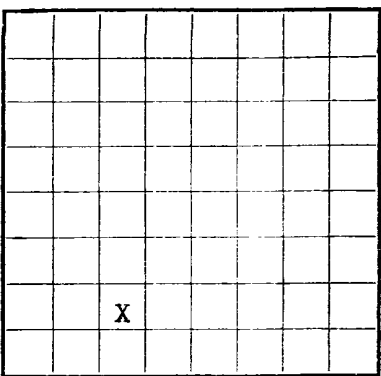


U. S. LAND OFFICE Santa Fe
SERIAL NUMBER 079051
LEASE OR PERMIT TO PROSPECT 14-06-001-1051



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company El Paso Natural Gas Company Address Box 997, Farmington, New Mexico
Lessor or Tract San Juan 28-6 Unit Field Blanco State New Mexico
Well No. 39 Sec. 5 T27N R. 6W Meridian NMPM County Rio Arriba
Location 1055 ft. [N.] of S. Line and 1465 ft. [E.] of W. Line of Section 5 Elevation 6509'
(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 D.C. Johnston
Date December 2, 1955 Title Petroleum Engineer

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

Commenced drilling October 17, 1955 Finished drilling November 1, 1955

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 3165 to 3248 G No. 4, from 5375 to 5565 G
No. 2, from 4812 to 4941 G No. 5, from _____ to _____
No. 3, from 4941 to 5375 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"	25.4#	P.E.	S.W.	160'	Howco				Surface
7"	20	8 RD	J-55	3260'	Baker				Intermediate
5 1/2"	15.50	8 RD	J-55	5501'	Baker				Prod. Csg.
2"	r.7#	8 RD	J-55	5421'					Prod. Tbg.

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
9 5/8"	173'	125	Circulated		
7"	3270'	250	Single Stage		
5 1/2"	5531'	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
		See Well History.				

TOOLS USED

Gas Drilled

Rotary tools were used from 0 feet to 3270 feet, and from 3270 feet to 5531 feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

November 9, 1955 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 5,100,000 Gallons gasoline per 1,000 cu. ft. of gas _____

Rock pressure, lbs. per sq. in. 1063

EMPLOYEES

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

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	425	425	Tan cr-grn ss w/thin sh breaks.
425	1316	891	Variegated sh w/thin ss breaks.
1316	2405	1089	Tan to gry cr-grn ss interbedded w/gry sh.
2405	2552	147	Ojo Alamo ss. White cr-grn s.
2552	2880	318	Kirtland form. Gry sh interbedded w/tight gry fine-grn ss.
2880	3165	285	Fruitland form. Gry carb sh, scattered coals coals and gry, tight, fine-grn ss.
3165	3248	83	Pictured Cliffs form. Gry, fine-grn, tight, varicolored soft ss.
3248	4812	1564	Lewis formation. Gry to white dense sh w/silty to shaly ss breaks.
4812	4941	129	Cliff House ss. Gry, fine-grn, dense sil ss.
4941	5375	434	Menefee form. Gry, fine-grn s, carb sh & coal.
5375	5505	130	Point Lookout form. Gry, very fine sil ss w/frequent sh breaks.
5505	5531 T.D.	26	Mancos formation. Gry carb sh.

FORMATION RECORD—Continued

[illegible]

HISTORY OF OIL OR GAS WELL

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.

Nov. 6, 1955, T.D. 5531', P.B. 5520'. Water fractured Point Lookout formation. Interval treated 5375' - 5393', 5432' - 5454' & 5490' - 5506' (through perforations 4 holes/ft.) Treated down casing with 60,000 gallons water and 60,000# regular sand. BDP 1800 psi, maximum pressure 1700 psi, average treating pressure 1650 psi, Average injection rate 40 bbls./min. Flushed w/5600 gallons water. No gages natural.

November 7, 1955. T.D. 5531', plug-back depth 5300'. Water fractured Cliff House formation. Interval treated 4807' - 4827', 4840' - 4852', & 4896' - 4940 (thru perf. 4 holes/ft.) Treated down casing with 58,500 gallons water and 60,000# fine sand. BDP 1500 psi, maximum treating pressure 1800 psi, average treating pressure 1650 psi. Average injection rate 42 bbls./min. Flushed with 5200 gallons water. No gages natural.

DATE OF COPY: 10/10/2014

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WUENEN, 1992.

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1. *Chlorophyll a* and *Chlorophyll b* were determined by the method of Arar and Collins (1971) using a Shimadzu 1010 spectrophotometer.