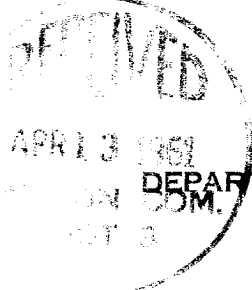
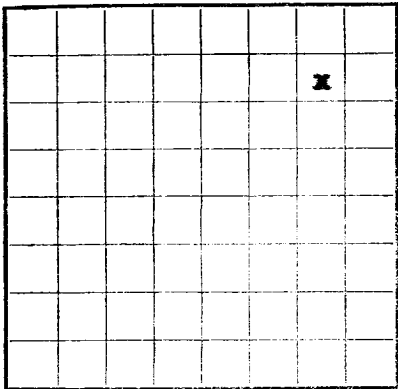


U. S. LAND OFFICE **Jicarilla Tribal**
SERIAL NUMBER **Jicarilla Tribal**
Contract 147
LEASE OR PERMIT TO PROSPECT



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company **Pan American Petroleum Corporation** Address **Box 480, Farmington, New Mexico**
Lessor or Tract **Jicarilla Contract 147** Field **Basin Dakota** State **New Mexico**
Well No. **3** Sec. **6** T. **25N** R. **5W** Meridian **H.M.P.M.** County **Rio Arriba**
Location **1190** ft. **S.** of **N** Line and **790** ft. **E** of **E** Line of **Section 6** Elevation **6665** (HDB)
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. Bauger, Jr.**
Date **April 11, 1961** Title **Senior Petroleum Engineer**
The summary on this page is for the condition of the well at above date.
Commenced drilling **February 25**, 19 **61** Finished drilling **March 17**, 19 **61**

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

No. 1, from **7005** to **7095** 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—	
8-5/8"	20	8VT	1-52	544	Guide				Surface
4-1/2"	11.6	8RT	3-55	1291	Guide				Oil String
4-1/2"	9.5	8RT	3-55	6238	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"	552	400 sacks of cement	Halliburton	1 Plug	
4-1/2"	7442	875 sacks of cement	Halliburton	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 **7442** 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 **Shut in for pipeline connection.**
Development Gas well **April 5 61** Put to producing **April 5**, 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 **989** Gallons gasoline per 1,000 cu. ft. of gas _____
Preliminary test _____
Rock pressure, lbs. per sq. in. _____

Potential test will be filed on Sundry Notice when available

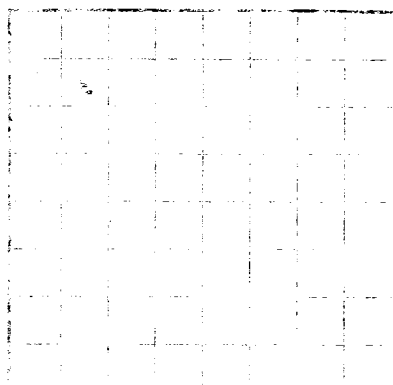
_____, Driller **D. S. Wixner**, Driller
_____, Driller **Leon Nestal**, Driller
R. D. Davis
M. W. McDonald

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	2855	2855	Undifferentiated sand and shale.
2855	2940	85	Pictured Cliffs sand and shale.
2940	4540	1600	Lewis shale.
4540	4787	247	Cliffhouse sand.
4787	5065	278	Manefee sand, shale and coals.
5065	5271	206	Point lookout sand and shale.
5271	5690	419	Mancoes shale.
5690	6680	990	Callup sand and shale.
6680	6900	220	Sanastee sand and shale.
6900	7075	175	Greenhorn sand.
7075	7215	140	Graneros sand and shale.
7215	7442	227	Dakota sand and shale.

100-443887-100

JUL 24 1960



total depth 7472', plug back depth 7406' - spotted 250 gallons BDY. per Gamma Ray
Concentration log and perforation with 6 shots per 1000 7405-7093'. Sandwater tracked with
28,600 gallons water containing 25 pounds per 1000 gallons Dowell J-101 additive with
1 percent calcium chloride and 21,200 pounds sand. Breakdown pressure 2700 psi,
maximum treating pressure 3000 psi, minimum treating pressure 2400 psi, average injection
rate 23 barrels per minute. Instrumentation shut in pressure 2200 psi, flowed 2-3/8"
 tubing at 7071'. Completed well 5, 1961, as shut in Basin D-400 field development
 gas oil. Production test well 5, 1961, flowed 989 KCF per day with adding pressure
 flowing 75 psi, and casing pressure flowing 300 psi.

total depth 7472'; on March 19, 1961, 4-1/2" casing set at 7472' with stage collar at 3893'. First stage 700 sacks cement with 6 percent gel and 1-1/2 pounds medium turpene per sack followed by 100 sacks neat cement. Test OK. Wait on cement four hours. Second stage cemented with 375 sacks 6 percent gel cement. Tested with 3000 psi. Test OK. Commenced completion operations.

5781 with 700 sacks cement containing 2 percent calcium chloride. Circulated 40 sacks of cement. After waiting on cement, tested 8 5/8" casing with CO₂ for 30 minutes. When held with no indication of pressure drop. Reduced hole to 7 7/8" at 5781 and resumed drilling.

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.

HISTORY OF OIL OR GAS WELL

FROM-	TO-	TOTAL FEET	FORMATION
0	10	10	SANDSTONE
10	20	20	SANDSTONE
20	30	30	SANDSTONE
30	40	40	SANDSTONE
40	50	50	SANDSTONE
50	60	60	SANDSTONE
60	70	70	SANDSTONE
70	80	80	SANDSTONE
80	90	90	SANDSTONE
90	100	100	SANDSTONE
100	110	110	SANDSTONE
110	120	120	SANDSTONE
120	130	130	SANDSTONE
130	140	140	SANDSTONE
140	150	150	SANDSTONE
150	160	160	SANDSTONE
160	170	170	SANDSTONE
170	180	180	SANDSTONE
180	190	190	SANDSTONE
190	200	200	SANDSTONE
200	210	210	SANDSTONE
210	220	220	SANDSTONE
220	230	230	SANDSTONE
230	240	240	SANDSTONE
240	250	250	SANDSTONE
250	260	260	SANDSTONE
260	270	270	SANDSTONE
270	280	280	SANDSTONE
280	290	290	SANDSTONE
290	300	300	SANDSTONE
300	310	310	SANDSTONE
310	320	320	SANDSTONE
320	330	330	SANDSTONE
330	340	340	SANDSTONE
340	350	350	SANDSTONE
350	360	360	SANDSTONE
360	370	370	SANDSTONE
370	380	380	SANDSTONE
380	390	390	SANDSTONE
390	400	400	SANDSTONE
400	410	410	SANDSTONE
410	420	420	SANDSTONE
420	430	430	SANDSTONE
430	440	440	SANDSTONE
440	450	450	SANDSTONE
450	460	460	SANDSTONE
460	470	470	SANDSTONE
470	480	480	SANDSTONE
480	490	490	SANDSTONE
490	500	500	SANDSTONE
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520	530	530	SANDSTONE
530	540	540	SANDSTONE
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800	810	810	SANDSTONE
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830	840	840	SANDSTONE
840	850	850	SANDSTONE
850	860	860	SANDSTONE
860	870	870	SANDSTONE
870	880	880	SANDSTONE
880	890	890	SANDSTONE
890	900	900	SANDSTONE
900	910	910	SANDSTONE
910	920	920	SANDSTONE
920	930	930	SANDSTONE
930	940	940	SANDSTONE
940	950	950	SANDSTONE
950	960	960	SANDSTONE
960	970	970	SANDSTONE
970	980	980	SANDSTONE
980	990	990	SANDSTONE
990	1000	1000	SANDSTONE