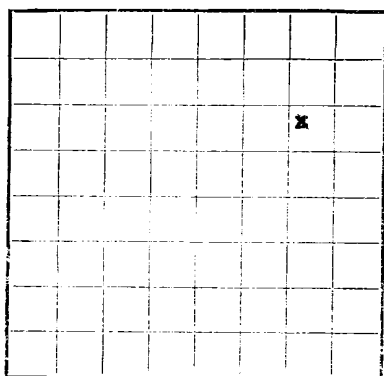




LOCATE WELL CORRECTLY

U. S. LAND OFFICE **Santa Fe**
SERIAL NUMBER **NM 05750**
LEASE OR PERMIT TO PROSPECTUNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYWORKOVER AND DUAL
COMPLETION OF OLD
WELL

LOG OF OIL OR GAS WELL

Company **Western Natural Gas Company** Address **823 Midland Tower, Midland, Texas**
Lessor or Tract **Graham** Field **Blanco Mesa Verde** State **New Mexico**
Well No. **1** Sec. **9** T. **27N** R. **3W** Meridian **N.M.P.M.** County **San Juan**
Location **1850** ft. **S.** of **N.** Line and **1165** ft. **E.** of **W.** Line of **9-27N-3W** Elevation **5941**
(Datum: 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 **Paul Roden**Date **December 19, 1960** Title **Office Manager**

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

Commenced drilling **December 8**, 19 **52** Finished drilling **January 17**, 19 **53**

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from **2133** to **2151** No. 4, from to
No. 2, from **4370** to **4570** No. 5, from to
No. 3, from to 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	Pierced		Purpose
							From	To	
9 5/8"	36	8	Max 1	210	Reg.				Surface
5 1/2"	15.50	8	Max 1	4370	Reg.				Production
2 1/2"	7.95	8	Max 1	4542					
4" OD	14	Hydril	slotted liner	set at 4263-4400					

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
9 5/8"	210	200	Halliburton		
5 1/2"	4370	329	Halliburton		

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
4 1/4	4"	Nitro	400 qts.		4410-4570	T.B.

TOOLS USED

Rotary tools were used from **0** feet to **4570** feet, and from feet to feet
Cable tools were used from feet to feet, and from feet to feet

DATES

December 19, 19 **60** Put to production **10-11**, 19 **60**
The production for the first 24 hours was **5** barrels of **gasoline** % was oil; %
emulsion; % water; and % sediment. Gravity, °Bé.
If gas well, cu. ft. per 24 hours **477 MCF** Gallons gasoline per 1,000 cu. ft. of gas
Rock pressure, lbs. per sq. in.

EMPLOYEES

Bill Roden, Driller **Elmer Martin**, Driller
Dick Schmidt, Driller

FORMATION RECORD

FROM	TO	TOTAL FEET	FORMATION
0	1405	1405	Sand w/shale breaks
1405	1980	575	Shale w/sand breaks
1980	2135	155	Shale, coal & sand
2135	2190	55	Sand w/thin shale breaks
2190	3790	1600	Shale w/sand breaks
3790	4370	580	Sand, shale & coal
4370	4572	202	Sand w/shale breaks

(OVER)

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 re-drilling, 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 pings or bridges were put in to test for water, state kind of material used, position, and results of pumping or piling.

Set retrievable bridge plug at 3297'. Perforated with 4 holes at 3003' - 34' casing. Pumped in w/water at 500 psi. Cemented with 300 ex 50-50 pounds w/43 gal with 12 1/2 lbs ellisite - maximum pressure was 1100 psi. Cement top at 2000'. According to temperature survey. Cleaned out to bridge plug and retrieved same. (Cleaned out open hole to 4500' with gas. Ran and set 4" OD 23 1/4" ID closed liner at 4458' with top of liner at 4293'. Pressed down inside open hole interval through liner with 500 gals water, 50,000 lbs water and 70,000 lbs sand. Max. pressure was 1200 psi, minimum was 1000 psi, average injection rate was 60 BPM. Finished with 105 bbls. water. Perforated ellisite interval of 2133-51' with 4 jet spots per foot. Ran and set BP-4 packer at 2244'. Placed pictured ellisite formation with 500 gals acid, 40,000 lbs water and 60,000 lbs sand. Formation broke at 2000 psi minimum pressure was 1300 psi, average injection rate was 53.6 BPM, finished with 47 bbls water. Retrieved the BP-4 packer - cleaned up both zones unloading sand and some water. Final dual completion as follows: tubing set at 4376'. With two joints of 2" BP-4 and below packer as well pipe, the Brown Oil Tool BP-4 packer set at 4180'. With 137 joints of 2" 10A and and tubing above packer and casing string. Please at 4058'. In closed position. Flowing and cleaning up both zones.