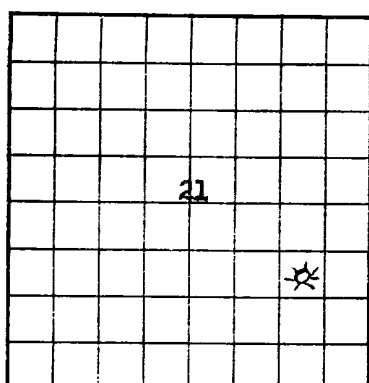
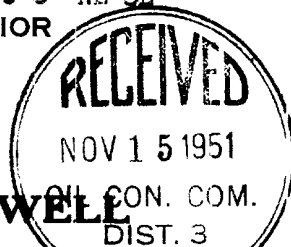




LOCATE WELL CORRECTLY

U. S. LAND OFFICE SANTA FE
SERIAL NUMBER 078872-A
LEASE OR PERMIT TO PROSPECTUNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYBolack #2
C S N E SE

LOG OF OIL OR GAS WELL

Company The Frontier Refining Company Address 410 Boston Bldg., Denver, Colo.
Lessor or Tract Bolack-Government Field W. Kutz Canyon State New Mexico
Well No. 2 Sec. 21 T. 27N R. 11W Meridian N.M.P.M. County San Juan 6355' Grd.
Location 1650 ft. N. of S. Line and 990 ft. W. of E. Line of Section 21 Elevation 6364' KB
(Terrick 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 Donnan S. GalbraithDate November 8, 1951 Title Donnan S. Galbraith, Geologist

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

Commenced drilling 5/28, 1951 Finished drilling 7/5, 1951

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 1986 to 2095' 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>40</u>	<u>8</u>	<u>API</u>	<u>100'</u>					<u>Surface</u>
<u>5 1/2"</u>	<u>26</u>	<u>8</u>	<u>API</u>	<u>1986'</u>					<u>Production</u>
<u>1 1/2"</u>	<u>1.77</u>	<u>8</u>	<u>API</u>	<u>2095'</u>					<u>Production</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>109'</u> KB	<u>85 sacks</u>	<u>plug</u>	<u>-</u>	<u>-</u>
<u>5 1/2"</u>	<u>1992'</u> KB	<u>150 sacks</u>	<u>plug</u>	<u>-</u>	<u>-</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>4 x 20</u>	<u>7</u>	<u>Liquid Nitro</u>	<u>140 qts.</u>	<u>7/27/51</u>	<u>2095'</u>	<u>2095'</u>
		<u>Jellied Nitro</u>	<u>120 qts.</u>			
		<u>Total</u>	<u>260 qts.</u>			

TOOLS USED

Rotary tools were used from 0 feet to 2095' feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

Completed 7/28, 1951 Put to producing Shut 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 260,000 Gallons gasoline per 1,000 cu. ft. of gas _____Rock pressure, lbs. per sq. in. 460

EMPLOYEES

McConnell Drilling Company, Driller _____, Driller
_____, Driller _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
<u>0</u>	<u>870</u>	<u>870</u>	<u>Sand and shale. Torrejon-Buero at surface. Ojo Alamo at 870'.</u>
<u>870</u>	<u>998</u>	<u>128</u>	<u>Sand with shale streaks. Top Kirtland shale at 998'.</u>
<u>998</u>	<u>1970</u>	<u>972</u>	<u>Sand and shale with minor amounts of coal. Top of Pictured Cliffs formation at 1970'.</u>
<u>1970</u>	<u>1986</u>	<u>16</u>	<u>Silty and shaly sand (?). Top of Pictured Cliffs sandstone at 1986'.</u>
<u>1986</u>	<u>2095</u>	<u>109</u>	<u>Sand with silty shale streaks.</u>
	<u>2095' KB</u>	<u>TD</u>	

(OVER)

LOGS WILL BE RECORDED CONTINUOUSLY



LOG OF OIL OR GAS WELL

FROM	TO	TOTAL FEET	FORMATION
			FORMATION
			FORMATION RECORD
			EMPLOYEES
			DATES
			TOOLS USED
			SHOOTING RECORD
			PISTOLS AND ADAPTERS
			MUDDING AND CEMENTING RECORD