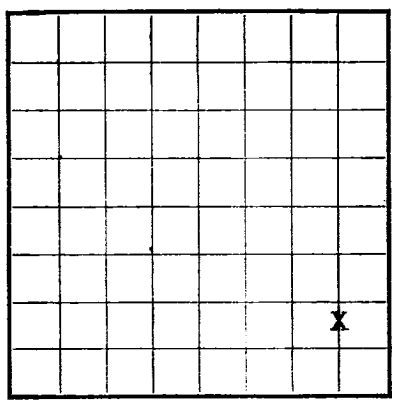
Budget Bureau No. 42-R355.4.
Approval expires 12-31-60.

Form 9-330

U. S. LAND OFFICE Navajo Tribal
SERIAL NUMBER 14-20-6037-733
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 Products Co. Address Post Office Box 1565, Farmington, N.M.

Lessor or Tract Horseshoe Navajo Field Horseshoe Gallup State New Mexico

Well No. 4 Sec. 5 T. 30N R. 16W Meridian NMPM County San Juan

Location 860 ft. {N.} of S. Line and 660 ft. {E.} of E. Line of Section 5 Elevation 5284
(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: JOSEPH E. KREGER

Date July 1959 Title Petroleum Engineer

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

Commenced drilling 8-3, 19 59 Finished drilling 6-5, 19 59

RECEIVED
JUL 10 1959
OIL CON. COM.
DIST. 3

OIL OR GAS SANDS OR ZONES

(*Denote gas by G*)

No. 1, from 1024 to 1037 No. 4, from ..... to .....

No. 2, from 1065 to 1085 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	Perforated From—	Perforated To—	Purpose
7-5/8	26.40	8rd	New	137					Surface
5-1/2	15.50	8rd	New	1160	Baker		1024	1037	Production
							1065	1085	

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
7-5/8	135	100	Circulated		
5-1/2	1166	50	Circulated		

MARK

FOLD

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

TOOLS USED

Rotary tools were used from 0 feet to 1177 feet, and from ..... feet to ..... feet

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

DATES

6-12, 19 59 Put to producing 6-29, 19 59

The production for the first 24 hours was 91.40 barrels of fluid of which 100 % was oil; ..... % emulsion; ..... % water; and ..... % sediment. Gravity, °Bé. 39.8° API

If gas well, cu. ft. per 24 hours ..... Gallons gasoline per 1,000 cu. ft. of gas .....

Rock pressure, lbs. per sq. in. .....

EMPLOYEES

....., Driller ....., Driller

....., Driller ....., Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	796	796	Mancos formation. Gy. carb. sh.
796	990	194	Upper Gallup formation. Shale, gy.-blk. calc. w/aragonite inclusion.
990	1163	173	Lower Gallup formation, Lt. gy. to brn. calc. carb. micaceous glauconitic. Very fn. to med. gr. ss. w/irreg. interbedded shale.
1163	1171	8	Sanastee formation. Dk.gy. calc. v/fn. to fn. gy. ss w/calc. veins, w/irreg. inbd. dk. gy. sd.

(OVER)

FORMATION RECORD—Continued

16—43094-4

Form 9-330

Budget Bureau No. 42-R356.4.
Approval expires 12-31-60.

U. S. Land Office [illegible]
Serial Number [illegible]
Lease or Permit to Prospect ....

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

Company El Paso Natural Gas [illegible] Address Post Office Box 1565, Farmington, N. M.

Lessor or Tract Horseshoe Navajo Field Horseshoe Gallup State New Mexico

Well No. [illegible] Sec. [illegible] T. [illegible] R. 16W Meridian NMPM County San Juan

Location 990 ft. N/S of S Line and 660 ft. E/W of E Line of Section [illegible] Elevation [illegible] (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: JOSEPH E. KREGER

Date [illegible] Title Petroleum Engineer

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

Commenced drilling 5-2, 19 59 Finished drilling 6-5, 19 59

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 1024 to 1037 No. 4, from .... to ....

No. 2, from 1065 to 1085 No. 5, from .... to ....

No. 3, from .... to .... No. 6, from .... to ....

RECEIVED [illegible] 1959 OIL CON. COM. DIST. 3

IMPORTANT WATER SANDS

No. 1, from .... to .... No. 3, from .... to ....

No. 2, from .... to .... No. 4, from .... to ....

6-12-59 SOF perf. interval 1024-1037; 1065-1085 with 49,502 gal. oil, 60,000# (20-40) sand, Flush 1260 gal. oil, IR: 49.0 bpl./min., MLTP 1250 psi., BDP 1300 psi., VLP 950 psi., injected 33 rubber balls halfway through trt., 200 psi increase.

CASING RECORD

Z. O. E.

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated From—	Perforated To—	Purpose
							1065	1085	

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.

16—43094-2 U. S. GOVERNMENT PRINTING OFFICE

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
7-5/8	135	100	Circulated		
5-1/2	1160	50	Circulated		

FOLD MARK

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

TOOLS USED

Rotary tools were used from 0 feet to 1171 feet, and from .... feet to .... feet

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

DATES

6-12, 19 59 Put to producing 6-29, 19 59

The production for the first 24 hours was 51.46 barrels of fluid of which 100 % was oil; .... % emulsion; .... % water; and .... % sediment. Gravity, °Bé. 32.8° API

If gas well, cu. ft. per 24 hours .... Gallons gasoline per 1,000 cu. ft. of gas ....

Rock pressure, lbs. per sq. in. ....

EMPLOYEES

........, Driller ...., Driller

........, Driller ...., Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	795	796	Mancos formation. Gy. carb. sh.
796	990	194	Upper Gallup formation. Shale, gy.-blk. calc. w/aragonite inclusion.
990	1163	173	Lower Gallup formation. Lt. gy. to brn. calc. carb. micaceous glauconitic. Very fn. to med. gr. ss. w/irreg. interbedded shale.
1163	1171	8	Sanastee formation. Dk. gy. calc. v/fn. to m. gy. ss w/calc. veins, w/irreg. inbd. dk. gy. sd.

FROM—	TO—	TOTAL FEET	FORMATION

16—43094-4 [OVER]

FORMATION RECORD—Continued