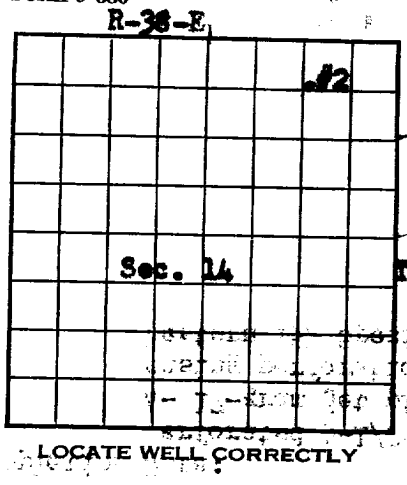
COPY TO O. C. C.

Form 9-330

Budget Bureau No. 42-R355.2.
Approval expires 12-31-52.

R-38-E



LOCATE WELL CORRECTLY

U. S. LAND OFFICE Las Cruces
SERIAL NUMBER 064605-A
LEASE OR PERMIT TO PROSPECT

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Amerada Petroleum Corporation Address Drawer 809 Seminole, Texas

Lessor or Tract Federal "A" Field Bronco Siluro Dev. State New Mexico

Well No. 2 Sec. 14 T. 13-S R. 38-E Meridian N.M.P.M. County Lea

Location 660 ft. {N./S.} of N. Line and 1274.10 ft. {E./W.} of E. Line of Sec. 14 Elevation 3810
(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 W. A. Dunlap

Date January 2, 1954 Title Dist. Supt.

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

Commenced drilling October 11, 1953 Finished drilling December 30, 1953

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 9432 to 9590 No. 4, from ____ to ____

No. 2, from 11418 to 11650 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 From—	Perforated To—	Purpose
13-3/8"	36#	8R	Armco	318'	Armco				
8-5/8"	32#	8R ST&C	J-55	4523'	Baker				
5-1/2"	17 & 20#	Kline & 8-Rd	J-55 & N-80	11,865'	Halliburton				

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
13-3/8"	318'	450 sx.	Halliburton		
8-5/8"	4523'	1200 sx.	Halliburton		
5-1/2"	11870'	700 sx.	Halliburton		

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 11,870 feet, and from ____ feet to ____ feet

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

DATES

December 30, 1953 Put to producing December 29, 1953

The production for the first 24 hours was 430.74 barrels of fluid of which 95.8 % was oil; ____ % emulsion; 1.3 % acid water; and 2.9 % sediment.

If gas well, cu. ft. per 24 hours ____ Gravity, ABE ~~XXX~~ 44.2 corrected

Rock pressure, lbs. per sq. in. ____ Gallons gasoline per 1,000 cu. ft. of gas ____

EMPLOYEES

K. R. Reeves, Driller T. C. Bennett, Driller

Guy Marker, Driller T. H. Dooly, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	18	18	Cellar
18	140	122	Caliche & Sand
140	322	182	Caliche, Sand & Red Bed
322	1890	1568	Red Bed
1890	2165	275	Red Bed & Anhy.
2165	2340	175	Red Bed
2340	3960	1620	Anhy. & Salt
3960	4403	443	Anhy.
4403	4524	121	Anhy. & Lime
4524	9393	4869	Lime
9393	9550	157	Lime & Shale
9550	10819	1269	Lime
10819	10924	105	Lime & Chert
10924	11013	89	Lime
11013	11066	53	Lime & Chert
11066	11180	114	Lime
11180	11376	196	Lime & Chert
11376	11472	96	Lime & Shale
11472	11498	26	Lime & Dolomite
11498	11651	153	Dolomite
11651	11700	49	Lime
11700	11863	163	Lime & Chert
11863	11870	7	Lime

FROM— TO— TOTAL FEET FORMATION

(OVER)

16-43891-8

FORMATION RECORD—Continued

FOLD | MARK

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION
Slope Tests:			
260 - 1/2		9165 - 1-3/4	
550 - 1/2		9185 - 1-3/4	
790 - 1/2		9236 - 1-3/4	
1070 - 1/2		9295 - 2-1/4	
1350 - 1/2		9350 - 1-3/4	
2085 - 1/4		9420 - 2	
2300 - 1/2		9496 - 1-1/2	
2641 - 3/4		9590 - 1-1/2	
2900 - 1/2		9670 - 1-1/4	
3170 - 1/4		9780 - 1-1/2	
3490 - 1/2		9845 - 1	
3780 - 1/4		9950 - 1-3/4	
4040 - 3/4		10050 - 1-1/4	
4280 - 1/2		10155 - 1	
4317 - 1/2		10270 - 1-1/2	
4500 - 1/2		10365 - 2	
4600 - 1/2		10430 - 1-3/4	
4800 - 3/4		10470 - 2	
4991 - 1/2		10495 - 1-3/4	
5145 - 1/2		10520 - 1-3/4	
5315 - 1/2		10610 - 1-3/4	
5500 - 1/4		10687 - 2-1/2	
5661 - 1/4		10730 - 1-3/4	
5875 - 1/4		10772 - 2	
6000 - 1/2		10795 - 2	Geological Data:
6215 - 3/4		10800 - 2	
6345 - 1		10830 - 2-3/4	Top Anhydrite - 2267'
6560 - 1-1/2		10920 - 2	Top Yates- 3089'
6755 - 1-1/2		10990 - 2-1/4	Top San Andres- 4500'
6942 - 1-3/4		11010 - 2-3/4	Top Clearfork- 6598'
7075 - 2		11051 - 2-1/4	Top Wichita- 7817'
7161 - 2		11080 - 2-3/4	Top Wolfcamp- 8948'
7325 - 1-3/4		11095 - 2-1/2	Top Pennsylvanian- 9404'
7425 - 1-3/4		11116 - 3	Top Mississippian- 10729'
7515 - 2		11140 - 3	Top Woodford- 11348'
7655 - 2		11160 - 2-3/4	Top Devonian- 11418'
7728 - 2		11176 - 3	
7815 - 1-3/4		11200 - 3	
7985 - 2		11292 - 3	
8140 - 2		11300 - 3	
8315 - 2		11370 - 3-3/4	
8419 - 2		11415 - 4	
8555 - 1-3/4		11495 - 4	
8695 - 2-1/4		11569 - 3-3/4	
8792 - 2		11640 - 4	
8880 - 2-1/4		11682 - 4	
8965 - 1-3/4		11710 - 4	
9090 - 1-3/4		11790 - 4	

HISTORY OF OIL OR GAS WELL

16—43094-1 U. S. GOVERNMENT PRINTING OFFICE

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.

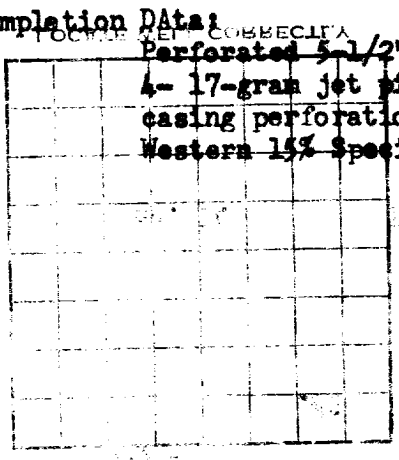
DST - #1 - 9185 to 9356, 1 hr, & 24 minute test, 4" drill pipe, used 341' water blanket. Opened tool with weak blow of air which died in 24 minutes. Recovered 341' water blanket and 40' mud.

DST - #2 - 9398 to 9601, 4 hr. test, 4" drill pipe, used 470' water blanket. Opened tool with fair blow of air increasing to strong blow in 1 hr. and 39 minutes. Gas to surface in 1 hr. and 52 minutes, volume 10,200 cu. ft. per day. Gas volume in 3 hrs. and at end of test- too weak to measure. Recovered 470' water blanket, 689' gas cut mud and 125' heavily gas and slightly oil cut mud, estimated 2% oil.

DST - #3 - 10,725 to 10,924, packers failed, no test.

DST - #4 - 10,805 to 10,924, 1 hr. and 10 minute test, 4" drill pipe, used 1786' water blanket. Opened tool with very weak blow of air which died in 10 minutes. Recovered 1786' water blanket and 62' mud.

DST - #5 - 11,715 to 11,805, 4 hr. test, 4" drill pipe, used 2726' water blanket. Opened tool with good blow of air deminishing to weak blow at end of test. Recovered 2726' water blanket with an est. 10% oil and gas cut mud and 889' free oil, average 40 mud. Gravity 44.4 corrected.

DST - #6 - 11,845 to 11,870, 1 hr. and 42 minute test, 4" drill pipe, used 2820' water blanket. Opened tool with weak blow of air which died in 42 minutes. Recovered 2820' water blanket and 125' mud cut oil and gas.

Completion Data:
Perforated 5-1/2" casing from 11,490 to 11,572', and from 11,586 to 11,650' with 4- 17-gram jet pipe shots per foot, total of 304 shots. Acidized thru 5-1/2" casing perforations with 1000 gallons Halliburton MCA Acid and 5000 gallons Western 15% Special Low Tension Acid.