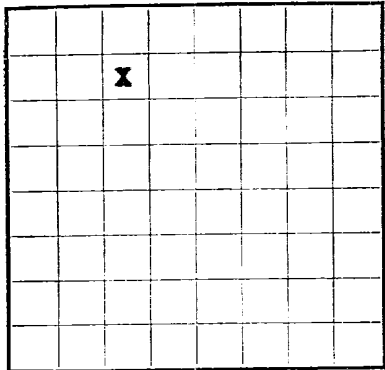


U. S. LAND OFFICE Santa Fe
SERIAL NUMBER 078233
LEASE OR PERMIT TO PROSPECT _____



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 990, Farmington, New Mexico
Lessor or Tract Huerfano Unit Field Basin Dakota State New Mexico
Well No. 113 (GD) Sec. 33 T. 27-N R. 10-W Meridian N.M.P.M. County San Juan
Location 990 ft. NXX of N Line and 1700 ft. E of W Line of Sec. 33 Elevation 6117
(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 By: D. H. Obain
Date February 13, 1961 Title Petroleum Engineer

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

Commenced drilling 10-23-, 160 Finished drilling 11-11-, 1960

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 5316 to 5836 (O & G) No. 4, from _____ to _____
No. 2, from 6054 to 6320 (O) No. 5, from _____ to _____
No. 3, from 6320 to 6548 (O) 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—	
10 3/4"	32.75	P.B.	S.W.	281	Hewco			surface	
2 7/8"	6.4	10 22	J-55	6514	Hewco				prod casing
2 7/8"	6.4	10 22	J-55	5940	Hewco				prod casing

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
10 3/4"	292	340	circulated		
2 7/8"	6525	81	single stage		
2 7/8"	5950	326	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

Rotary tools were used from 0 feet to 6548 feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

S. I. 12-29-, 1960 Put to producing _____, 19____

Callup The production for the first 24 hours was 27.8 barrels of fluid of which 100 % was oil; _____ %
emulsion; _____ % water; and _____ % sediment. 2127 MCF/D Gravity, °Bé. _____

If gas well, cu. ft. per 24 hours D-802,000 Gallons gasoline per 1,000 cu. ft. of gas _____

Rock pressure, lbs. per sq. in. G-1007; D-2011 Dakota A.O.F. 804 MCF/D

EMPLOYEES

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

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	788	788	Tan to gry cr-grn ss interbedded w/gry sh.
788	909	121	Ojo Alamo ss. White cr-grn s
909	1600	691	Kirtland form. Gry sh interbedded w/tight gry fine-grn ss.
1600	1806	206	Fruitland form. Gry carb sh, scattered coals, coals and gry, tight, fine-grn ss.
1806	1882	76	Pictured Cliffs form. Gry, fine-grn, tight, varicolored soft ss.
1882	3362	1480	Lewis form. Gry, fine-grn, dense sil ss.
3362	3438	76	Cliff House form. Gry, fine-grn, dense sil ss.
3438	4218	780	Menafee form. Gry, fine-grn s, carb sh & coal.
4218	4450	232	Point Lookout form. Gry, very fine sil ss w/frequent sh breaks.
4450	5316	866	Mancos form. Gry carb sh.
5316	5836	520	Gallup form. Lt gry to brn calc carb micac glauco very ine gry ss w/irreg. interbed sh.
5836	6194	358	Sanostee form. Drk gry calc very fine to fine gry ss w/calc veins w/irreg inter drk gry s.
6194	6254	60	Greenhorn form. Highly calc gry sh w/thin lmst.
6254	6320	66	Graneros form. Dk gry shale, fossil & carb s/prite incl.
6320	6548	228	Dakota form. Lt to dk gry foss carb sl calc sl silty ss w/prite incl thin sh bands clay & shale breaks.

(OVER)

FORMATION RECORD—Continued

[illegible]

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 16-50842-2

5078-98	Oil trace gallop w/19,000 gal oil & 17,000 # sand. HIR 1500 #, max in 4500 #, avg in 4000-4500 #. I.R. 18 HIR. Sanded off when 19,000 gal oil & 17,000 # sand. 200 gal acid spotted when pumping down cement plugs.
5709-14	Oil trace gallop w/27,904 gal oil w/1/2 strength Petrolol, & 30,000 # sand. Flushed w/2000 gal oil. Max in 4500 #, avg injection rate 12 HIR. HIR 2000 #. Ir in 4500-4800.
5678-98	5709-14
5709-14	6418-34
5678-98	Water traced Dakota w/20,000 # sand & 30,000 gal galled water. Flushed w/1600 gal water. Max in 4500 #, avg 3100 #. Avg injection rate 15.6 HIR. Ir in 4000-4500-4500. Spotted 20 gal acid prior to part.
6286-91	Water traced Dakota w/25,200 gal water & 20,000 # sand. Flushed w/2520 gal water. Max in 4500 #, HIR 2100 #, avg I.R. 18 HIR. Ir in 4200-4500 #.
6318-24	Water contained J-101 & 2 % calcium chloride. 200 gal acid was spotted prior to part.
6317-76	