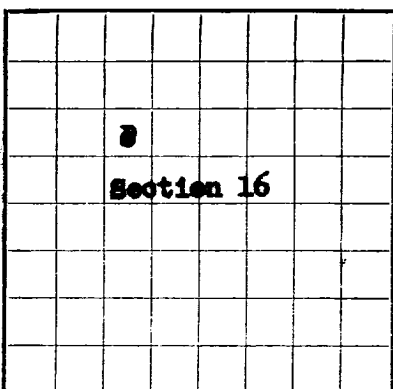
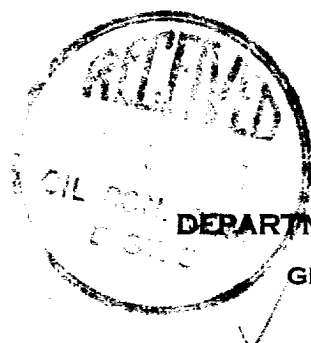




LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYJicarilla Apache
Tribe of Indians
Contrast #104
LEASE OR PERMIT TO PROSPECT

LOG OF OIL OR GAS WELL

Company Southern Union Gas Company Address 1801 Burt Bldg., Dallas, Texas
Lessor or Tract Jicarilla Field Tapacito State New Mexico
Well No. 5-E Sec. 16 T. 26N R. 4W Meridian N.M.P.M. County Rio Arriba
Location 1650 ft. S. of N. Line and 1585 ft. E. of W. Line of Section 16 Elevation 6808
(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 A. M. Wiederkehr Title Mgr., Exploration Dept.

Date August 27, 1956

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

Commenced drilling 5-20-, 19 56 Finished drilling 5-31-, 19 56

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 3469 to 3502 (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—	
<u>9-5/8</u>	<u>32.30</u>	<u>8HD</u>	<u>J-55</u>	<u>217</u>					<u>Surface Prod.</u>
<u>4-1/2</u>	<u>21.30</u>	<u>8HD</u>	<u>J-55</u>	<u>155</u>					

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
<u>9-5/8</u>	<u>198' MB</u>	<u>150</u>	<u>Halliburton</u>		
<u>4-1/2</u>	<u>3539' MB</u>	<u>150</u>	<u>Halliburton</u>		
<u>2-3/8</u>	<u>3457'</u>				

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
<u>Perforated 3469' to 3502' - Sand water fraced with 20,000 gals. water & 20,000# sand.</u>						

TOOLS USED

Rotary tools were used from -0- feet to 3540 feet, and from _____ feet to _____ feet
Cable tools were used from Cleaning out & fracing feet, and from _____ feet to _____ feet

DATES

8-3-, 19 56 Put to producing _____, 19 _____

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 36,600 MCF Gallons gasoline per 1,000 cu. ft. of gas _____Rock pressure, lbs. per sq. in. 1061# / 72 hrs.

EMPLOYEES

Empire States Drilling Co., Driller McKinney Drilling Company, Driller
Leon Messer, Driller R. E. Edwards, Driller

W. C. Bramble

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
<u>-0-</u>	<u>205</u>	<u>205</u>	<u>Shale</u>
<u>205</u>	<u>2360</u>	<u>2155</u>	<u>Sand & shale</u>
<u>2360</u>	<u>2502</u>	<u>142</u>	<u>Sand, shale & Bentonite</u>
<u>2502</u>	<u>2651</u>	<u>149</u>	<u>Sand & shale</u>
<u>2651</u>	<u>2731</u>	<u>80</u>	<u>Sand, shale & Bentonite</u>
<u>2731</u>	<u>3344</u>	<u>613</u>	<u>Sand & shale</u>
<u>3344</u>	<u>3410</u>	<u>66</u>	<u>Sand, shale & Bentonite</u>
<u>3410</u>	<u>3540 TD</u>	<u>130</u>	<u>Sand & shale</u>
<u>Pictured Cliffs 3460'</u>			

FORMATION RECORD—Continued

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Section 10

Date August 27, 1952 _____
 Signed _____
 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.
 Location 1952 ft. 2' of N. line and 1950 ft. 10' of W. line of Section 15, T. 22 N., R. 10 E., S. 4 E.,
 Well No. 5-11-52 Sec. 15, T. 22 N., R. 10 E., S. 4 E.
 Based on Town _____
 Township _____
 County _____
 State New Mexico
 Company Southern Union Gas Company
 Address 1901 First Ave., Dallas, Texas

Completed drilling..... 5-20-1936 Finished drilling..... 5-21-1936

(b) (5) ACP, (b) (5) DPP)

No. 1 from _____ to _____ 3000 (b) 3000
No. 2 from _____ to _____
No. 3 from _____ to _____

.....			
.....			

[illegible]

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

FORMATION RECORD		FORMATION RECORD		FORMATION RECORD	
FORMATION	TOTAL FEET	FORMATION	TOTAL FEET	FORMATION	TOTAL FEET
Shale	200	Shale	200	Shale	200
Sand & shale	2100	Sand & shale	2100	Sand & shale	2100
Sand, shale & bentonite	100	Sand, shale & bentonite	100	Sand, shale & bentonite	100
Sand & shale	100	Sand & shale	100	Sand & shale	100
Sand, shale & bentonite	50	Sand, shale & bentonite	50	Sand, shale & bentonite	50
Sand & shale	50	Sand & shale	50	Sand & shale	50
Sand, shale & bentonite	50	Sand, shale & bentonite	50	Sand, shale & bentonite	50
Sand, shale & bentonite	50	Sand, shale & bentonite	50	Sand, shale & bentonite	50
Sand & shale	150	Sand & shale	150	Sand & shale	150