NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

7-3-58

# APPLICATION FOR DUAL COMPLETION

| Field Name | | | County | | Date |
|---|---|---|---|---|---|
| Blanco & South Blanco P. C. Ext. | | | Rio Arriba | | April 9, 1959 |
| Operator | | Lease | | | Well No. |
| El Paso Natural Gas Company | | San Juan 27-5 Unit | | | 45 (PM) |
| Location of Well | Unit | Section | Township | | Range |
| | K | 6 | 27N | | 5W |

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 X NO _____

2. If answer is yes, identify one such instance: Order No. DC-657 ; Operator, Lease, and Well No.:

San Juan 28-6 Unit No. 70 (PM)

| 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) | 3362-3386 | 5156-5170 (Cliff House)<br>5550-5646 (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 Co. is operator of the San Juan 27-5; 28-5 & 28-6 Units

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DIST. 3

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 Div. Petroleum Engineer 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, David W. Meehan, being first duly sworn upon my oath depose and say as follows:

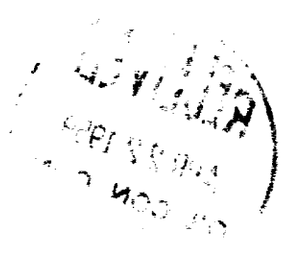
I am an employee of El Paso Natural Gas Company, and that on March 12, 1959, I was called to the location of the El Paso Natural Gas Company San Juan 27-5 Unit No. 45 (PM) Well located in the NESW/4 of Section 6, Township 27 North, Range 5 West, N.M.P.M., for advisory service in connection with installation of a production packer. In my presence, a Baker Model "EGJ" Production Packer was set in this well at 3576 feet in accordance with the usual practices and customs of the industry.

David W. Meehan

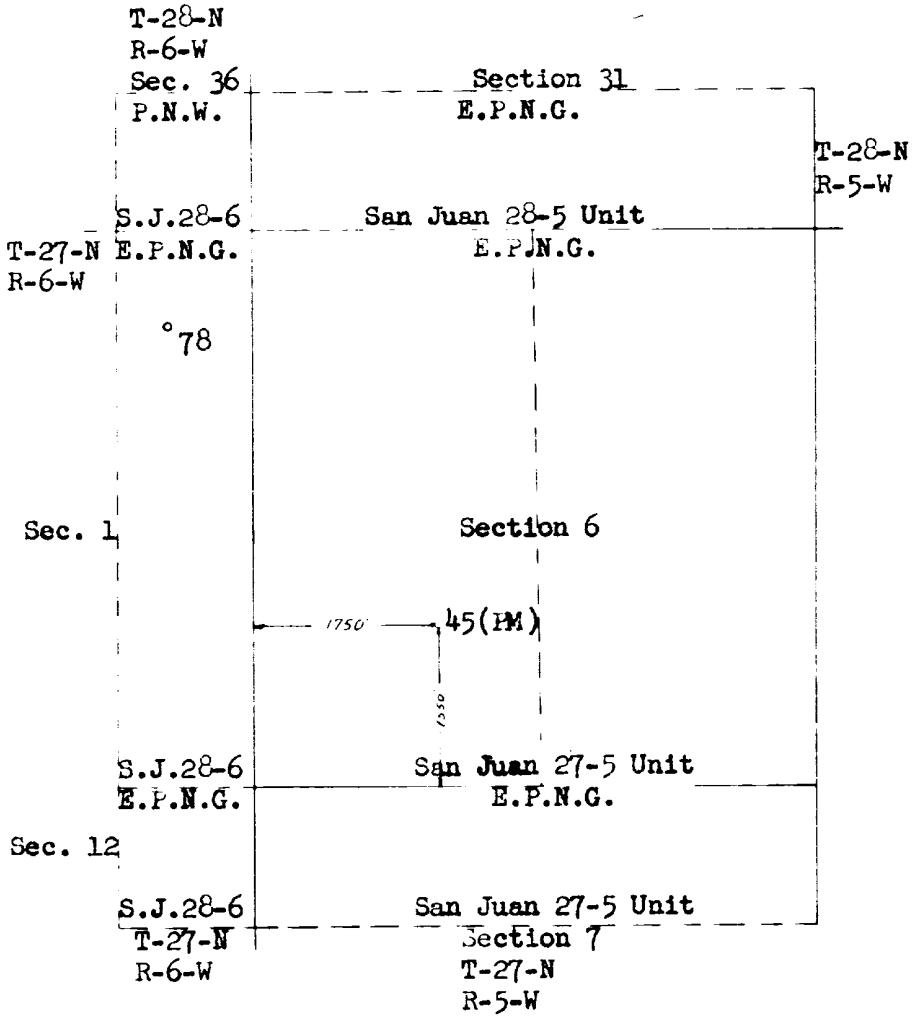
Subscribed and sworn to before me this 9th day of April, 1959.

Notary Public in and for San Juan County, New Mexico

My commission expires February 24, 1960.



Plat Showing Location of Dually Completed
El Paso Natural Gas Co. San Juan 27-5 Unit No. 45 (PM)
and Offset Acreage

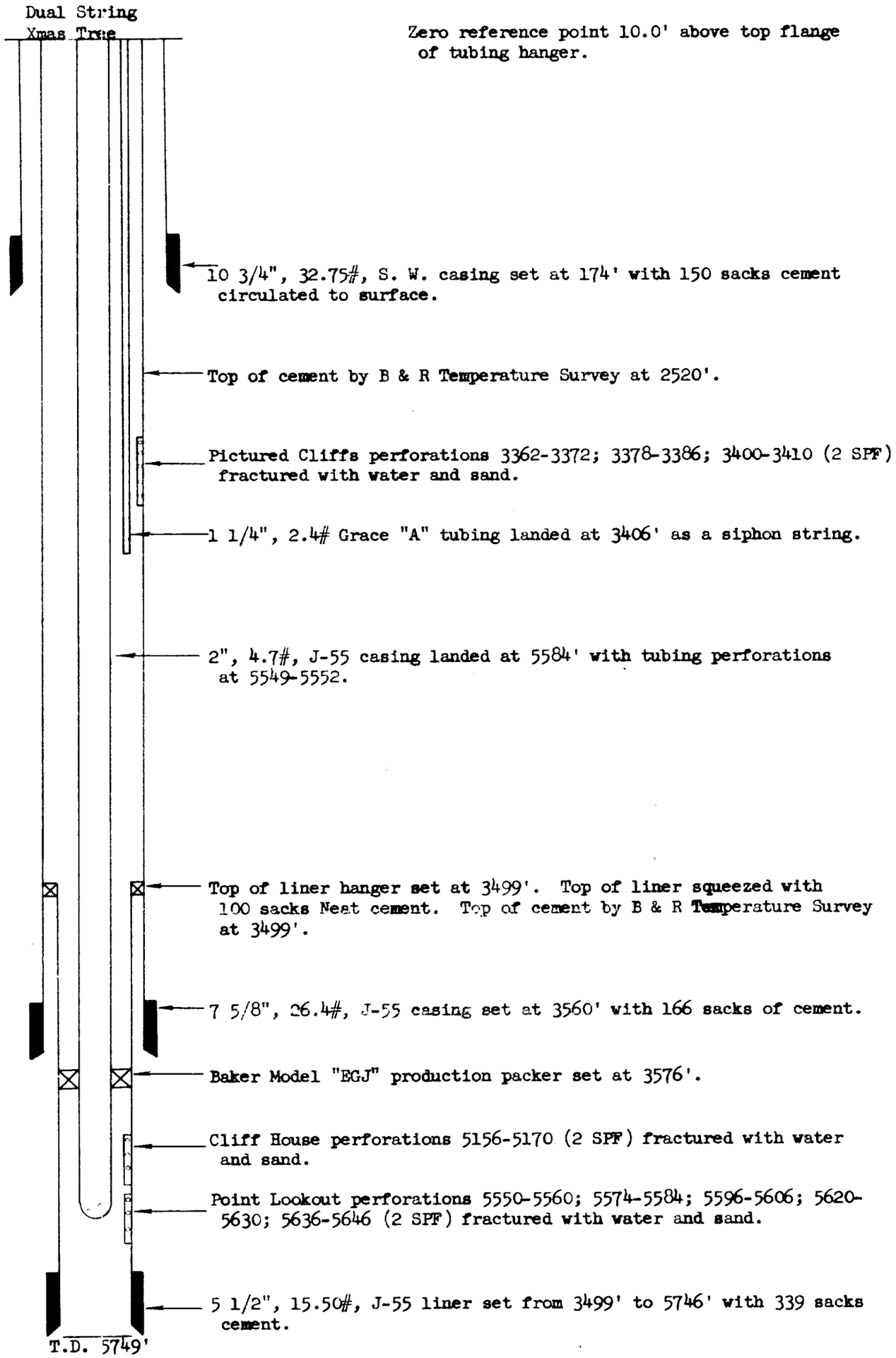



EL PASO NATURAL GAS COMPANY
EL PASO, TEXAS

| SCALE | DATE | No. |
|---|---|---|
| DRAWN BY | CHECKED BY | |

FORM 7-132R (12-56)

Schematic Diagram of Dually Completed
El Paso Natural Gas Co. San Juan 27-5 Unit No. 45 (PM)
NESW Section 6, T-27-N, R-5-W



EL PASO NATURAL GAS COMPANY

# OPEN FLOW TEST DATA

**DUAL COMPLETION** DATE March 30, 1959

| | | | |
|---|---|---|---|
| Operator: El Paso Natural Gas | | Lease: San Juan 27-5 No. 45 (P) | |
| Location: 1550S, 1750W; 6-27-5 | | County: Rio Arriba | State: New Mexico |
| Formation: Pictured Cliffs | | Pool: Undesignated | |
| Casing: Diameter: 7-5/8 | Set At: Feet: 3560 | Tubing: Diameter: 1-1/4 | Set At: Feet: 3396 |
| Pay Zone: From: 3362 | To: 3410 | Total Depth: 5749 c/o 5705 | Shut in 3/12/59 |
| Stimulation Method: Sand Water Frac. | | Flow Through Casing: X | Flow Through Tubing |

| | | | |
|---|---|---|---|
| Choke Size, Inches: .75 | Choke Constant: 12.365 | 5-1/2 liner 3499 - 5746 | |
| Shut-in Pressure, Casing, PSIG: (PC) 1042 | + 12 = PSIA: 1054 | Days Shut-in: 18 | Shut-in Pressure, Tubing PSIG: (PC)1045 + 12 = PSIA: 1057 |
| Flowing Pressure: P PSIG: 303 | + 12 = PSIA: 315 | | Working Pressure: Pw PSIG: 315 + 12 = PSIA: 327 |
| Temperature: T °F: 61 | Fpv (From Tables): .850 | | Fg (From Tables): 1.031 Gravity: .650 |

Initial SIPT (MV) = 1076 psig
Final SIPT (MV) = 1080 psig

Packer at 3576

CHOKE VOLUME: Q = C x $P_t$ x $F_t$ x Fg x Fpv

Q = 12.365 x 315 x .9990 x .9608 x 1.031 = 3854 MCF/D

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

$\left( \frac{1,117,249}{1,010,320} \right)^n$ $1.1058^{.85} \times 3,854 = 1.0892 \times 3,854$

Aof = 4,198 MCF/D

TESTED BY: R. R. Davis

WITNESSED BY: Lewis D. Galloway
L. D. Galloway

Lewis D. Galloway
L. D. Galloway