

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. Ext.		County Rio Arriba	Date September 21, 1959
Operator El Paso Natural Gas Company		Lease San Juan 27-5 Unit	Well No. 4 (HM)
Location of Well A	Section 29	Township 27N	Range 5N

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.:

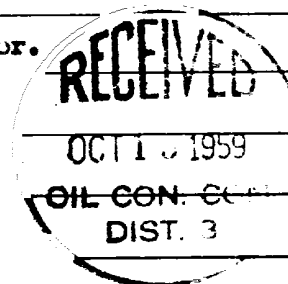
3. The following facts are submitted:	Upper Zone	Lower Zone
a. Name of reservoir	Pictured Cliffs	Mesa Verde
b. Top and Bottom of Pay Section (Perforations)	3203-3304	5352-5494 (Point Lookout)
c. Type of production (Oil or Gas)	Gas	Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing	Flowing

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 27-5 Unit Operator.



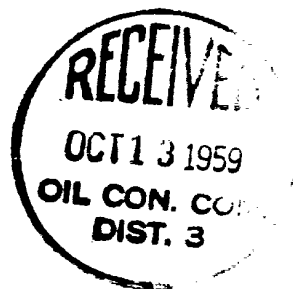
6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES _____ NO _____. If answer is yes, give date of such notification _____.

CERTIFICATE: I, the undersigned, state that I am the Division Petroleum Eng. 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 perforation 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 22, 1959, I was called to the location of the El Paso Natural
Gas Company San Juan 27-5 Unit No. 4 (PM) Well located in the NENE/4
of Section 29, 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 Guiberson Model "AN" Production Packer was set in this well
at 4730 feet in accordance with the usual practices and customs of the
industry.

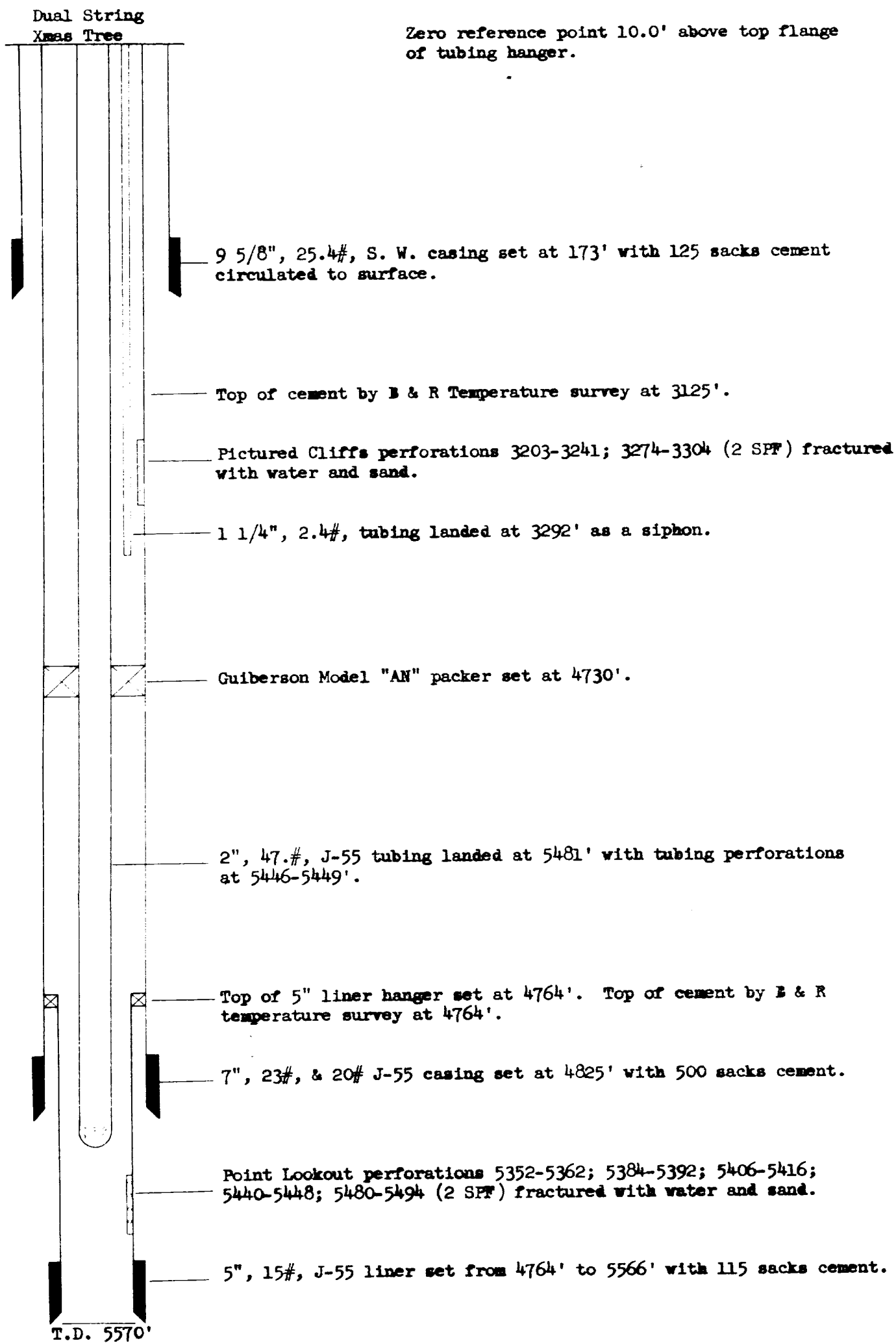
A. T. Fry

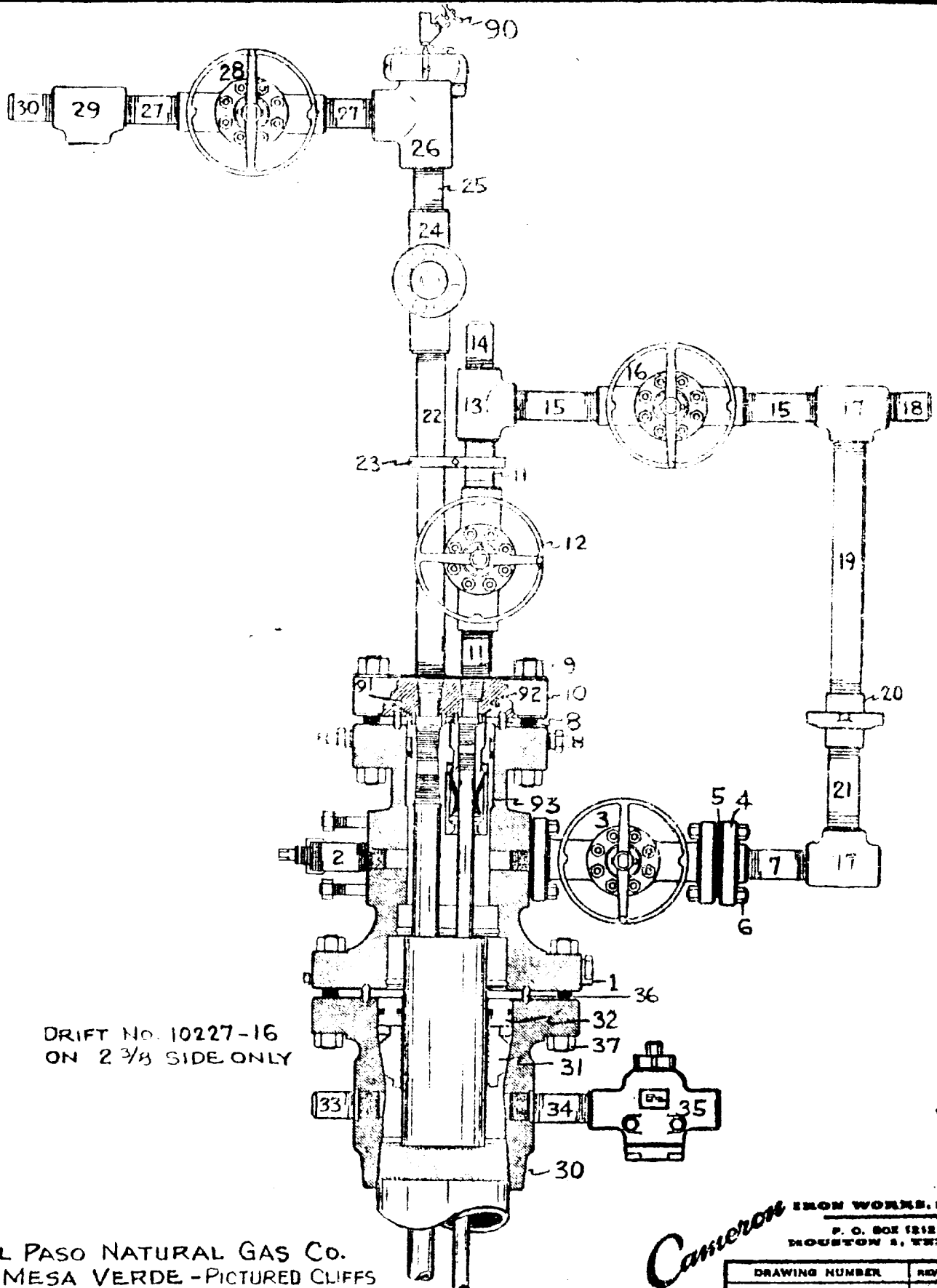
Subscribed and sworn to before me this 22nd day of September
1959.

W. H. MacLachlan
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 27-5 Unit No. 4 (PM)
NE/4 Section 29, T-27-N, R-5-W

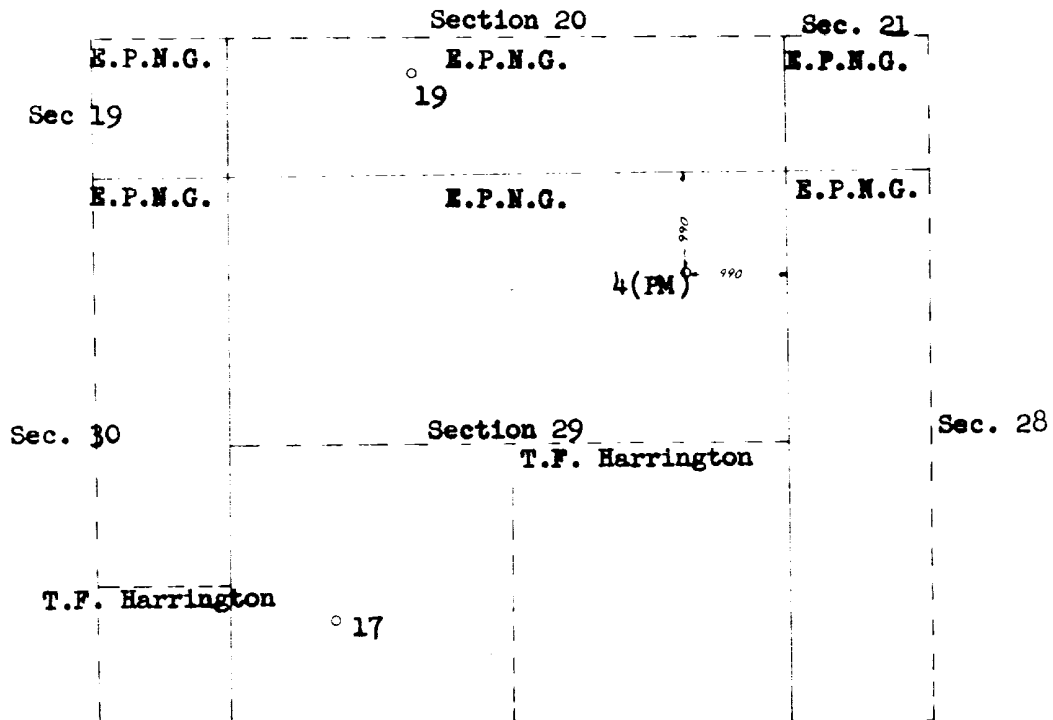




EL PASO NATURAL GAS CO. MESA VERDE - PICTURED CLIFFS		Cameron IRON WORKS, INC. P. O. BOX 1212 HOUSTON 1, TEXAS					
DRAWN BY: <u>E. H.</u>	DATE: <u>3-17-59</u>	WORKING PRESSURE: <u>2,000</u> #	<table border="1"> <tr> <th>DRAWING NUMBER</th> <th>REVISION</th> </tr> <tr> <td>916015</td> <td>"A"</td> </tr> </table>	DRAWING NUMBER	REVISION	916015	"A"
DRAWING NUMBER	REVISION						
916015	"A"						

**PLAT SHOWING LOCATION OF DUALY COMPLETED
El Paso Natural Gas Co. San Juan 27-5 Unit No. 4 (FM)
and Offset Acreage**

T-27-N
R-5-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 1, 1959

Operator El Paso Natural Gas Company		Lease San Juan 27-5 No. 4 (P)		OWWO	
Location 990N, 990E; 29-27-5		County Rio Arriba		State New Mexico	
Formation Pictured Cliffs		Pool Undesignated			
Casing Diameter 7	Set At Feet 4825	Tubing Diameter 1-1/4	Set At Feet 3282		
Pay Zone Thickness 3203	3304	Total Length 5566 c/o 5525	Shut in: 7/22/59		
Stimulation Method Sand Water Frac.		Flowing Through Tubing X			

Choke Size, Inches .75	Choke Constant 12.365	5" at 4764 - 5566	
Shut-In Pressure, Casing 1020 (PC)	Shut-In Pressure, Tubing 1032	PSIG 41	PSIA 1033
Flowing Pressure, Casing 96	Flowing Pressure, Tubing 102	PSIG 108	PSIA 114
Temperature, T 57	Gravity .85	Spv. From Tables 1.007	.631

Initial SIPT (MV) = 1089 psig

Packer at 4798

Final SIPT (MV) = 1075 psig

CHOKE VOLUME = $Q \times C \times P_c \times F_v \times F_g \times F_c$

$$Q = 12.365 \times 108 \times 1.0029 \times .9759 \times 1.007 = 1316 \text{ MCF/D}$$

$$\text{OPEN FLOW } A_o^2 = Q \left(\frac{P_c}{P_w} \right)^n$$

$$A_o^2 = \left(\frac{1067089}{1054093} \right)^n \quad 1.0123^{.85} \times 1316 = 1.0104 \times 1316$$

$$A_o^2 = 1330 \text{ MCF/D}$$

TESTED BY **S. V. Roberts**

WITNESSED BY **Tom Smith (N.M.O.C.C.)**

Lewis D. Galloway
L. D. Galloway

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE August 11, 1959

Operator El Paso Natural Gas		Lease San Juan 27-5 No. 4 (M) (OWWO)	
Location 990N, 990E; 29-27-5		County Rio Arriba	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing Diameter 7"	Set At Feet 4825	Tubing Diameter 2"	Set At Feet 5471
Pay Zone From 5352	To 5494	Total Depth 5566 c/o 5525	Shut In 7/22/59
Stimulation Method Sand Water Frac.		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .75		Choke Constant: C 12.365		5_4764 - 5566	
Shut-in Pressure, Casing 991 (PC)	PSIG - 12" PSIA 1003	Days Shut-In 20	Shut-in Pressure, Tubing 1089 (MV)	PSIG - 12" PSIA 1101	
Flowing Pressure, P 130	PSIG - 12" PSIA 142		Working Pressure, P _w Calc. 281	PSIG - 12" PSIA	
Temperature, T 60	F		F _{pv} (From Tables) 1.016	Gravity .693	

Initial SIPT (PC) = 992 psig
Final SIPC (PC) = 994 psig

Packer at 4798'

CHOKE VOLUME $Q = C \times P_1 \times F_1 \times F_g \times F_{gv}$

$$C = 12.365 \times 142 \times 1.000 \times .9325 \times 1.016$$

1664

MCF/D

OPEN FLOW $A_{of} = Q \left(\frac{P_1}{P_2} \right)^n$

$$A_{of} = \left(\frac{1212201}{1133240} \right)^n \cdot 1.0696^{.75} \times 1664 = 1.0510 \times 1664$$

$A_{of} = 1749$ MCF/D

TESTED BY **S. V. Roberts**

WITNESSED BY **Fred Cook, N.M.O.C.C.**
Bill Dawson, N.P.N.G.

L. D. Galloway
L. D. Galloway by *AKL*

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

DATE 10-21-59

OIL CONSERVATION COMMISSION
BOX 871
SANTA FE, NEW MEXICO

RE: Proposed NSP _____

Proposed NSL _____

Proposed NFO _____

Proposed DC ✓

Gentlemen:

I have examined the application dated 9-21-59
for the EPNG San Juan 27-5 Unit # 4 (PM)
Operator Lease and Well No. S-T-R
A-29-27N-5W

and my recommendations are as follows:

Approve

Yours very truly,

OIL CONSERVATION COMMISSION

A. R. Hendrick