



COPY TO O. C. C.

UNITED STATES  
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

P. O. Box 965  
Farmington, New Mexico

October 25, 1955

J. Glenn Turner  
Box 728 - Farmington, New Mexico  
(Home Office: 17th Flr.-Mercantile Bank Bldg.  
Dallas, Texas)

Re: Santa Fe 078050

Gentlemen:

Receipt is acknowledged of your "Notice of Intention to Drill" dated October 24, 1955 covering your well No. 5-3 Christine Hughes in NW 1/4 sec. 3, T. 27 N., R. 9 W., N. M. P. M., San Juan County, New Mexico, So. Elance P. C. ~~pool~~ pool.

Your proposed work is hereby approved subject to compliance with the provisions of the "Oil and Gas Operating Regulations" revised May 25, 1942, a copy of which will be sent to you on request, and subject to the following conditions:

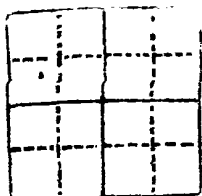
1. Drilling operations so authorized are subject to the attached sheet for general conditions of approval.
2. Furnish copies of all logs.

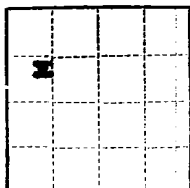
Very truly yours,

(Orig. Sgd.) P. T. McGrath

P. T. McGrath  
District Engineer

PTMcGrath:al





(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Land Office Santa Fe  
Lease No. 078050  
Unit 2-1

SUNDRY NOTICES AND REPORTS ON WELLS

|   |                                     |   |  |
|---|-------------------------------------|---|--|
| NOTICE OF INTENTION TO DRILL.....                   | <input checked="" type="checkbox"/> | SUBSEQUENT REPORT OF WATER SHUT-OFF.....        |  |
| NOTICE OF INTENTION TO CHANGE PLANS.....            |                                     | SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING..... |  |
| NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....     |                                     | SUBSEQUENT REPORT OF ALTERING CASING.....       |  |
| NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL..... |                                     | SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR..... |  |
| NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....        |                                     | SUBSEQUENT REPORT OF ABANDONMENT.....           |  |
| NOTICE OF INTENTION TO PULL OR ALTER CASING.....    |                                     | SUPPLEMENTARY WELL HISTORY.....                 |  |
| NOTICE OF INTENTION TO ABANDON WELL.....            |                                     |   |  |

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

October 24, 1955

Christine Hughes

Well No. 5-3 is located 1650 ft. from N line and 990 ft. from E line of sec. 3

2-1 Section 3 7-27-N R. 9-W N.M.P.M.  
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)  
So. Blanco P.C. San Juan County New Mexico.  
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is \_\_\_\_\_ ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Propose to spud with cable tools; then drill with rotary tools to the top of the Pictured Cliffs Formation - expected between 1,900 and 2,200 feet below surface. Completion with cable tools - and sand oil fracturing or shooting with solidified nitro glycerin as conditions warrant.

Casing program: 90 feet of 8-5/8" new 8 rd. thd. 21# casing, circulate cement to surface, using at least 75 sacks of cement.

5-1/2 O.D. 11# J-55 seamless casing to be set on top of Pictured Cliffs formation, cemented with 100 sacks regular cement.

1" tubing to be set within 20 feet of total depth for production.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

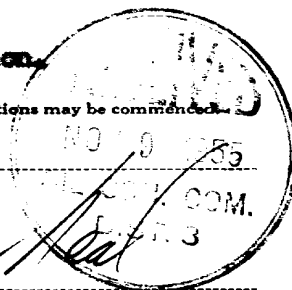
Company J. Glenn Turner

Address Box 728 - Farmington, New Mexico.

(Home Office: 17th Flr. - Mercantile Bank Bldg. - By

Dallas, Texas)

C. Hanson Neal  
Title Agent in Farmington



COMPANY J. Glenn Turner

Well Name & No. Christine Hughes No. 5-3

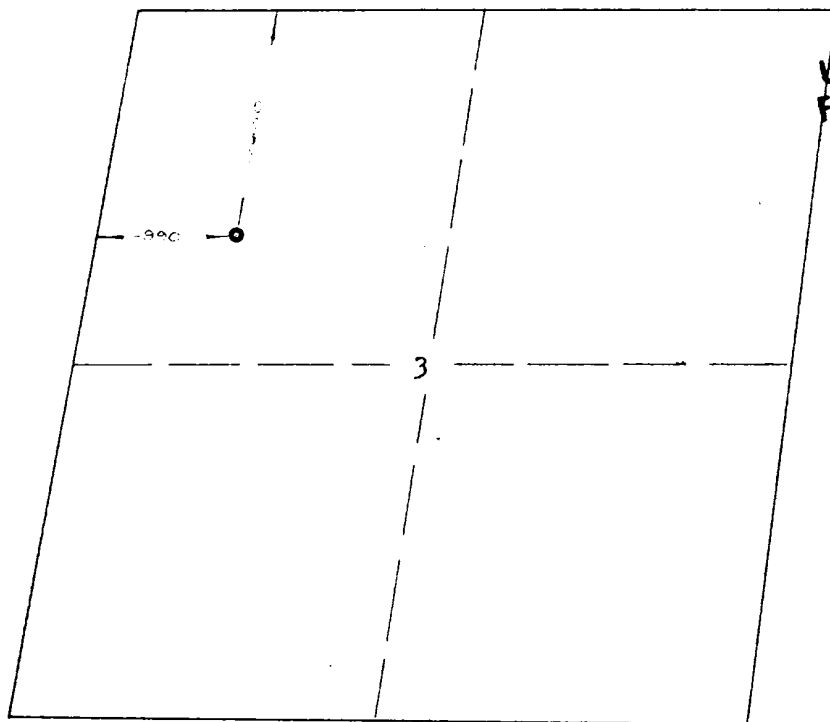
Lease No. Santa Fe 078050

Location 1650' from the North line and 990' from the West line.

Being: SWING

Sec. 3, T27N., R. 9W., N.M.P.M., San Juan County, New Mexico.

Ground Elevation



Scale -- 4 inches equals 1 mile

Surveyed July 6, 1955

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

Ernest V. Echohawk

Ernest V. Echohawk  
Registered Land Surveyor  
N. M. Reg. #1545

Seal  
FARMINGTON, NEW MEXICO

RECEIVED  
OCT 25 1955  
U. S. GEOLOGICAL SURVEY  
FARMINGTON, NEW MEXICO



NEW MEXICO OIL CONSERVATION COMMISSION  
GAS WELL TEST DATA SHEET - - SAN JUAN BASIN

(TO BE USED FOR FRUITLAND, PICTURED CLIFFS, MESAVERDE, & ALL DAKOTA  
EXCEPT BARKER DOME STORAGE AREA)

Pool Ballined Pictured Cliff Formation Pictured Cliff County San Juan  
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed \_\_\_\_\_

Operator J. Glenn Turner Lease Hughes Well No. 5-3  
Unit E Sec. NW3 Twp. 27N Rge. 9W Pay Zone: From 2937 To 3007  
Casing: OD 5 1/4 WT. 15.50 Set At 2942 Tubing: OD 1 1/4 WT. 2.3 T. Perf. 2987  
Produced Through: Casing X Tubing \_\_\_\_\_ Gas Gravity: Measured .655 Estimated \_\_\_\_\_  
Date of Flow Test: From 6/8 To 6/16 \* Date S.I.P. Measured 4/4/56  
Meter Run Size 4 Orifice Size \_\_\_\_\_ Type Chart Sq. Rt. Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt) \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (a)  
Flowing tubing pressure (Dwt) \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (b)  
Flowing meter pressure (Dwt) \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (c)  
Flowing meter pressure (meter reading when Dwt. measurement taken):  
Normal chart reading \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (d)  
Square root chart reading (\_\_\_\_\_) <sup>2</sup> x spring constant \_\_\_\_\_ = \_\_\_\_\_ psia (d)  
Meter error (c) - (d) or (d) - (c) \_\_\_\_\_ ± \_\_\_\_\_ = \_\_\_\_\_ psi (e)  
Friction loss, Flowing column to meter:  
(b) - (c) Flow through tubing: (a) - (c) Flow through casing \_\_\_\_\_ = \_\_\_\_\_ psi (f)  
Seven day average static meter pressure (from meter chart):  
Normal chart average reading \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (g)  
Square root chart average reading (7.30) <sup>2</sup> x sp. const. 5 \_\_\_\_\_ = 266 psia (g)  
Corrected seven day avge. meter press. (P<sub>f</sub>) (g) + (e) \_\_\_\_\_ = 266 psia (h)  
P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = 266 psia (i)  
Wellhead casing shut-in pressure (Dwt) 719 psig + 12 = 731 psia (j)  
Wellhead tubing shut-in pressure (Dwt) 720 psig + 12 = 732 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 731 psia (l)  
Flowing Temp. (Meter Run) 68 °F + 460 \_\_\_\_\_ = 528 °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) \_\_\_\_\_ = 366 psia (n)

Q = \_\_\_\_\_ X  $\left( \frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)}} = \frac{\text{_____}}{\sqrt{(d)}} = \text{_____}} \right)^* = \text{269} \text{ MCF/da}$   
(integrated)

DELIVERABILITY CALCULATION  
D = Q 269  $\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{.8637}{.8828} = \text{237} \text{ MCF/da.}$   
400,405  
463,605

SUMMARY  
P<sub>c</sub> = 731 psia  
Q = 269 Mcf/day  
P<sub>w</sub> = 266 psia  
P<sub>d</sub> = 366 psia  
D = 237 Mcf/day

Company El Paso Natural Gas Company  
By Original Signed  
Title Lewis D. Galloway  
Witnessed by \_\_\_\_\_  
Company \_\_\_\_\_

- \* This is date of completion test.
- \* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

| GL | (1-e <sup>-S</sup> ) | (F <sub>c</sub> Q) <sup>2</sup> | (F <sub>c</sub> Q) <sup>2</sup> (1-e <sup>-S</sup> )<br>R <sup>2</sup> | P <sub>t</sub> <sup>2</sup><br>(Column i) | P <sub>t</sub> <sup>2</sup> + R <sup>2</sup> | P <sub>w</sub> |
|----|----------------------|---------------------------------|--|---|--|----------------|
|    |                      |                                 |  |   |  |                |
|    |                      |                                 | FRICTION NEGLECTED   |   |  |                |

D • 250 = 270

QX

