

NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

7-3-58

APPLICATION FOR DUAL COMPLETION

Field Name Blanco M. V. & So. Blanco P. C.		County Rio Arriba	Date September 29, 1959
Operator El Paso Natural Gas Company		Lease San Juan 28-7 Unit	Well No. 104 (FM)
Location of Well M	Unit 3	Township 27N	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 ☐
2. If answer is yes, identify one such instance: Order No. **DC-572**; Operator, Lease, and Well No.:

El Paso Natural Gas Co. San Juan 28-7 Unit No. 82 (FM)

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)	3274-3326	5526-5634 (Point Lockout)
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 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
August 6, 1959, I was called to the location of the El Paso Natural
Gas Company San Juan 28-7 Unit No. 104 (PM) Well located in the SWSW
of Section 3, Township 27 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 "AG" Production Packer was set in this
well at 5405 feet in accordance with the usual practices and customs
of the industry.

A. T. Fry

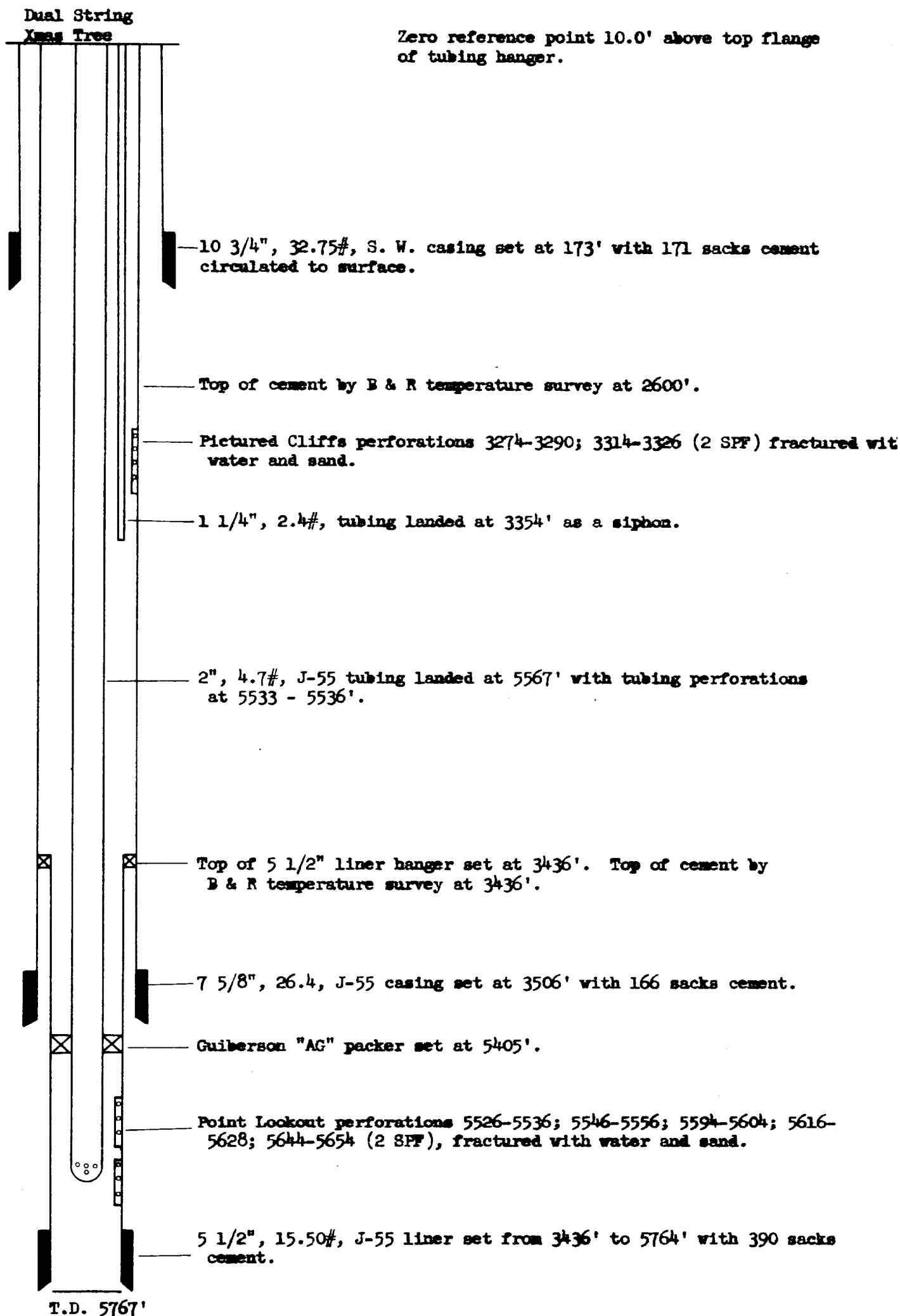
Subscribed and sworn to before me this 30th day of September,
1959.

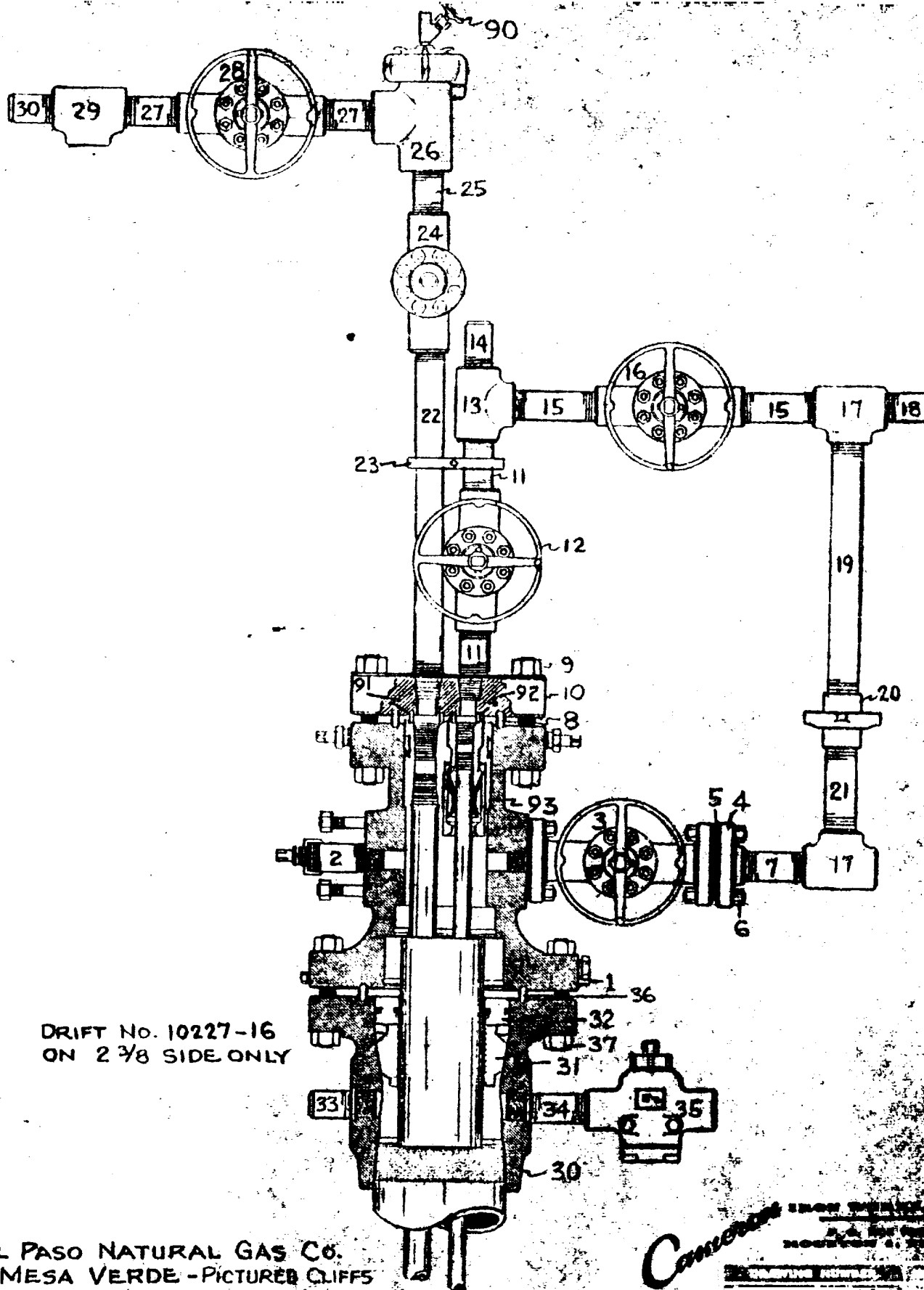
Paul H. Smith
Notary Public in and for San Juan County,
New Mexico

My commission expires February 24, 1960.



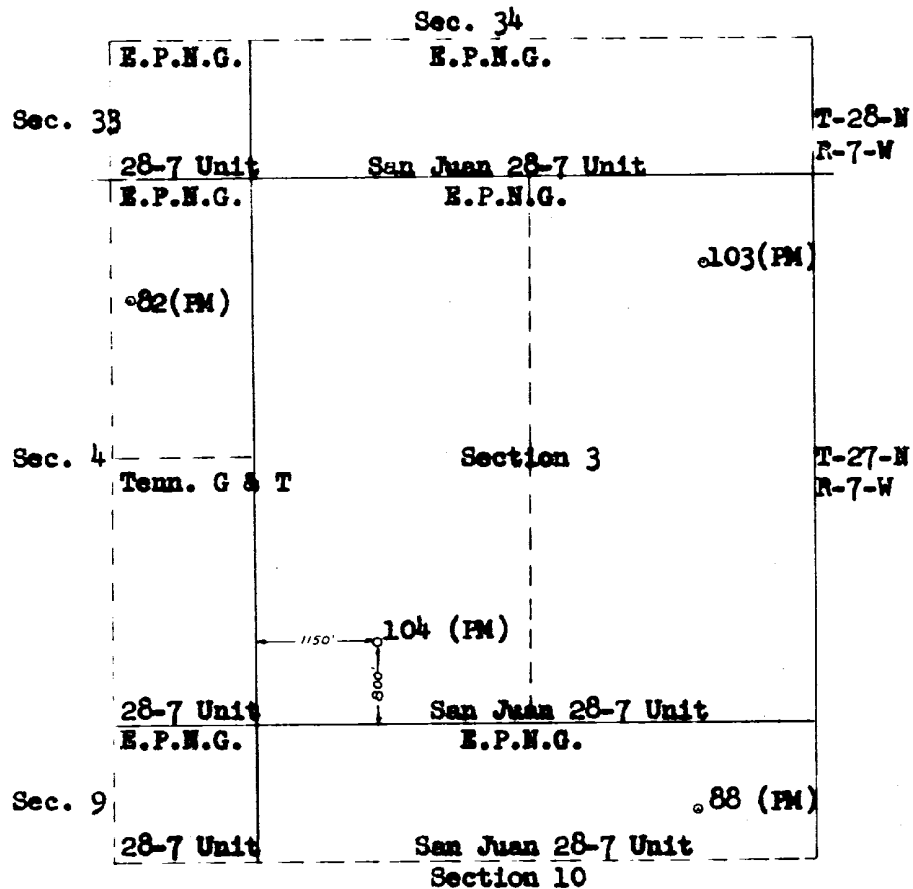
SCHEMATIC DIAGRAM OF DUAL COMPLETION
El Paso Natural Gas Co. San Juan 28-7 Unit No. 104 (PM)
SW/4 Section 3, T-27-N, R-7-W





DRAWN BY: E N DATE: 3-17-59 WORKING PRESSURE: 2,000 # DRIFT NO.

PLAT SHOWING LOCATION OF DUALY COMPLETED
 El Paso Natural Gas Co. 28-7 Unit No. 104 (FM)
 SW/4 Section 3, T-27-N, R-7-W



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. 104 (PC)	
Location 8008, 1150W; Sec. 3-27-7		County Rio Arriba	State New Mexico
Formation Pictured Cliffs		Pool South Blanco	
Casing: Diameter 7-5/8	Set At: Feet 3506	Tubing: Diameter 1-1/4	Set At: Feet 3354
Pay Zone: From 3274	To 3326	Total Depth c/o 5696b	Shut In: 8/6/59
Stimulation Method Sand Water Frac.		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .75		Choke Constant: C 14.1605	
Shut-In Pressure, Casing, PSIG 1009 (PC)	PSIA 1021	Days Shut-In 29	Shut-In Pressure, Tubing, PSIG (PC) 1010
Flowing Pressure: P, PSIG 94	PSIA 106	Working Pressure: P _w , PSIG 516	PSIA 528
Temperature, T, °F 46	.85	F _{pv} (From Tables) 1.010	Gravity .675

Initial SIPT (MV) = 1023 psig
Final SIPT (MV) = 1021 psig

Packer at 5405

CHOKE VOLUME = Q · C · P_i · x F_v · x F_g · x F_{pv}

Q 14.1605 x 106 x 1.0137 x .9427 x 1.010 1449 MCF/D

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

Aof $\left(\frac{1044484}{765700} \right)^n$ 1.3640^{.85} x 1449 = 1.3020 x 1449

Aof 1887 MCF D

TESTED BY W. D. Dawson

WITNESSED BY

L. D. Galloway
L. D. Galloway

Aof $\left(\frac{1022121}{889625} \right)^n$ 1.1489^{.75} x 2166 = 1.1096 x 2166

Aof 2403 MCF D

TESTED BY S. V. Roberts

WITNESSED BY Mr. Tom Smith, N.M.O.C.C.

L. D. Galloway
L. D. Galloway

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

Corrected Copy

DATE August 18, 1959

Operator El Paso Natural Gas Company		Lease San Juan 28-7 No. 104 (M)	
Location 8008, 1150W; 3-27-7		County Rio Arriba	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 7-5/8	Set At: Feet 3506	Tubing: Diameter 2"	Set At: Feet 5566
Pay Zone: From 5526	To 5670	Total Depth: c/o 5696	Shut in 8/6/59
Stimulation Method Sand Water Frac.		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .75		Choke Constant: C 12.365	
Shut-In Pressure, Casing, PSIG 968 (PC)	PSIG - 12 = PSIA 980	Days Shut-In 12	Shut-In Pressure, Tubing PSIG - 12 = PSIA 999 (MV) 1011
Flowing Pressure: P PSIG 170	PSIG - 12 = PSIA 182	Working Pressure: P _w PSIG - 12 = PSIA Calc. 364	
Temperature: T 59	.75	Fpv (From Tables) 1.020	Gravity .677

Initial SIPT (PC) = 969 psig

Packer at 5405

Final SIPC (PC) = 972 psig

CHOKE VOLUME = Q C x P_s x F_v x F_g x F_p

$$Q = 12.365 \times 182 \times 1.0010 \times .9427 \times 1.020 = 2166 \text{ MCF/D}$$

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

$$A_{of} = \left(\frac{1022121}{889625} \right)^n = 1.1489^{.75} \times 2166 = 1.1096 \times 2166$$

$$A_{of} = 2403 \text{ MCF/D}$$

TESTED BY S. V. RobertsWITNESSED BY Mr. Tom Smith, N.M.O.C.C.

L. D. Galloway
L. D. Galloway

By TBC

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

OIL CONSERVATION COMMISSION
BOX 871
SANTA FE, NEW MEXICO

DATE 10-21-59

RE: Proposed NSP _____

Proposed NSL _____

Proposed NFO _____

Proposed DC ✓

Gentlemen:

I have examined the application dated 9-29-59
for the EPNG S-14 28-7 #104 (PM) 3-27N-7W
Operator Lease and Well No. S-T-R

and my recommendations are as follows:

Approve

Yours very truly,

OIL CONSERVATION COMMISSION

A. R. Hendricks