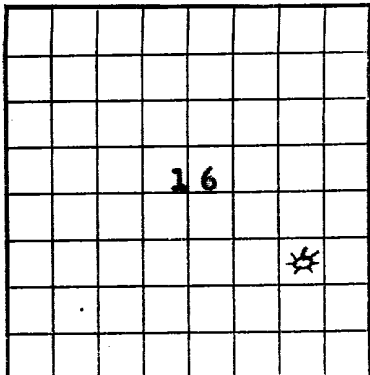


Form 9-330

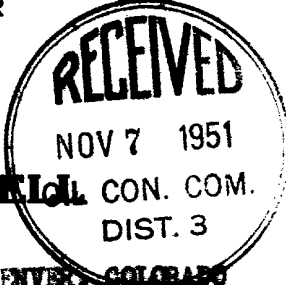
U. S. LAND OFFICE SANTA FE
SERIAL NUMBER 078872 A
LEASE OR PERMIT TO PROSPECT _____



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BOLACK #14
C SW NE SE



LOG OF OIL OR GAS WELL

Company THE FRONTIER REFINING COMPANY Address 410 BOSTON BLDG., DENVER, COLORADO
Lessor or Tract BOLACK-GOVERNMENT Field W. KUTZ CANYON State NEW MEXICO
Well No. 14 Sec. 16 T. 27N R. 11W Meridian N.M.P.M. County SAN JUAN
Location 1650 ft. ^(N.) of S Line and 990 ft. ^(W.) of 3 Line of Section 16 Elevation _____
(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 Denman S. Galbraith

Date November 2, 1951

Title Denman S. Galbraith, Geologist

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

Commenced drilling 8/30, 1951 Finished drilling 9/1, 1951

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

No. 1, from 1926 to 1990 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"	29.3	8	API	1926	plug	Surface			Surface
5-1/2"	19.6	8	API	1990	plug	1926			Production
1"	12.7	8	API	1990	plug	1990			1990' Line
HISTORY OF OIL OR GAS WELL									

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8-5/8"	108' KB	90 sacks	plug	-	-
5-1/2"	1960' KB	160 sacks	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
4x20	3	Liquid Nitro	60 gts	9/9/51	1913-1998' KB	1998' KB

TOOLS USED

Rotary tools were used from 0 feet to 1990' KB feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

Completed 9/15, 1951 Put to producing Start in, 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 3,460,000 Gallons gasoline per 1,000 cu. ft. of gas _____
Rock pressure, lbs. per sq. in. 460#

EMPLOYEES

Camden Drilling Company _____, Driller _____, Driller
English Drilling Company _____, Driller _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	851	851	Sand and shale. Top Ojo Alamo at 851'.
851	945	94	Sand with shale streaks. Top Kirtland shale at 945'.
945	1946	1001	Shale and sand with trace of coal. Top Pictured Cliffs at 1946'.
1946	1990	44	Sand with shale streaks.
	1990' KB TD	(CABLE TOOL TD)	

(OVER)

