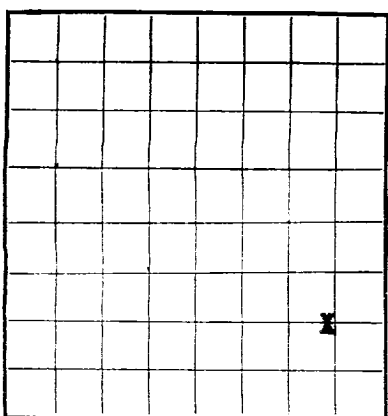


UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company Redfern & Hard, Inc. Address Box 1747, Midland, Texas
Lessor or Tract Largo Spur Field Devils Fork State New Mexico
Well No. A-1 14 24N 7W Meridian 121PM County Rio Arriba
Location 1690 ft. S. of Line and 790 ft. E. of Line of Sec 14 Elevation 6860
(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.

Date 11-21-60 Signed Original signed by T. A. Dugan
Title Consulting Engineer

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

Commenced drilling 10-25, 1960 Finished drilling 11-8, 1960

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 5776 to 5784 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	24.4	8	Lucas	200'	Open	Surface			Drilling
4 1/2	58.46	15	Lucas	150'	Pump plug	5776			Drilling

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8-5/8	217	175	Pump plug		
4 1/2	58.46	150			

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
8-5/8	217	175	27,721 gal grade			
4 1/2	58.46	150				

TOOLS USED

Rotary tools were used from surface to 5550 feet, and from to feet
Cable tools were used from to feet, and from to feet

DATES

11-19, 1960 Put to producing, 1960
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 1,064,000 Gallons gasoline per 1,000 cu. ft. of gas
Rock pressure, lbs. per sq. in. 1565

EMPLOYEES

Whigham Drig Co, Driller Jack Thornton, Driller
Thomas Whigham, Contractor, Driller
Tom Dugan, Engineer

FROM	TO	TOTAL FEET	FORMATION
			Pictured Cliffs 2265
			Lewis Shale 2340
			Chacara 3065
			Cliffhouse 3780
			Point Lookout 4362
			Manceos 4715
			Gallup 5538

LOCATION RECORD—Continued

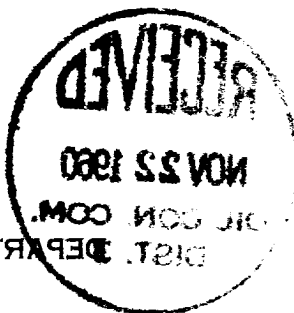
03 000000

 LEASE OR PERMIT TO PROSPECT

 SERIAL NUMBER

 U.S. LAND OFFICE

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

[illegible]

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

[illegible]

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 _____
Original signed by J. A. Cooper _____

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

Commenced drilling	10-25	10-26	Finished drilling	10-27	10-28
10-25	10-26	10-27	10-28	10-29	10-30

Date _____ Title _____

OIL OR GAS SANDS OR ZONES

DATE		to		from		(1) Remains due by (2)	
No. 1.	from			No. 4.	from		to
No. 2.	from			No. 5.	from		to
No. 3.	from			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

[illegible]

HISTORY OF OIL OR GAS WELL

U. S. GOVERNMENT PRINTING OFFICE 10-40004-2

MUDDING AND CEMENTING RECORD

Serial	Where set	Number sacks of cement	Method used	Kind Gravity	Amount of mud used
1	200	150	Hand - trowel		
2	200	150	Hand - trowel		

PLUGS AND ADAPTERS

Adapters - Material	Size	Depth set
Bearing pins - Material	Length	

SHOOTING RECORD

Sl. No.	Depth used	Explosive used	Quantity	Date	Depth shot	Depth cleared out
55,000	2770-2780	4000 lbs				

TOOLS USED

feet	to	feet	from	and	feet	more	to	feet	
feet	to	feet	from	and	feet	more	to	feet	

DATE

Rock pressure, lbs. per sq. in.	15.1-16.5
If gas well, cu. ft. per 24 hours	1,000-1,500
Emulsion; % water; and % sediment.	100%
The production for the first 24 hours was	100%
Put to producing	10

EMPLOYEES

[illegible]

INFORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
			2532
			4712
			4342
			3771
			3002
			2340
			2532

FORMATION RECORD—Continued (OVER)

1405A-1