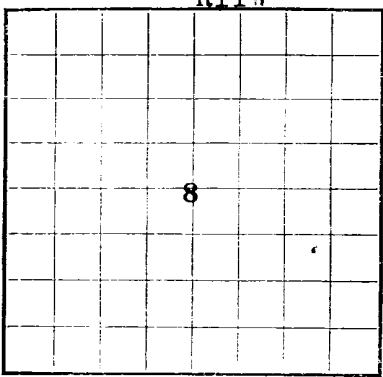




U. S. LAND OFFICE Santa Fe
SERIAL NUMBER SF 080382A
LEASE OR PERMIT TO PROSPECT

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company The Frontier Refining Co. Address 4040 E. Louisiana Ave. Denver 22, Colorado
Lessor or Tract Schwerdtfeger Field Basin Dakota State New Mexico
Well No. 2-D Sec. 8 T.27N R. 11W Meridian N.M.P.M. County San Juan
Location 1850 ft. N of S. Line and 790 ft. W of E Line of Sec. 8 Elevation 6182' (KB)
(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 _____
Date March 15, 1961 Title Petroleum Engineer

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

Commenced drilling 11-12, 1960 Finished drilling 11-26, 1960

OIL OR GAS SANDS OR ZONES

(G) (Denote gas by G)
No. 1, from 6444' to 6565' 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"	24.0	8Rd	Spang	192'	None	-	-	-	Surface
4 1/2"	11.6	8Rd	CF&I	6582'	Float	-	6444	6565	Oil String
2 3/8"	4.70	8Rd	J&L	6420'	None	-	-	-	Prod String

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8 5/8"	204'	175	Pump	Water	Water
4 1/2"	6593'	225	Pump	9.2#/gal	-

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 6600 feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES Waiting on pipeline connection.

1-26/27, 1961 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. 52.2° API

If gas well, cu. ft. per 24 hours 1,519,000* Gallons gasoline per 1,000 cu. ft. of gas _____

Rock pressure, lbs. per sq. in. 2,200 SI *22/64" choke

EMPLOYEES 500 psi back pressure 1.0 bbl distillate/hour

J. W. Baker, Driller _____, Driller

Alex Cowan, Driller _____ F. C. Seale, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
			Kirtland 883'
			Fruitland 1710'
			Pictured Cliffs 1888'
			Chacra 2820'
			Pt. Lookout 4260'
			Mancos 4626'
			Gallup 5498'
			Huerfano 5850'
			Sanastee 5990'
			Greenhorn 6342'
			Graneros Shale 6394'
			1st Graneros S.S. 6424'
			2nd Graneros S.S. 6444'
			Dakota "A" 6488'
			Total Depth* 6594'
			P.B.T.D. 6578'
			*Schlumberger Induction-Electrical Log measurement. Driller total depth was 6600'.

FROM-	TO-	TOTAL FEET	FORMATION
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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 "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If pings or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.