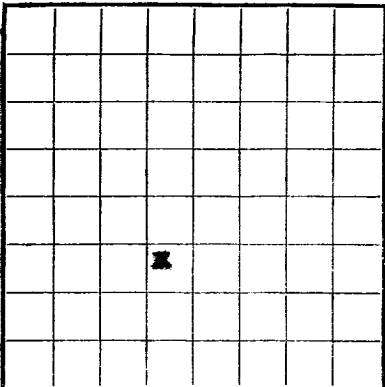




U. S. LAND OFFICE
SERIAL NUMBER **1-119-IND-6477**
LEASE OR PERMIT TO PROSPECT

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company **Pan American Petroleum Corporation** Address **P.O. Box 480, Farmington, New Mexico**
Lessor or Tract **Callages Canyon Unit** Field **Cha Cha Gallup State New Mexico**
Well No. **140** Sec. **29** T. **28N** R. **12W** Meridian **N.M.P.M.** County **San Juan**
Location **1915** ft. **N** of **2** Line and **2070** ft. **E** of **W** Line of **Section 29** Elevation **5565**
(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. **Fred L. Nabers, District Engineer**
Signed _____ ORIGINAL SIGNED BY **F. H. HOLLINGSWORTH**

Date **September 17, 1963** Title _____

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

Commenced drilling **August 2**, 19**63** Finished drilling **August 10**, 19**63**

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

No. 1, from **5203** to **5211 (G)** 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"	22.9	135	BJ 1 Plug						
4-1/2"	9.54	84	BJ 2 Stage						

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8-5/8"	229	135	BJ 1 Plug		
4-1/2"	5285	350	BJ 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 _____ feet to _____ feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to **5285** feet, and from _____ feet to _____ feet

DATES

Completed as shut in **Cha Cha Gallup Gas Well** Put to producing **Shut in**, 19____
September 3, 19**63** **September 3**, 19**63**
The production for the first 24 hours was _____ barrels of fluid of which _____ % was oil; _____ %
emulsion; _____ % water; and _____ % sediment. Gravity, °Bé. _____
If gas well, _____ cfs. per 24 hours Gallons gasoline per 1,000 cu. ft. of gas _____
Rock pressure, lbs. per sq. in. **6903**

EMPLOYEES

_____, Driller _____, Driller
Ira Ellis _____, Driller **Jim Speaker** _____, Driller
Earl Babcock _____ **Jim Babcock**

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	1233	1233	Surface Sands and Shales
1233	1400	167	Pictured Cliffs
1400	2132	732	Lewis Shale
2132	4000	1868	Mesaverde Group
4000	4854	854	Mancos Shale
4854	5203	349	Gallup Sands and Shales
5203	5213	10	Gallup Pay
5213	5285	72	Base Gallup

UNITED STATES
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A blank sheet of graph paper with a grid pattern. The grid consists of 10 columns and 8 rows of squares. A small black mark or smudge is visible near the center of the page, approximately at the intersection of the 6th column from the left and the 4th row from the bottom.

LOCATE WELL CORRECTLY

Commenced drilling _____ 1963 _____ Finished drilling _____ 1963 _____
The summary on this page is for the condition of the well at above date.

(Derote par G)

IMPORTANT WATER SANDS

CASING RECORD

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 attached or left in place, state the reason. 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 balling of shots.

HISTORY OF OIL OR GAS WELL

MUDDING AND CEMENTING RECORD

Case No.	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
175	100	30	31.5 lb/cu yd		
176	58	132	31.1 lb/cu yd		

PLUGS AND ADAPTERS

	Adapters—Material	Six	
	Floating plug—Material	Length	Depth set

SHOOTING RECORD

[illegible]

TOOLS USED

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

DATE	DESCRIPTION	AMOUNT	CHECK NO.	BANK	INITIALS
10/1/58	...	...	...	...	...
10/2/58	...	...	...	...	...
10/3/58	...	...	...	...	...
10/4/58	...	...	...	...	...
10/5/58	...	...	...	...	...
10/6/58	...	...	...	...	...
10/7/58	...	...	...	...	...
10/8/58	...	...	...	...	...
10/9/58	...	...	...	...	...
10/10/58	...	...	...	...	...
10/11/58	...	...	...	...	...
10/12/58	...	...	...	...	...
10/13/58	...	...	...	...	...
10/14/58	...	...	...	...	...
10/15/58	...	...	...	...	...
10/16/58	...	...	...	...	...
10/17/58	...	...	...	...	...
10/18/58	...	...	...	...	...
10/19/58	...	...	...	...	...
10/20/58	...	...	...	...	...
10/21/58	...	...	...	...	...
10/22/58	...	...	...	...	...
10/23/58	...	...	...	...	...
10/24/58	...	...	...	...	...
10/25/58	...	...	...	...	...
10/26/58	...	...	...	...	...
10/27/58	...	...	...	...	...
10/28/58	...	...	...	...	...
10/29/58	...	...	...	...	...
10/30/58	...	...	...	...	...
10/31/58	...	...	...	...	...

It was well cut per 24 hours emulsion; and _____% sediment.	The production for the first 24 hours was _____% compared to a test in Dec, 19 _____%
Gallons gasoline per 1,000 cu. ft. of gas (Gravity, °Bé. _____)	barrels of fluid of which _____% was oil. 19 _____%

EMPLOYEES

[illegible]

FORMATION RECORD

FROM-	TO-	TOTAL FEET	FORMATION
0	1001	1001	surface sand and gravel
1001	1002	1	stratified clays
1002	1003	1	loose shale
1003	1004	1	interbedded clay
1004	1005	1	loose shale
1005	1006	1	stratified sand and gravel
1006	1007	1	loose shale
1007	1008	1	base of fill