

OIL CONSERVATION COMMISSION
1000 Rio Brazos Rd.
Aztec, New Mexico

OIL CONSERVATION COMMISSION
BOX 871
SANTA FE, NEW MEXICO

DATE 11-4-59

RE: Proposed NSP _____

Proposed NSL _____

Proposed NFO _____

Proposed DC ✓

Gentlemen:

I have examined the application dated 10-19-59
for the EPNG SJU 28-7* 33-28N-7W
Operator Lease and Well No. S-T-R

and my recommendations are as follows:

approve

Yours very truly,

OIL CONSERVATION COMMISSION

A. R. Hendrick

NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

7-3-58

APPLICATION FOR DUAL COMPLETION

| | | | |
|--|-------------------|------------------------------------|---------------------------------|
| Field Name Blanco M. V. & South Blanco P. C. | | County Rio Arriba | Date October 19, 1959 |
| Operator El Paso Natural Gas Company | | Lease San Juan 28-7 Unit | Well No. 1 (HM) |
| Location of Well A | Unit 33 | Township 28N | Range 7W |

1. Has the New Mexico Oil Conservation Commission heretofore authorized the dual completion of a well in these same pools or in the same zones within one mile of the subject well? YES _____ NO **X**
2. If answer is yes, identify one such instance: Order No. _____ ; Operator, Lease, and Well No.:

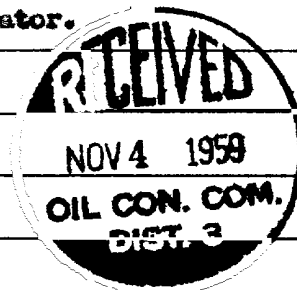
| 3. The following facts are submitted: | Upper Zone | Lower Zone |
|--|------------------------|----------------------------------|
| a. Name of reservoir | Pictured Cliffs | Mesa Verde |
| b. Top and Bottom of Pay Section (Perforations) | 2658 - 2696 | 4086-4958 (Point Lookout) |
| c. Type of production (Oil or Gas) | Gas | Gas |
| d. Method of Production (Flowing or Artificial Lift) | Flowing | Flowing |

4. The following are attached. (Please mark YES or NO)

- Yes** a. Diagrammatic Sketch of the Dual Completion, showing all casing strings, including size and setting, top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.
- Yes** b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
- No** c. Waivers consenting to such dual completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.*
- No** d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed, it shall be submitted as provided by Rule 112-A.)

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

El Paso Natural Gas Company is San Juan 28-7 Unit Operator.



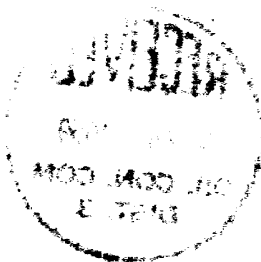
6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES _____ NO _____. If answer is yes, give date of such notification _____.

CERTIFICATE: I, the undersigned, state that I am the **Division Petroleum Engr.** of the **El Paso Natural Gas Co.** (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

ORIGINAL SIGNED **E. S. OBERLY**

Signature

- * Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.
- NOTE: If the proposed dual completion will result in an unorthodox well location and/or a non-standard proration unit in either or both of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.



STATE OF NEW MEXICO)
)
COUNTY OF SAN JUAN)

I, A. T. Fry, being first duly sworn upon my oath
depose and say as follows:

I am an employee of Guiberson Corporation, and that
on July 25, 1959, I was called to the location of the El Paso Natural
Gas Company San Juan 28-7 Unit No. 1 (PM) Well located in the NENE/4
of Section 33, Township 28 North, Range 7 West, N.M.P.M., for advisory
service in connection with installation of a production packer. In my
presence, a Guiberson Model "AN" Production Packer was set in this well
at 3322 feet in accordance with the usual practices and customs of the
industry.

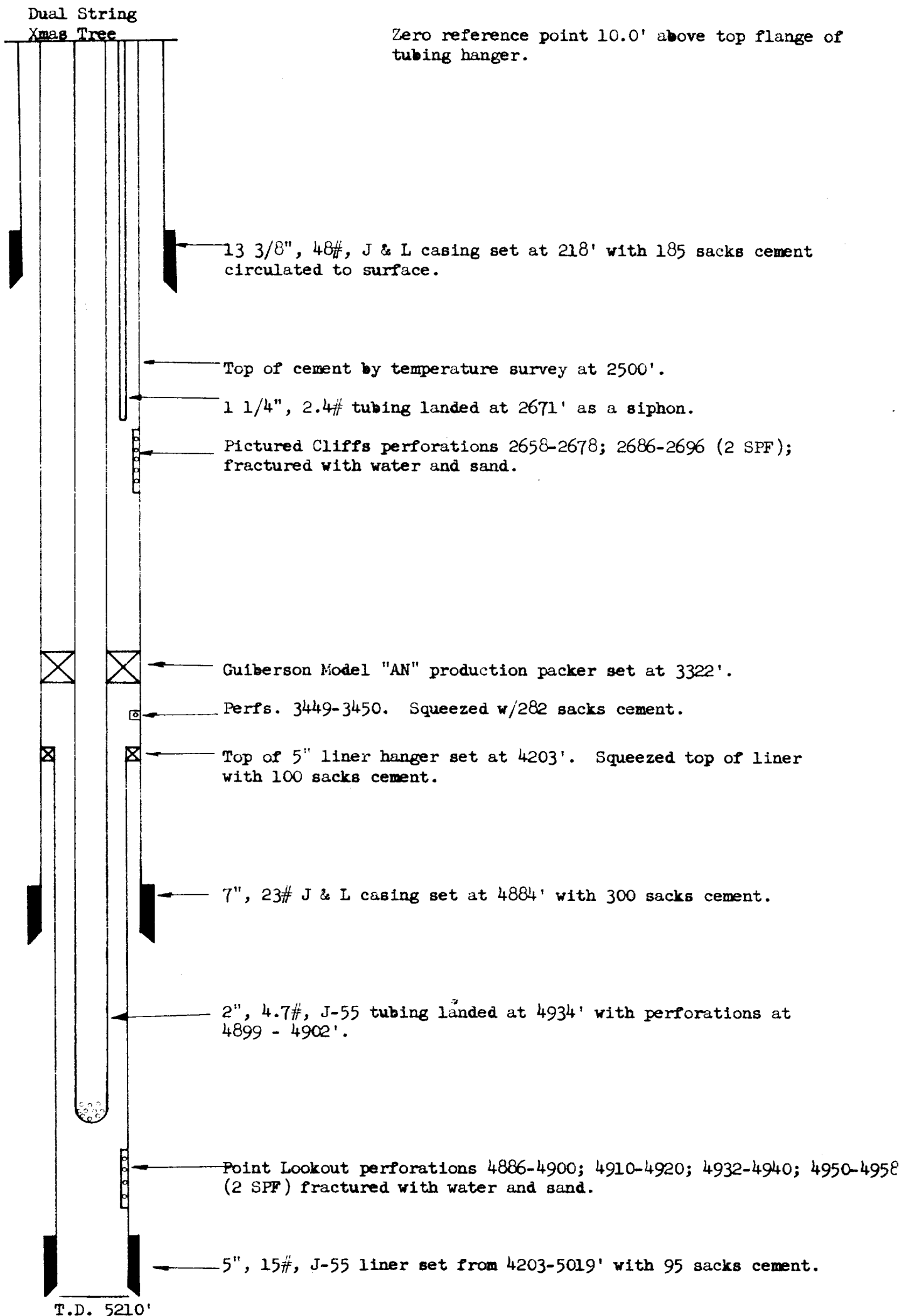
A. T. Fry

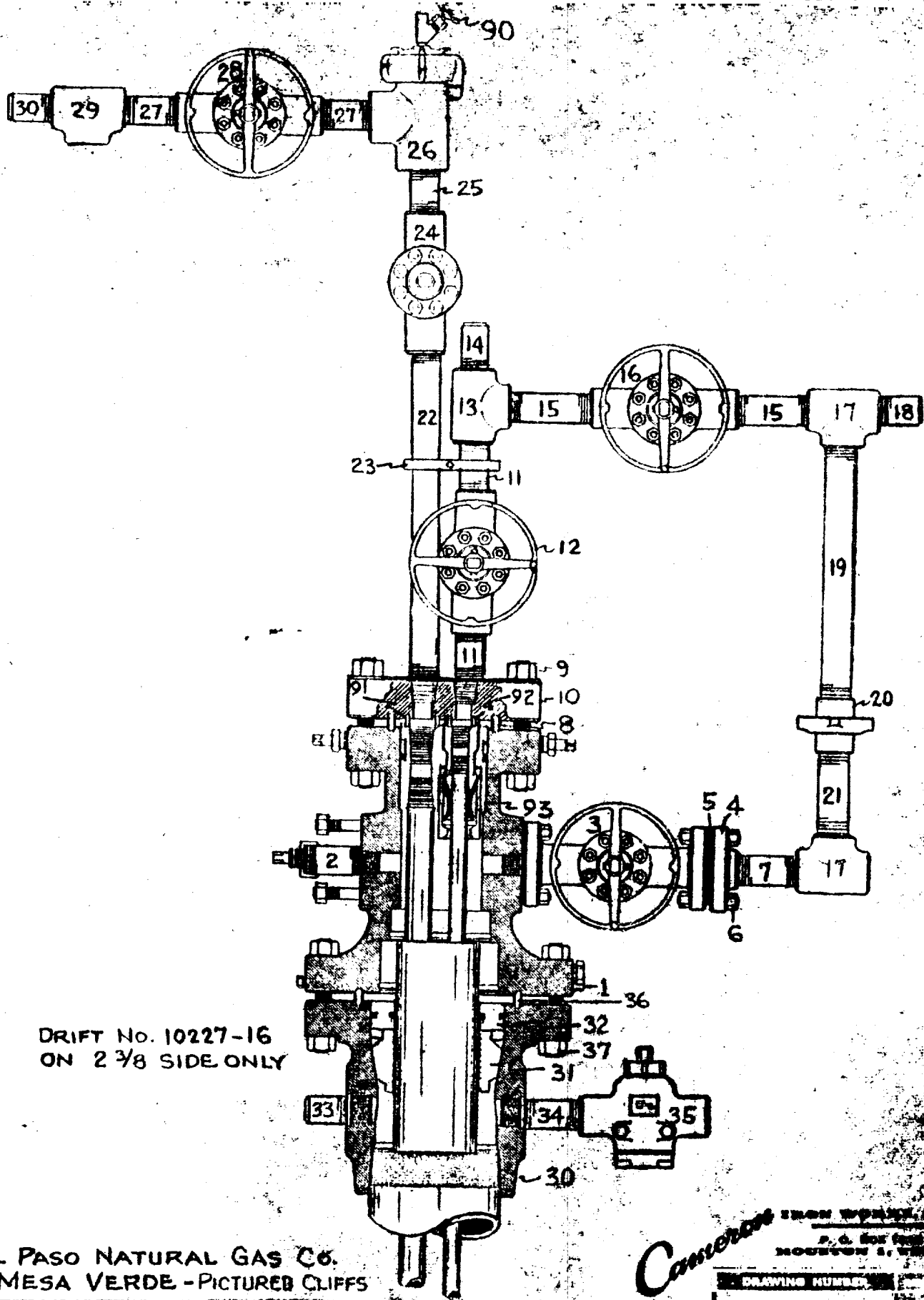
Subscribed and sworn to before me this 20th day of
October, 1959.

Paul MacCallister
Notary Public in and for San Juan County,
New Mexico

My commission expires February 24, 1960.

SCHEMATIC DIAGRAM OF DUAL COMPLETION
El Paso Natural Gas Co. San Juan 28-7 Unit No. 1 (PM)
NE/4 Section 33, T-28-N, R-7-W





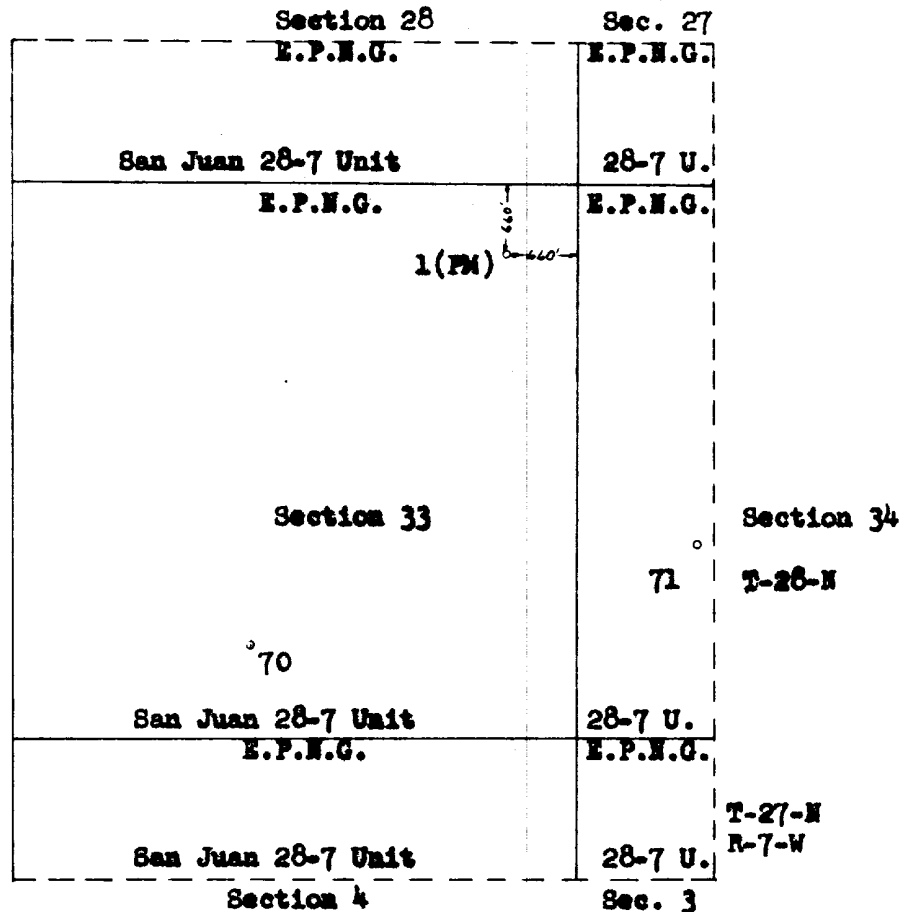
DRIFT No. 10227-16
ON 2 3/8 SIDE ONLY

EL PASO NATURAL GAS CO.
MESA VERDE - PICTURED CLIFFS

Cameras IRON WORKS, INC.
P. O. BOX 100
HOUSTON 1, TEXAS
DRAWING NUMBER

DRAWN BY E. H. DATE 3-17-59 WORKING PRESSURE 2,000 * DRIFT NO. 916015

**PLAT SHOWING LOCATION OF DUALY COMPLETED
El Paso Natural Gas Co. San Juan 28-7 Unit No. 1 (FM)
and Offset Acreage**



EL PASO NATURAL GAS COMPANY
EL PASO, TEXAS

SCALE

DATE

No.

DRAWN BY

CHECKED BY

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE **September 4, 1959**

| | | | |
|---|-----------------------------|--|---------------------------------|
| Operator El Paso Natural Gas | | Lease San Juan 28-7 No. 1 (M) OWWO | |
| Location 660N, 660E; Sec. 33-28-7 | | County Rio Arriba | State New Mexico |
| Formation Mesa Verde | | Pool Blanco | |
| Casing: Diameter 7" | Set At: Feet 4884 | Tubing: Diameter 2" | Set At: Feet 4924 |
| Pay Zone: From 4886 | To 4958 | Total Depth 5210 c/o 4980 | Shut In: 7/25/59 |
| Stimulation Method Sand Water Frac. | | Flow Through Casing | Flow Through Tubing X |

| | | | | | |
|--|---------------------|------------------------------------|---------------------------|--|------------------------|
| Choke Size, Inches .75 | | Choke Constant: C 12.365 | | Liner at 4203 - 5019 | |
| Shut-In Pressure, Casing 1033 (PC) | PSIG 1045 | PSIA 1045 | Days Shut-In 41 | Shut-In Pressure, Tubing 791 (MV) | PSIG 803 |
| Flowing Pressure: P 90 | PSIG 102 | PSIA 102 | | Working Pressure: P _w Calc. | PSIG 194 |
| Temperature: T 60 | F .75 | | | Fpv (From Tables) 1.011 | Gravity .715 |

Initial SIPC (PC) = 1033 psig

Final SIPC (PC) = 1035 psig

Packer at 3322

$$\text{CHOKE VOLUME} = Q \cdot C \cdot P_r \cdot F_r \cdot F_g \cdot F_{pv}$$

$$Q \cdot 12.365 \times 102 \times 1.000 \times .9161 \times 1.011 = 1168 \text{ MCF/D}$$

$$\text{OPEN FLOW: } A_{of} = Q \left(\frac{P_c^2}{P_r^2 - P_w^2} \right)^n$$

$$A_{of} = \left(\frac{644809}{607173} \right)^n \cdot 1.0619^{.75} \times 1168 = 1.0460 \times 1168$$

$$A_{of} = 1222 \text{ MCF/D}$$

TESTED BY **S. V. Roberts**WITNESSED BY **Tom Smith (NMOCC)**

Lewis D. Galloway
L. D. Galloway

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE September 16, 1959

| | | | |
|--|-----------------------------|--|-----------------------------|
| Operator El Paso Natural Gas Company | | Lease San Juan 28-7 No. 1 (P) OWWO | |
| Location 660N, 660E; 33-28-7 | | County Rio Arriba State New Mexico | |
| Formation Pictured Cliffs | | Pool South Blanco | |
| Casing Diameter 7" | Set At: Feet 4884 | Tubing Diameter 1-1/4" | Set At: Feet 2662 |
| Pay Zone From 2658 | To 2696 | Total Depth 5210 c/o 4980 | Shut In: 7/25/59 |
| Stimulation Method Sand Water Frac. | | Flow Through Casing X | |

| | | |
|--|------------------------------------|--|
| Choke Size, inches .75 | Choke Constant, C 12.365 | Liner 4203 - 5019 |
| Shut-In Pressure, Casing 1031 (PC) | PSIG - 12 - PSIA 1043 | Shut-In Pressure, Tubing 1026 (PC) |
| Flowing Pressure, P 101 | PSIG - 12 - PSIA 113 | Working Pressure, Pw 106 |
| Temperature, T 62 | RF .85 | Flow (From Test) 1.012 |
| | | Gravity .700 |

Initial SIPT (MV) = 789 psig
Final SIPT (MV) = 784 psig

Packer at 3322

CHOKE VOLUME $C \times P_1 \times P_2 \times F_0 \times F_{pv}$

$$C \quad 12.365 \times 113 \times .9981 \times .9258 \times 1.012$$

1307

MCF/D

$$\text{OPEN FLOW } A_{of} = \left(\frac{P_1^2 - P_2^2}{P_1^2 - P_a^2} \right)^n$$

$$A_{of} = \left(\frac{1087849}{1073925} \right)^n \quad 1.0129^{.85} \times 1307 = 1.0110 \times 1307$$

$$A_{of} \quad 1321 \quad \text{MCF/D}$$

TESTED BY Frank Clark

WITNESSED BY _____

Checked By H. L. Kendrick

Lewis D. Galloway
L. D. Galloway