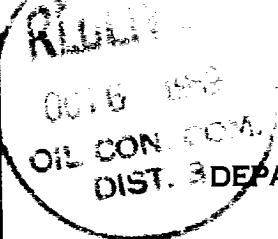


LOCATE WELL CORRECTLY



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

U. S. LAND OFFICE Santa Fe
SERIAL NUMBER 078989
LEASE OR PERMIT TO PROSPECT

U. S. GEOLOGICAL SURVEY
FARMINGTON, NEW MEXICO

LOG OF OIL OR GAS WELL

Company El Paso Natural Gas Company Address Box 997, Farmington, New Mexico
Lessor or Tract San Juan 31-6 Unit Field Willcat Dakota State New Mexico
Well No 16-33(ND) Sec. 33 T. 31N R. 6W Meridian N.M.P.M. County Rio Arriba
Location 850 ft. [N.] of S. Line and 1840 ft. [E.] of W. Line of Section 33 Elevation 6500
(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 September 30, 1959 Signed ORIGINAL SIGNED J.J. ILLERSON Title Petroleum Engineer

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

Commenced drilling 6-15, 19 59 Finished drilling 7-24, 19 59

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

No. 1, from 3449 to 3558 (G) No. 4, from 5703 to 5879 (G)
No. 2, from 5330 to 5457 (G) No. 5, from 6850 to 7342 (G)
No. 3, from 5457 to 5703 (G) No. 6, from 7895 to 8182 (G)

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-	
13 3/8	48	8 Rd.	J-55	324	Reeve	0-1998			Surface
9 5/8	40	8 Rd.	J-55	275	Baker	0-1998			Intermediate
7"	26	8 Rd.	N-80	397	Baker	0-1998			Prod. Liner
7"	23	8 Rd.	N-80	289	Baker	0-1998			Prod. Liner
7"	23	8 Rd.	J-55	5052	Baker	0-1998			Prod. Liner
5"	18	8 Rd.	N-80	517	Baker	0-1998			Prod. Tag.
2"	4.7	8 Rd.	N-80	517	Baker	0-1998			Siphon

CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
1 1/4	2.4	10 Grade "A"	7714		
13 3/8	338	477	Circulated		
9 5/8	3573	1670	2-Stage & Squeeze		
7"	1997-7736	1330	Single Stage		
5"	7661-8178	75	Circulated		

PLUGS AND ADAPTERS

Heaving plug—Material _____ Length _____ Depth set _____
Adapters—Material _____ Size Gilbertson "AG" packer @ 7627'

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
See Well History						

TOOLS USED

Rotary tools were used from 0 feet to 3573 feet, and from 3573 feet to 7743 feet
Cable tools were used from _____ feet to _____ feet, and from 7743 feet to 8182 feet

DATES

Put to producing _____, 19 _____
8-25, 19 59

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 MV-1,952,000 Gallons gasoline per 1,000 cu. ft. of gas Dak-1,783,000
Rock pressure, lbs. per sq. in. MV-896; Dak - 2280 A.O.F. = MV 2922, Dak 1806 MCF/D

EMPLOYEES

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

FORMATION RECORD

FROM-	TO-	TOTAL FEET	FORMATION
0	2514	2514	Tan to gry cr-grn ss interbedded w/gry sh.
2514	2605	91	Ojo Alamo ss. White cr-grn s.
2605	3103	498	Kirtland form. Gry sh interbedded w/tight gry fine-grn ss.
3103	3449	346	Fruitland form. Gry carb sh, scattered coals, coals and gry, tight, fine-grn ss.
3449	3558	109	Pictured Cliffs form. Gry, fine-grn, tight, varicolored soft ss.
3558	5330	1772	Lewis formation. Gry to white dense sh w/silty to shaly ss breaks.
5330	5457	127	Cliff House ss. Gry, fine-grn, dense sil ss.
5457	5703	246	Menefee form. Gry, fine-grn s, carb sh & coal.
5703	5879	176	Point Lookout form. Gry, very fine sil ss w/frequent sh breaks.
5879	6850	971	Mancos formation. Gry carb sh.
6850	7342	492	Gallup form. Lt gry to brn calc carb micac glauco very fine gry ss w/irreg. interbed sh.
7342	7718	376	Sanastee form. Drk gry calc very fine to fine gry ss w/calc veins w/irreg inter drk gry s.
7718	7779	61	Greenhorn form. Highly calc gry sh w/thin lmat.
7779	7895	116	Graneros form. Dk gry shale, fossil & carb w/prite incl.
7895	8182	387	Dakota form. Lt to dk gry foss carb al calc sil silty ss w/prite incl thin sh bands clay & shale breaks.

