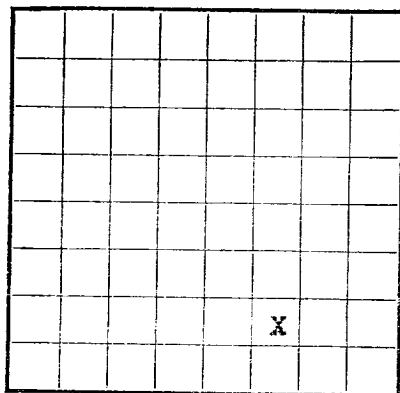


U. S. LAND OFFICE Jicarilla Tribal
SERIAL NUMBER Con. #6, Tract
LEASE OR PERMIT TO PROSPECT #121

LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company El Paso Natural Gas Co. Address Box 997, Farmington, New Mexico
Lessor or Tract Jicarilla Field Wildcat State New Mexico
Well No. 2-E Sec. 19 T. 25 R. 4W Meridian NPM County Rio Arriba
Location 890 ft. N. of 8 Line and 1550 ft. W. of 8 Line of Section 19 Elevation 7340'
(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 W. F. CrowlDate June 14, 1956Title Petroleum Engineer

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

Commenced drilling May 2, 1956 Finished drilling May 14, 1956

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 3572 to 3637 (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>25.4</u>	<u>P.E.</u>	<u>4.1</u>	<u>121'</u>	<u>Howe</u>				<u>Surface</u>
<u>5 1/2"</u>	<u>19.0</u>	<u>B.B.</u>	<u>4.1</u>	<u>1050'</u>	<u>Howe</u>				<u>Production</u>
<u>2 1/2"</u>	<u>4.6</u>	<u>B.B.</u>	<u>4.1</u>	<u>355'</u>	<u>Howe</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>133'</u>	<u>100</u>	<u>Circulated</u>		
<u>5 1/2"</u>	<u>3660'</u>	<u>150</u>	<u>Single Stage</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

TOOLS USED

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

DATES

_____ May 15, 1956 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 13,144,000 A.O.F. Ch. Volume 4960 Gallons gasoline per 1,000 cu. ft. of gas _____Rock pressure, lbs. per sq. in. 1023

EMPLOYEES

_____, Driller _____, Driller
_____, Driller _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	2828	2828	Tan to gry cr-grn ss interbedded w/gry sh.
2828	3195	367	Ojo Alamo ss. White cr-grn s.
3195	3426	231	Kirtland form. Gry sh interbedded w/tight gry fine-grn ss.
3426	3572	146	Fruitland form. Gry carb sh, scattered coals coals and gry, tight, fine-grn ss.
3572	3637	65	Pictured Cliffs form. Gry, fine-grn, tight, varicolored soft ss.
3637	3660 T.D.	23	Lewis formation. Gry to white dense sh w/silty to shaly ss breaks.

U.S. Land Office
SPECIAL INQUIRY
RECEIVED AT DENVER CO. 1901

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

00J 00 20 JO RC SAZ WEF

[illegible]

J. Biol. Chem. 267:1098-1104, 1992

The first of these is the fact that the $\mathbb{Z}_2$ -invariant is not a topological invariant. This is because the $\mathbb{Z}_2$ -invariant is not a homotopy invariant. For example, the $\mathbb{Z}_2$ -invariant of a sphere is 1, while the $\mathbb{Z}_2$ -invariant of a torus is 0. This means that the $\mathbb{Z}_2$ -invariant is not a topological invariant.

1. The condition of the road at the time of the accident was such that it was not possible to see the car in the distance.

NOT OR ONE EVIDENCE OF

③ 16:00 ~ 16:30

.....	most 10%		most 10%
.....	most 10%		most 10%
.....	most 10%		most 10%

CONFIDENTIAL

5-18-66 Fertilizer with Lime HATCO, L.B. 300g/l., 4900/45, C.O.D.P. 3650.
Perforated 3616-3632, 3572-3596. Water treated with 39,751 gallons water
and 60,000# sand. Flushed with 300 Gallons. Maximum pressure 2300#, BOP
2300#, average treating pressure 2000#. Injection rate 49.5 bblm/min.

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of reworking, 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 pigs or bridges were put in to test for water, state kind of material used, position, and results of pumping or balling.

HISTORY OF OIL OR GAS WELL

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

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