

U. S. LAND OFFICE **Navajo Allotted**
SERIAL NUMBER **011369**
LEASE OR PERMIT TO PROSPECT **14-20-603-769**

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company El Paso Natural Gas Company Address Box 997, Farmington, New Mexico
Lessor or Tract Williams Field Ballard P. C. State New Mexico
Well No. 1 Sec. 7 T. 26N R. 8W Meridian N.M.P.M. County San Juan
Location 1550 ft. XX of N Line and 1500 ft. E of W Line of Sec. 7 Elevation 6167
(Devil's foot relative to corner)

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 D. C. Johnston

Date September 24, 1957 Title Petroleum Engineer

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

Commenced drilling 8-8, 19 57 Finished drilling 8-10, 19 57

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 1885 to 1999 (G) No. 4, from _____ to _____
 No. 2, from _____ to _____ No. 5, from _____ to _____
 No. 3, from _____ to _____ No. 6, from _____ to _____

IMPORTANT WATER SANDS

No. 1, from _____ to _____

No. 2, from _____ to _____

No. 3, 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	
8 5/8"	24	8 Rd.	J-55	116'	Howco				Surface
5 7/8"	15.3	8 Rd.	J-55	116'	Howco				Surface
HISTORY OF OIL OR GAS WELL									
1 1/4"	2.3	8 Rd. Grade "B"	1903						Prod. Tub.

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8 5/8"	126'	100	Circulated		
5 1/2"	2020'	150	Single Stage		

PLUGS AND ADAPTERS

Heaving plug—Material	Length	Depth set
Adapters—Material	Size	

SHOOTING RECORD

[illegible]

TOOLS USED

Rotary tools were used from 0 feet to 2020 feet, and from _____ feet to _____ feet.

Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet.

DATES

8-19	19	57	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			A.O.F. = 1553 MCF/D	
1,508,000			Gallons gasoline per 1,000 cu. ft. of gas	
Rock pressure, lbs. per sq. in.			660	

EMPLOYEES

_____, Driller

_____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	993	993	Tan to gry cr-grn ss interbedded w/gry sh.
993	1230	237	Ojo Alamo ss. White cr-grn s.
1230	1684	454	Kirtland form. Gry sh interbedded w/tight gry fine-grn ss.
1684	1885	201	Fruitland form. Gry carb sh, scattered coals, coals and gry, tight, fine-grn ss.
1885	1999	114	Pictured Cliffs form. Gry, fine-grn, tight, varicolored soft ss.
1999	2020	21	Lewis formation. Gry to white dense sh w/silty to shaly ss breaks.

14-00000-101
LEASE OR PERMIT TO PROSPECT
SERIAL NUMBER 011307
U. S. LAND OFFICE
Nevada District

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

A blank sheet of graph paper with a grid pattern. The grid consists of 10 columns and 8 rows of squares. A thicker vertical line runs down the left side, creating a margin. There are also thicker horizontal lines at the top and bottom edges.

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 _____

Well No. A _____ Sec. 1 T. 22N R. 2E. 12nd 1/4

Location 1/4 of E. 1/4 Line and 1/4 of W. 1/4 of E. 1/4 Line of Sec. 1

Elevation 2151' (Elevation from datum to well)

County _____

State _____

Field _____

Address _____

Company _____

Original Signed D. C. Johnson

The sum money on this page is for the condition of the wall at above date.

Completed Building _____
1-8
Uncompleted Building _____
6-50

Date _____
Time _____
Electrician Engineer _____

THEY ARE NOT IN THE SAME ZONE

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No. 8 from _____
No. 7 from _____
No. 6 from _____

NO
OCT 1 1950

No. 6 from _____
No. 5 from _____
No. 4 from _____

RECEIVED AT THE OFFICE OF THE SECRETARY OF THE ARMY

1994.8.07

PR. 18007, NAR. tr. pr. 18007, IN 91 NIM. Just 3000 water.

B-18-77 Total length 2000'. C.O.D. 1974. Part 1886-1926 (2 jets/ft.)
 Traced. P.C. 31,000 gal. water and 40,000 sand. Hgt 2250'. Max. tr.

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," as felt 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

MUDDING AND CEMENTING RECORD

Year	Number of cases	Number of deaths	Number of recoveries	Number of cases	Number of deaths	Number of recoveries
1950	100	10	90	100	10	90
1951	100	10	90	100	10	90
1952	100	10	90	100	10	90
1953	100	10	90	100	10	90
1954	100	10	90	100	10	90
1955	100	10	90	100	10	90
1956	100	10	90	100	10	90
1957	100	10	90	100	10	90
1958	100	10	90	100	10	90
1959	100	10	90	100	10	90
1960	100	10	90	100	10	90
1961	100	10	90	100	10	90
1962	100	10	90	100	10	90
1963	100	10	90	100	10	90
1964	100	10	90	100	10	90
1965	100	10	90	100	10	90
1966	100	10	90	100	10	90
1967	100	10	90	100	10	90
1968	100	10	90	100	10	90
1969	100	10	90	100	10	90
1970	100	10	90	100	10	90
1971	100	10	90	100	10	90
1972	100	10	90	100	10	90
1973	100	10	90	100	10	90
1974	100	10	90	100	10	90
1975	100	10	90	100	10	90
1976	100	10	90	100	10	90
1977	100	10	90	100	10	90
1978	100	10	90	100	10	90
1979	100	10	90	100	10	90
1980	100	10	90	100	10	90
1981	100	10	90	100	10	90
1982	100	10	90	100	10	90
1983	100	10	90	100	10	90
1984	100	10	90	100	10	90
1985	100	10	90	100	10	90
1986	100	10	90	100	10	90
1987	100	10	90	100	10	90
1988	100	10	90	100	10	90
1989	100	10	90	100	10	90
1990	100	10	90	100	10	90
1991	100	10	90	100	10	90
1992	100	10	90	100	10	90
1993	100	10	90	100	10	90
1994	100	10	90	100	10	90
1995	100	10	90	100	10	90
1996	100	10	90	100	10	90
1997	100	10	90	100	10	90
1998	100	10	90	100	10	90
1999	100	10	90	100	10	90
2000	100	10	90	100	10	90
2001	100	10	90	100	10	90
2002	100	10	90	100	10	90
2003	100	10	90	100	10	90
2004	100	10	90	100	10	90
2005	100	10	90	100	10	90
2006	100	10	90	100	10	90
2007	100	10	90	100	10	90
2008	100	10	90	100	10	90
2009	100	10	90	100	10	

OSMAI YACA OVA 2005

leaving plug - Material	Length	Depth
leaving plug - Material	Size	

SHOOTING RECORD

[illegible]

doors used

test	of test	most bar, test	test to	most been saw also
test	of test	most bar, test	test to	most been saw also

DATE

The production for the first 24 hours was	
The water; and	
Gallons produced per 24 hours	
Oil = 187.9	
Gravity . 88°	
% was oil:	
Ten to producing	

EMPLOYEES

Driller	Driller
Driller	Driller

FORMATION RECORD

FORMATION	TOTAL FEET	TO-	FROM-
1. 100 to 150 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	100	100	0
2. 150 to 200 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	150	250	100
3. 200 to 250 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	250	500	250
4. 250 to 300 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	300	800	500
5. 300 to 350 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	350	1150	800
6. 350 to 400 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	400	1550	1150
7. 400 to 450 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	450	1900	1550
8. 450 to 500 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	500	2400	1900
9. 500 to 550 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	550	2950	2400
10. 550 to 600 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	600	3550	2950
11. 600 to 650 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	650	4200	3550
12. 650 to 700 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	700	4900	4200
13. 700 to 750 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	750	5650	4900
14. 750 to 800 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	800	6450	5650
15. 800 to 850 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	850	7300	6450
16. 850 to 900 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	900	8200	7300
17. 900 to 950 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	950	9150	8200
18. 950 to 1000 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	1000	10150	9150
19. 1000 to 1050 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	1050	11200	10150
20. 1050 to 1100 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	1100	12300	11200
21. 1100 to 1150 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	1150	13450	12300
22. 1150 to 1200 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	1200	14650	13450
23. 1200 to 1250 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	1250	15900	14650
24. 1250 to 1300 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	1300	17200	15900
25. 1300 to 1350 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	1350	18550	17200
26. 1350 to 1400 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	1400	19950	18550
27. 1400 to 1450 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	1450	21400	19950
28. 1450 to 1500 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	1500	22900	21400
29. 1500 to 1550 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	1550	24450	22900
30. 1550 to 1600 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	1600	26050	24450
31. 1600 to 1650 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	1650	27700	26050
32. 1650 to 1700 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	1700	29400	27700
33. 1700 to 1750 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	1750	31150	29400
34. 1750 to 1800 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	1800	32950	31150
35. 1800 to 1850 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	1850	34800	32950
36. 1850 to 1900 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	1900	36700	34800
37. 1900 to 1950 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	1950	38650	36700
38. 1950 to 2000 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	2000	40650	38650
39. 2000 to 2050 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	2050	42700	40650
40. 2050 to 2100 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	2100	44800	42700
41. 2100 to 2150 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	2150	46950	44800
42. 2150 to 2200 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	2200	49150	46950
43. 2200 to 2250 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	2250	51400	49150
44. 2250 to 2300 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	2300	53700	51400
45. 2300 to 2350 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	2350	56050	53700
46. 2350 to 2400 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	2400	58450	56050
47. 2400 to 2450 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	2450	60900	58450
48. 2450 to 2500 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	2500	63400	60900
49. 2500 to 2550 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	2550	65950	63400
50. 2550 to 2600 ft. of gray to grayish green sandstone, some of it shaly, some of it containing thin layers of limestone.	2600	68550	65950

FORMATION RECORD—Continued

Figure 1. The effect of the concentration of the inhibitor on the rate of polymerization of α -methylstyrene in the presence of SnCl_4 at 25°C .

FORMATION