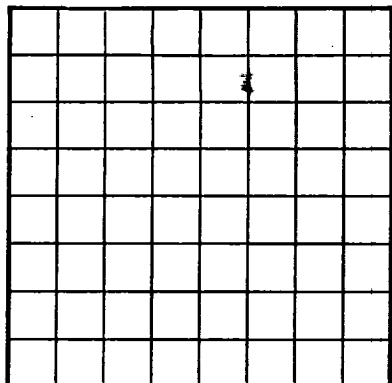


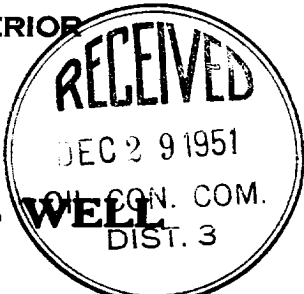
Form 2-3

U. S. LAND OFFICE Santa Fe
SERIAL NUMBER 078578-A
LEASE OR PERMIT TO PROSPECT Howell



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



LOG OF OIL OR GAS WELL

Company John Production Company Address P.O. Box 997, Farmington, New Mexico
Lessor or Tract Howell Field Blanco La Plata State New Mexico
Well No. 3-K Sec. 15 T. 37N R. 27W Meridian N.M.P.M. County San Juan
Location 72 ft. N. of 1 Line and 145 ft. W. of 2 Line of Sec. 15 Elevation 5044
(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 ORIGINAL SIGNED E. J. COEL

Date December 11, 1951 Title Petro. Engr.

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

Commenced drilling 10-16, 1951 Finished drilling 11-22, 1951

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

No. 1, from 2700 to 2779 (G) No. 4, from 4954 to 5035 (G)
No. 2, from 4461 to 4573 (G) No. 5, from _____ to _____
No. 3, from 4573 to 4954 (G) 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>26</u>	<u>8</u>	<u>Young</u>	<u>2700</u>	<u>API</u>	<u>2700</u>			<u>Surface</u>
<u>5</u>	<u>15</u>	<u>8</u>	<u>Young</u>	<u>4461</u>	<u>API</u>	<u>4461</u>			<u>Production</u>
<u>2</u>	<u>4.65</u>	<u>8</u>	<u>Young</u>	<u>5073</u>	<u>API</u>	<u>5073</u>			<u>Prod. log.</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>2700</u>	<u>190</u>	<u>Circulated</u>		
<u>5</u>	<u>4430</u>	<u>300</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
<u>4 1/2</u>	<u>Reg</u>	<u>ENG</u>	<u>1460</u>	<u>11-23-51</u>	<u>4483-5205</u>	<u>5210</u>

TOOLS USED

Gas Circulation

Rotary tools were used from _____ feet to 4430 feet, and from 4430 feet to 5210 feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

12-12, 51 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 5,800,000 Gallons gasoline per 1,000 cu. ft. of gas _____

Rock pressure, lbs. per sq. in. 1,997

EMPLOYEES

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

FORMATION RECORD

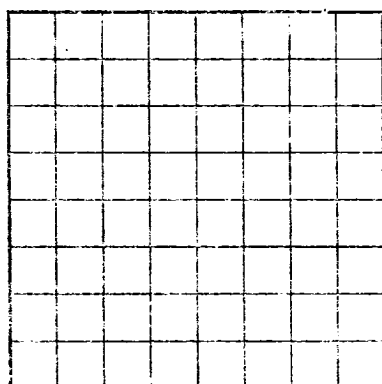
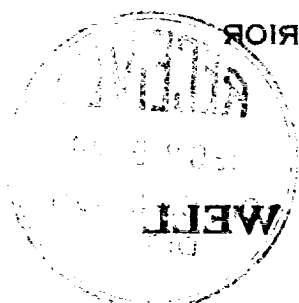
FROM—	TO—	TOTAL FEET	FORMATION
	<u>586</u>	<u>586</u>	<u>Thin coarse gr ss w/ thin sh bks.</u>
<u>586</u>	<u>1062</u>	<u>376</u>	<u>Variag shales w/ thin ss bks.</u>
<u>1062</u>	<u>1662</u>	<u>600</u>	<u>Thin to gry coarse gr ss interbedded w/ gry shales.</u>
<u>1662</u>	<u>1712</u>	<u>50</u>	<u>Ojo Alamo ss w/ coarse gr ss. T/Ojo 1662.</u>
<u>1712</u>	<u>2392</u>	<u>680</u>	<u>Kirtland frm, gry shale interbedded w/ tight gry fine gr ss. T/Kirt 1712/</u>
<u>2392</u>	<u>2700</u>	<u>308</u>	<u>Fruitland frm, gry carb shales scattered coals & gry tight fine gr ss. T/Fruit 2392.</u>
<u>2700</u>	<u>2779</u>	<u>79</u>	<u>Pictured Cliffs frm, gry fine gr tight varie soft ss. T/PC 2700.</u>
<u>2779</u>	<u>4461</u>	<u>1582</u>	<u>Lewis frm, gry to blk waste shale w/ sil to shaly ss streaks. T/Lewis 2779.</u>
<u>4461</u>	<u>4573</u>	<u>117</u>	<u>Cliff House, ss gry fine gr dense sil ss. T/CH 4461.</u>
<u>4573</u>	<u>4954</u>	<u>376</u>	<u>Manosco frm, gry fine gr ss, carb shales & coal. Top Manosco 4573.</u>
<u>4954</u>	<u>5035</u>	<u>81</u>	<u>Pt. Lookout frm, gry very fine sil ss w/ frequent shale breaks. T/PL 4954.</u>
<u>5035</u>	<u>5210 TD</u>	<u>175</u>	<u>Manosco frm, gry carb shales. T/Manosco 5035.</u>

UNITED STATES

DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL



LOCATE WELL CORRECTLY

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.

WELL NO. _____

Sec. _____ T. _____ R. _____

Location _____ ft. N. _____ ft. E. _____ ft. of _____ line and _____ ft. _____

Elevation _____

State _____

County _____

Address _____

Company _____

1300 J. E. D3M012 JAN12/20

_____ Date _____ Title _____

The summary on this page is for the condition of the well as above date _____

_____ Corporation and Well Name _____

[illegible]

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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 plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

HISTORY OF OIL OR GAS WELL

U. S. GOVERNMENT PRINTING OFFICE

STUDYING AND RESEARCHING IN THE

[illegible]

PLUGS AND COILERS

Heaving plug—Material	Length	Weight
Adapters—Material	Size	

PROCESS CYTOCHRE

Size	Shell used	Exposure used	Exposure	Time	Depth used	Depth element used

0320 2100T

Rotary tools were used from	feet to	feet, and from	feet to
Chisel tools were used from	feet to	feet, and from	feet to

अभ्यास

Rock pressure, lbs. per sq. in.	
Gas well, cu. ft. per 24 hours	
Emulsion, % water and % sediment	
The production for the first 24 hours was	
	19

82Y049412

Driver		Driver	
Driver		Driver	

FORMATION RECORD

[illegible]

FORMATION RECORD—Continued