks 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" at 520' and resumed drilling operations.

Total depth 6475' set 4-1/2" casing at 6475' with stage tool at 2021'. Cemented first stage with 275 sacks 6 percent gel cement with 1-1/2 pounds medium Tuf Plug per sack, followed by 100 sacks neat cement. Cemented second stage with 150 sacks 6 percent gel cement. Tested both plugs with 3000 psi for 15 minutes which held with no indication of pressure drop. Preparing for completion operations.

Plug back depth 6437 - Drilled the stage tool and cleaned out to 6437'. Tested casing with 3000 psi which held with no indication of pressure drop. Spotted 500 gallons 15 percent HCA. Perforated 6358-6369', 6389-6393', 6392-6396' with six shots per foot. Sandwater fracked with 40,000 gallons water, and 40,000 pounds sand. Breakdown pressure 1300 psi, average treating pressure 2300 psi, average injection rate 41 barrels per minute. Landed 2" tubing at 5345'. Completed February 14, 1961, as shut in Basin Dakota Field Development Well. Preliminary test 214 MCF per day. Tubing pressure flowing 400 psi, casing pressure flowing 925 psi, top pay Dakota 6354'.

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