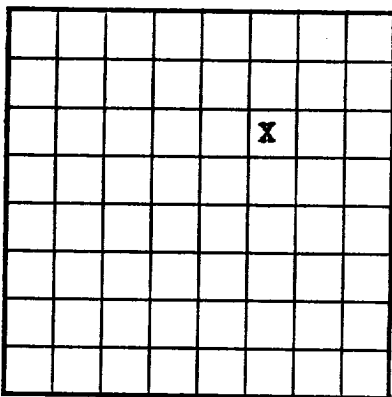
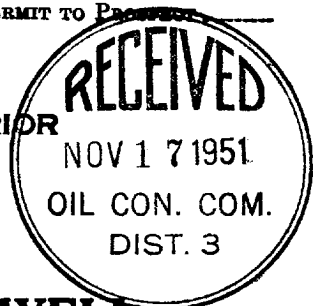


U. S. LAND OFFICE Santa Fe
SERIAL NUMBER 078387
LEASE OR PERMIT TO PRODUCE

LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company San Juan Production Company Address P.O. Box 997, Farmington, New Mexico
Lessor or Tract Howell Field Wildcat State New Mexico
Well No. 4-D Sec. 33 T. 31N R. 8W Meridian N. M. P. M. County San Juan
Location 1650 ft. [S.] of N. Line and 1650 ft. [W.] of E. Line of Section 33 Elevation 6272
(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. ORIGINAL SIGNED E. J. COEL

Signed _____

Date November 1, 1951 Title E. J. Coel
Petroleum Engineer

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

Commenced drilling August 29, 1951 Finished drilling October 12, 1951

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 3120 to 3235 (G) No. 4, from 5460 to 5610 (G)
No. 2, from 4838 to 5042 (G) No. 5, from _____ to _____
No. 3, from 5042 to 5460 (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—	
9-5/8"	36	8	Natl. Spring	252	Halib.				Surface
7	20	8	Spring	1611	Halib.				Production
2	4.7	8	Young	5518					Prod. Tubing

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
9-5/8"	263	150	Circulated		
7	4855	300	Single Stage		

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
Quartz	Regular	O.W.E.	1425	10-12	4913-5563	5563

TOOLS USED

Rotary tools were used from 0 feet to 4920 feet, and from 4920 feet to 5610 feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

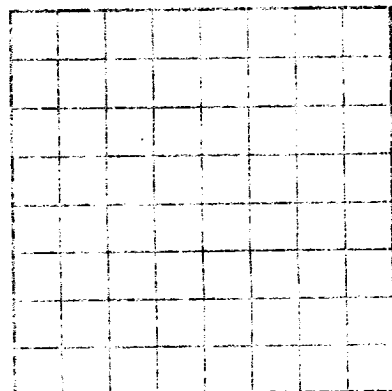
October 29, 1951 Put to producing _____, 19____
The production for the first 24 hours was _____ barrels of fluid of which _____ % was oil; _____ %
emulsion; _____ % water; and _____ % sediment. Gravity, °Bé. _____
If gas well, cu. ft. per 24 hours 3,540,000 Gallons gasoline per 1,000 cu. ft. of gas _____
Rock pressure, lbs. per sq. in. 1098

EMPLOYEES

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

FORMATION RECORD

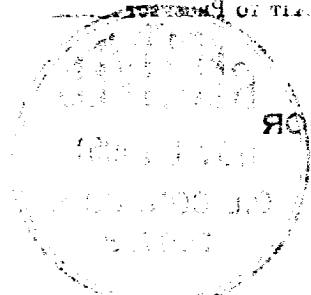
FROM—	TO—	TOTAL FEET	FORMATION
0	630	630	Tan coarse-grained sandstone w/shale breaks.
630	900	270	Variegated shales w/thin sandstone breaks.
900	2110	1210	Tan to gray coarse-grained sandstone w/shale breaks.
2110	2235	125	Ojo Alamo sandstone-white coarse-grained sandstone. Top Ojo Alamo 2110.
2235	2810	575	Kirtland formation-gray shales interbedded w/tight fine-grained sandstone. Top Kirtland 2235.
2810	3120	310	Fruitland formation-gray carbonaceous shales & coals w/fine-grained sandstone. Top Fruitland 2810.
3120	3235	115	Pictured Cliffs formation-gray fine dense argil sandstone, salt & pepper w/variegated colors. Top Pictured Cliffs 3120/
3235	4838	1603	Lewis formation-gray to white dense sandstone. Top Lewis 3235.
4838	5042	204	Cliff House formation-gray fine-grained sand, silty to shaley. Top Cliff House 4838.
5042	5460	418	Mamre formation-gray fine-grained sand, carbaceous shales & coals. Top Mamre 5042.
5460	5610 T.D.	150	Point Lookout formation-gray fine-grained sandstone w/shale breaks. Top Point Lookout 5460.



LOCATE WELL ON SECTION

LOG OF OIL OR GAS WELL

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



Location of well on section and line of section. The information given here is a complete and correct record of the well and all work done thereon so far as can be determined from all available records. (ORIGINAL SIGNED BY LOGGERS)

The summary on this page is for the location of the well as above data.

OIL OR GAS SANDS OR ZONES

No. 1 from ... to ...
No. 2 from ... to ...
No. 3 from ... to ...

IMPORTANT WATER SANDS

No. 1 from ... to ...
No. 2 from ... to ...

CASING RECORD

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 "struck" or left in the well, give its size and location. If the well has been dynamited, give date, 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

FORMATION RECORD		EMPLOYEES		DATES		TOOLS USED		SHOOTING RECORD		ADDITIONAL RECORD	
FROM	TO	Driller	Driller								
100	110										
110	120										
120	130										
130	140										
140	150										
150	160										
160	170										
170	180										
180	190										
190	200										
200	210										
210	220										
220	230										
230	240										
240	250										
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330	340										
340	350										
350	360										
360	370										
370	380										
380	390										
390	400										
400	410										
410	420										
420	430										
430	440										
440	450										
450	460										
460	470										
470	480										
480	490										
490	500										
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800	810										
810	820										
820	830										
830	840										
840	850										
850	860										
860	870										
870	880										
880	890										
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990	1000										