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

DATE _1-4-60_____

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 _12-22-59_____

for the _EPNG_____SJU-27-5 # 47_____K-18-27-5_____
            Operator   Lease and Well No.   S-T-R

and my recommendations are as follows:

_____

_____

_____

_____

Yours very truly,

OIL CONSERVATION COMMISSION

APPLICATION FOR DUAL COMPLETION

Field Name			County	Date
Blanco M.V. & So. Blanco P.C. Ext.			Rio Arriba	December 22, 1959
Operator		Lease		Well No.
El Paso Natural Gas Company		San Juan 27-5 Unit		47 (HM)
Location of Well	Unit K	Section 18	Township 27N	Range 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-821** _____ ; 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)	3210-3278	5376-5502 (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 San Juan 27-5 Unit Operator.

RECEIVED DEC 31 1959 OIL CON. COM. DIST. 3
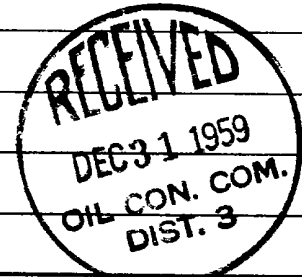
6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES _____ NO _____ If answer is yes, give date of such notification _____ .

CERTIFICATE: I, the undersigned, state that I am the **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 October 14, 1959, I was called to the location of the El Paso Natural Gas Company San Juan 27-5 Unit No. 47 (PM) Well located in the NESW/4 of Section 18, 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 "AG" Production Packer was set in this well at 3295 feet in accordance with the usual practices and customs of the industry.

                                        A. T. Fry

        Subscribed and sworn to before me this 23rd day of December, 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. 47 (PM)
and Offset Acreage

T-27-N
R-5-W

¢
T-27-N
R-6-W

E.P.N.G.

Sec. 12

Section 7
E.P.N.G.

o
46 (PM)

28-6 Unit   San Juan 27-5 Unit
E.P.N.G.   E.P.N.G.

Sec. 13

Section 18

28-6 Unit   '750   o 47 (PM)
T.F. Harrington

o
'500

28-6 Unit   San Juan 27-5 Unit
T.F. Harrington   E.P.N.G.

Sec. 24

28-6 Unit   San Juan 27-5 Unit
Section 19

EL PASO NATURAL GAS COMPANY		
EL PASO, TEXAS		
SCALE	DATE	No.
DRAWN BY	CHECKED BY	

FORM 7-132R
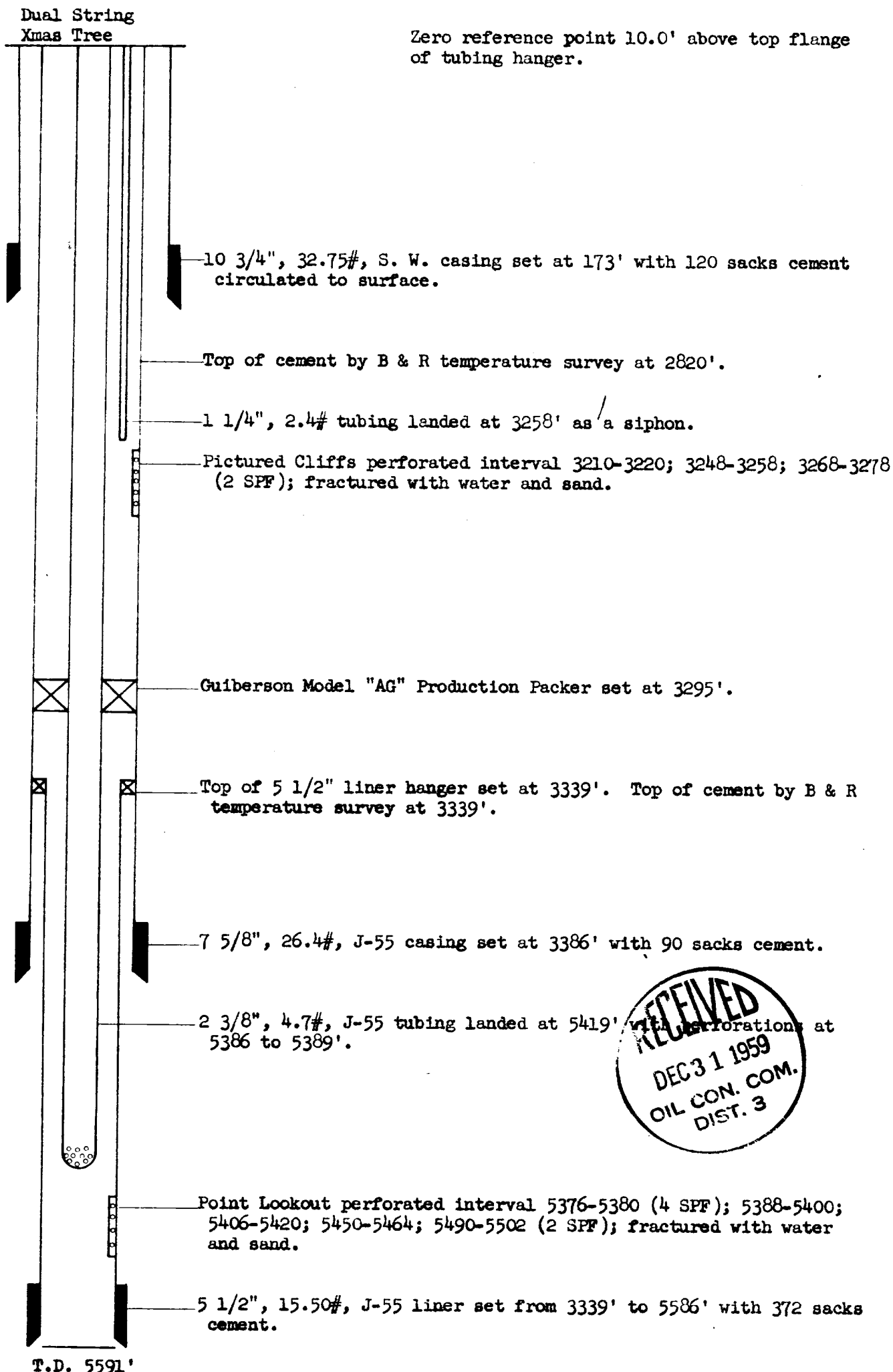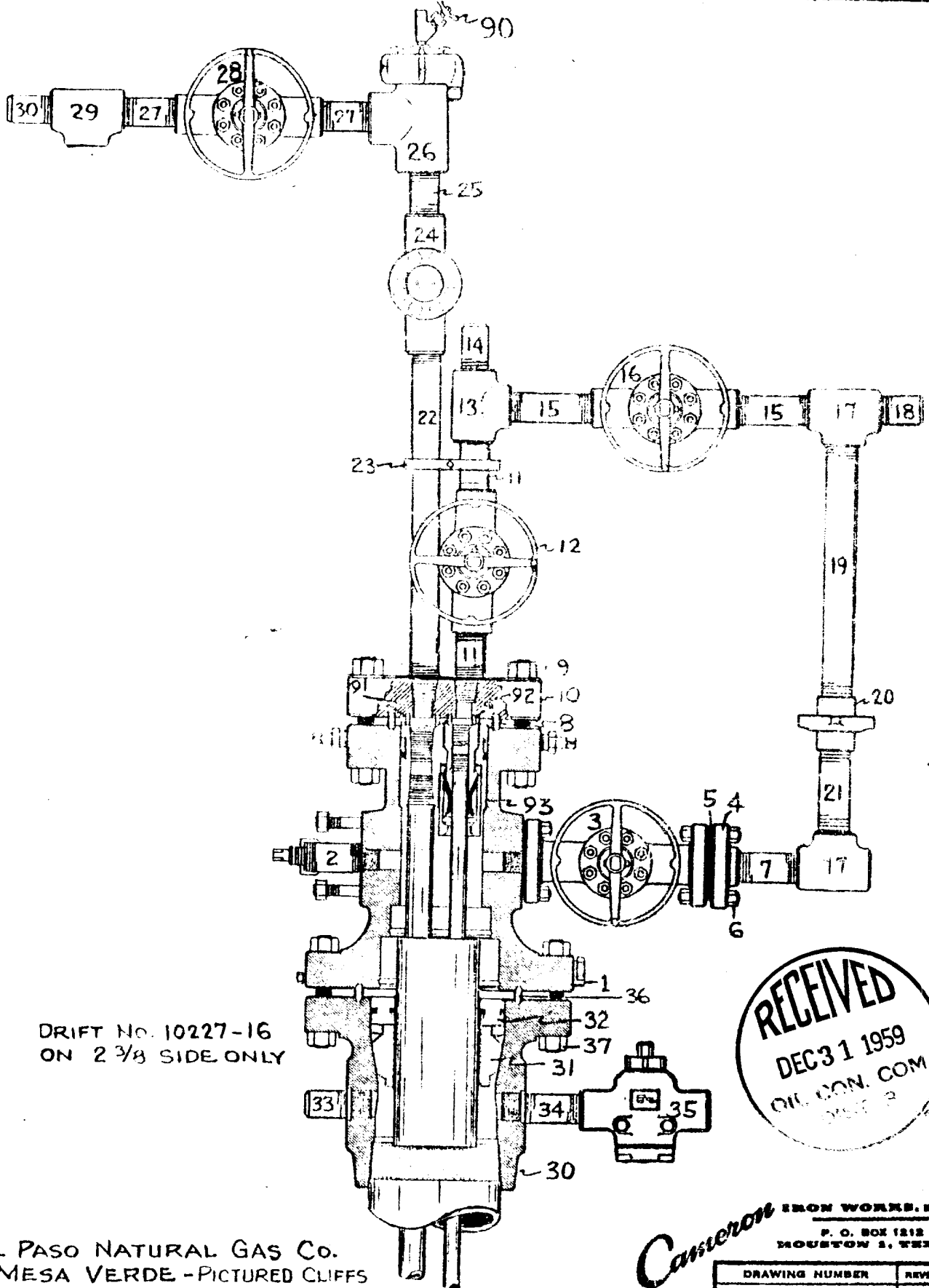
SCHEMATIC DIAGRAM OF DUAL COMPLETION
El Paso Natural Gas Co. San Juan 27-5 Unit No. 47 (PM)
SW/4 Section 18, T-27-N, R-5-W

Dual String
Xmas Tree

Zero reference point 10.0' above top flange
of tubing hanger.

10 3/4", 32.75#, S. W. casing set at 173' with 120 sacks cement
circulated to surface.

Top of cement by B & R temperature survey at 2820'.

1 1/4", 2.4# tubing landed at 3258' as a siphon.

Pictured Cliffs perforated interval 3210-3220; 3248-3258; 3268-3278
(2 SPF); fractured with water and sand.

Guiberson Model "AG" Production Packer set at 3295'.

Top of 5 1/2" liner hanger set at 3339'. Top of cement by B & R
temperature survey at 3339'.

7 5/8", 26.4#, J-55 casing set at 3386' with 90 sacks cement.

2 3/8", 4.7#, J-55 tubing landed at 5419' with perforations at
5386 to 5389'.

Point Lookout perforated interval 5376-5380 (4 SPF); 5388-5400;
5406-5420; 5450-5464; 5490-5502 (2 SPF); fractured with water
and sand.

5 1/2", 15.50#, J-55 liner set from 3339' to 5586' with 372 sacks
cement.

T.D. 5591'

P.M.

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

EL PASO NATURAL GAS Co.
MESA VERDE - PICTURED CLIFFS

Cameron IRON WORKS, INC.
P. O. BOX 1212
HOUSTON 1, TEXAS

| DRAWN BY E. H. | DATE 3-17-59 | WORKING PRESSURE 2,000 # | DRIFT NO | DRAWING NUMBER 916015 | REVISION "A" |

FORM 23-75 (6-56)

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE **November 24, 1959**

Operator		Lease	
El Paso Natural Gas Company		**San Juan 27-5 No. 47 (P)** **OWWO**	

Location		County	State
1500S, 1750W; 18-27-5		**Rio Arriba**	**New Mexico**

Formation		Pool	
Pictured Cliffs		**Undesignated**	

Casing: Diameter	Set At: Feet	Tubing: Diameter	Set At: Feet
7-5/8	**3376**	**1-1/4**	**3248**

Pay Zone: From	To	Total Depth	Shut In: 11/10/59
3210	**3278**	**c/o 5491**	

Stimulation Method	Flow Through Casing	Flow Through Tubing
Sand Water Frac.	**X**	

Choke Size, Inches		Choke Constant C		
.75		**12.365**		

Shut-In Pressure, Casing	PSIG	+ 12 = PSIA	Days Shut-In	Shut-In Pressure, Tubing	PSIG	+ 12 = PSIA
922 (P)		**934**	**14**	**922 (P)**		**934**

Flowing Pressure: P	PSIG	+ 12 = PSIA	Working Pressure: Pw	PSIG	+ 12 = PSIA
106		**118**	**111**		**123**

Temperature: T	°F	n =	Fpv (From Tables)	Gravity
57		**.85**	**1.009**	**.629**

Initial SIPT (MV) = 808 psig
Final   SIPT (MV) = 810 psig

Packer at 3295

CHOKE VOLUME = Q = C × P. × F. × Fg × Fpv

Q = **12.365 x 118 x 1.0029 x .9798 x 1.009**   **1447** MCF/D

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

Aof $\left(\dfrac{872356}{857227}\right)^n$ = **1.0176$^{.85}$ x 1447 = 1.0149 x 1447**

Aof = **1469** MCF D

TESTED BY **S. V. Roberts**

WITNESSED BY

L. D. Galloway
L. D. Galloway

DUAL COMPLETION   DATE   **November 17, 1959**

Operator			Lease		
El Paso Natural Gas Company			**San Juan 27-5 Unit 47 (M)** OWWO		
Location			County		State
1500S, 1750W; 18-27-5			**Rio Arriba**		**New Mexico**
Formation			Pool		
Mesa Verde			**Blanco**		
Casing: Diameter		Set At: Feet	Tubing: Diameter		Set At: Feet
5-1/2		**5586**	**2**		**5423**
Pay Zone: From	To		Total Depth:		
5376	**5502**		**c/o 5544**		**Shut In: 11/10/59**
Stimulation Method:			Flow Through Casing		Flow Through Tubing
Sand Water Frac.					**X**

Choke Size, inches		Choke Constant					
.75		**12.365**					
Shut-in Pressure, Casing	PSIG + 12 = PSIA	Days Shut-in	Shut-in Pressure, Tubing		PSIG + 12 = PSIA		
903 (PC)	**915**	**19**	**801 (MV)**		**813**		
Flowing Pressure: P	PSIG + 12 = PSIA		Working Pressure P		PSIG + 12 = PSIA		
196 (MV)	**208**		**Calc.**		**413**		
Temperature: T	°F n		Fpv (From Tables)		Gravity		
57	**.75**		**1.024**		**.702**		

Initial SIPT (PC) = 903 psig   **Packer at 3295**
Final   SIPC (PC) = 907 psig

CHOKE VOLUME $Q = C \times P_t \times F_t \times F_g \times F_{pv}$

$Q = 12.365 \times 208 \times 1.0029 \times .9258 \times 1.024$ = **2445** _____ MCF/D

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

Aof $\left(\dfrac{660969}{490400} \right)^n$ $1.3478^{.75} \times 2445 = 1.2505 \times 2445$

Aof _____ **3057** _____ MCF D

TESTED BY ____ **S. V. Roberts**

WITNESSED BY _____

Louie D. Galloway
L. D. Galloway