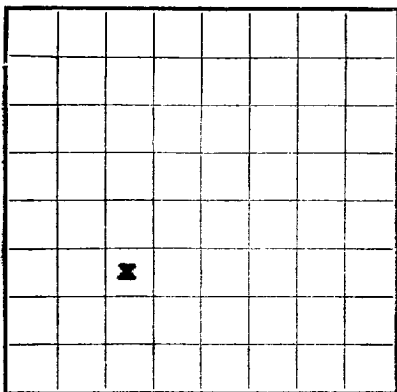


U. S. LAND OFFICE **Jicarilla Contract**
No. 146
SERIAL NUMBER _____
LEASE OR PERMIT TO PROSPECT _____

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 **Jicarilla Contract No. 146** Field **Otero Chacra** State **New Mexico**
Well No. **12** Sec. **4** T. **25N** R. **5W** Meridian **N.M.P.M.** County **Rio Arriba**
Location **1510** ft. **[N.]** of **3** Line and **175** ft. **[E.]** of **W** Line of **Section 4** Elevation **6660'**
(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 **R. M. Bauer, Jr.**
Signed **June 12, 1961** Title **Senior Petroleum Engineer**

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

Commenced drilling **June 11, 1961** Finished drilling **June 17, 1961**

OIL OR GAS SANDS OR ZONES
No. 1, from **3772** to **3782** No. 2, from **3782** to **3784**
No. 3, from **3784** to **3792** No. 4, from **3792** to **3875**
No. 5, from **3875** to **3875**

IMPORTANT WATER SANDS
No. 1, from **3772** to **3782** No. 2, from **3782** to **3784**
No. 3, from **3784** to **3792** No. 4, from **3792** to **3875**

CASING RECORD
Size casing Weight per foot Threads per inch Make Amount Kind of shoe Cut and pulled from From To Purpose

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	From	To	Purpose
8-5/8"	20.55	8	API	3772	Ball	3772			Bottom
4-1/2"	9.5	8	API	3782	Ball	3782			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"	266	225	Halliburton	2 plug	
4-1/2"	3874	300	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 **0** feet to **3875** feet, and from _____ feet to _____ feet

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

Completed as shut in Otero Chacra Field DATES Completed and shut in.

Well. **June 30, 1961** Put to producing **June 30, 1961**

The production for the first 24 hours was _____ barrels of fluid of which _____ % was oil; _____ %

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

If gas well, **MCF** per 24 hours **1065** Gallons gasoline per 1,000 cu. ft. of gas _____

Rock pressure, lbs. per sq. in. **850**

EMPLOYEES

D. S. Wisner, Driller **Stilka Priddy**, Driller

Leon Vestal, Driller **Pete Estes**, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	2900	2900	Undifferentiated sands and shales.
2900	2982	82	Pictured cliffs sands and shales.
2982	3772	790	Lewis shale.
3772	3875	103	Chacra sand.

(Tops from "E" log)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOCATE WITH CORRECTLY

A 10x10 grid with a small 'X' mark in the 7th column and 4th row from the top-left corner.

251AM 01100

HISTORY OF OIL OR GAS WELL

FORMATION RECORD				MUDGING AND CEMENTING RECORD			
FROM-	TO-	TOTAL FEET	FORMATION	Number sacks of cement	Net mud used	Mud gravity	Amount of mud used
0	200	200	Well formation and mud.				
200	250	50	Heavy white sand and shales.				
250	300	50	Heavy sand.				
300	350	50	Heavy sand.				
FORMATION RECORD FROM- TO- TOTAL FEET FORMATION				EMPILOYEES Driller Driller			
Hook pressure, lbs. per sq. in. 100 If gas well, gas ft. per 24 hours 100 Emulsion of water and sediment The production for the first 24 hours was Put to producing Completed and tested Test to Test to Test to				TOOLS USED Depth shot Depth cleaned out SHOOTING RECORD Size Weight used Explosive used Quantity Date Depth shot Depth cleaned out			
ADAPTERS—Material Heavy plug—Material Length Depth set PLUGS AND ADAPTERS				Size casing Weight Number sacks of cement Net mud used Mud gravity Amount of mud used MUDGING AND CEMENTING RECORD			