

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

OIL CONSERVATION COMMISSION  
BOX 871  
SANTA FE, NEW MEXICO

DATE 12-7-60

RE: Proposed NSP \_\_\_\_\_

Proposed NSL \_\_\_\_\_

Proposed NFO \_\_\_\_\_

Proposed DC ✓

Gentlemen:

I have examined the application dated 11-30-60  
for the EPNG 51428-7 #45(PM) L-27-28-7  
Operator Lease and Well No. S-T-R

and my recommendations are as follows:

approve  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Yours very truly,

OIL CONSERVATION COMMISSION

*A. R. Kendrick*

## NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

7-3-58

## APPLICATION FOR DUAL COMPLETION

Field Name <b>Blanco M. V. &amp; Wildcat Pictured Cliffs</b>		County <b>Rio Arriba</b>	Date <b>November 30, 1960</b>
Operator <b>El Paso Natural Gas Company</b>		Lease <b>San Juan 28-7 Unit</b>	Well No. <b>45 (IM)</b>
Location of Well <b>L</b>	Unit <b>27</b>	Township <b>25N</b>	Range <b>7W</b>

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. IX-031; Operator, Lease, and Well No.:

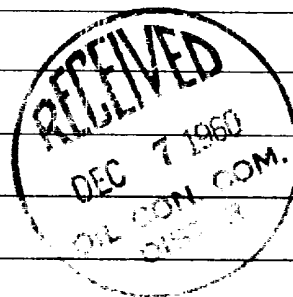
**El Paso Natural Gas Company San Juan 28-7 Unit No. 52 (IM)**

3. The following facts are submitted:	Upper Zone	Lower Zone
a. Name of reservoir	<b>Pictured Cliffs</b>	<b>Mesa Verde</b>
b. Top and Bottom of Pay Section (Perforations)	<b>2706-2740</b>	<b>4330-5055 (CH &amp; F. L.)</b>
c. Type of production (Oil or Gas)	<b>Gas</b>	<b>Gas</b>
d. Method of Production (Flowing or Artificial Lift)	<b>Flowing</b>	<b>Flowing</b>

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.



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, R. G. Miller, 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 August 15, 1960, I was called to the location of the El  
Paso Natural Gas Company San Juan 28-7 Unit No. 45 (PM) Well  
located in the NWSW/4 of Section 27, 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 "Shorty"  
Production Packer was set in this well at 2864 feet in accordance  
with the usual practices and customs of the industry.

R. G. Miller

Subscribed and sworn to before me the 30th day of November,  
1960.

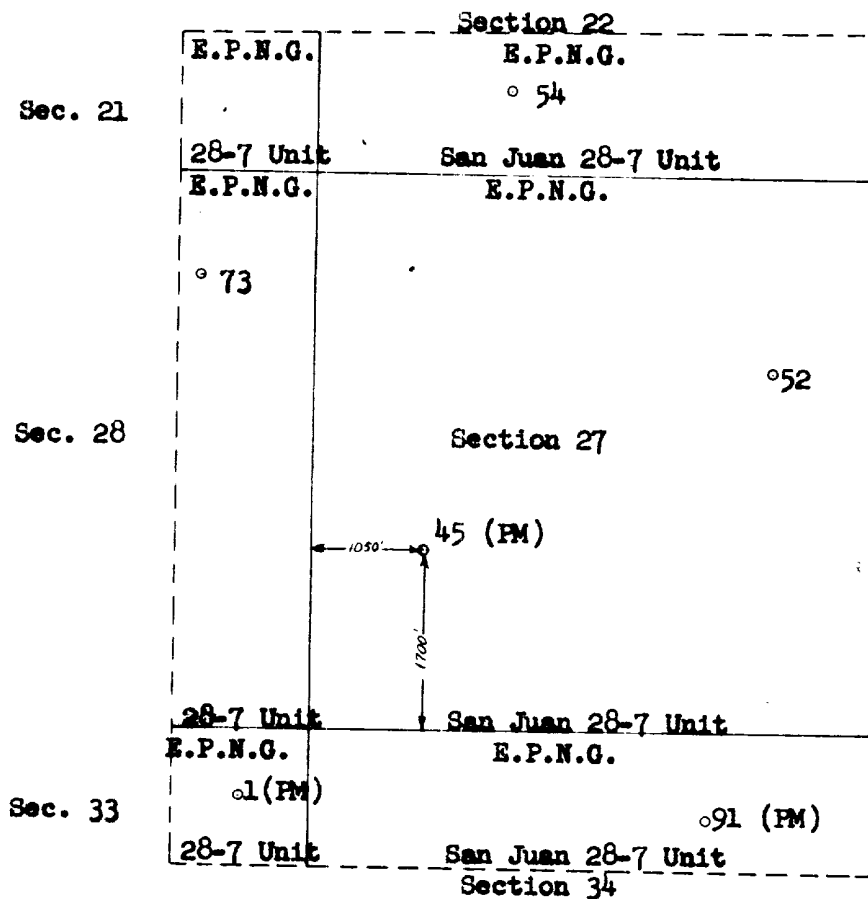
Notary Public

Notary Public in and for San Juan County,  
New Mexico

My commission expires October 5, 1964.

Plat Showing Location of Dually Completed  
El Paso Natural Gas Co. San Juan 28-7 Unit No. 45 (PM)  
and Offset Acreage

T-28-N  
R-7-W

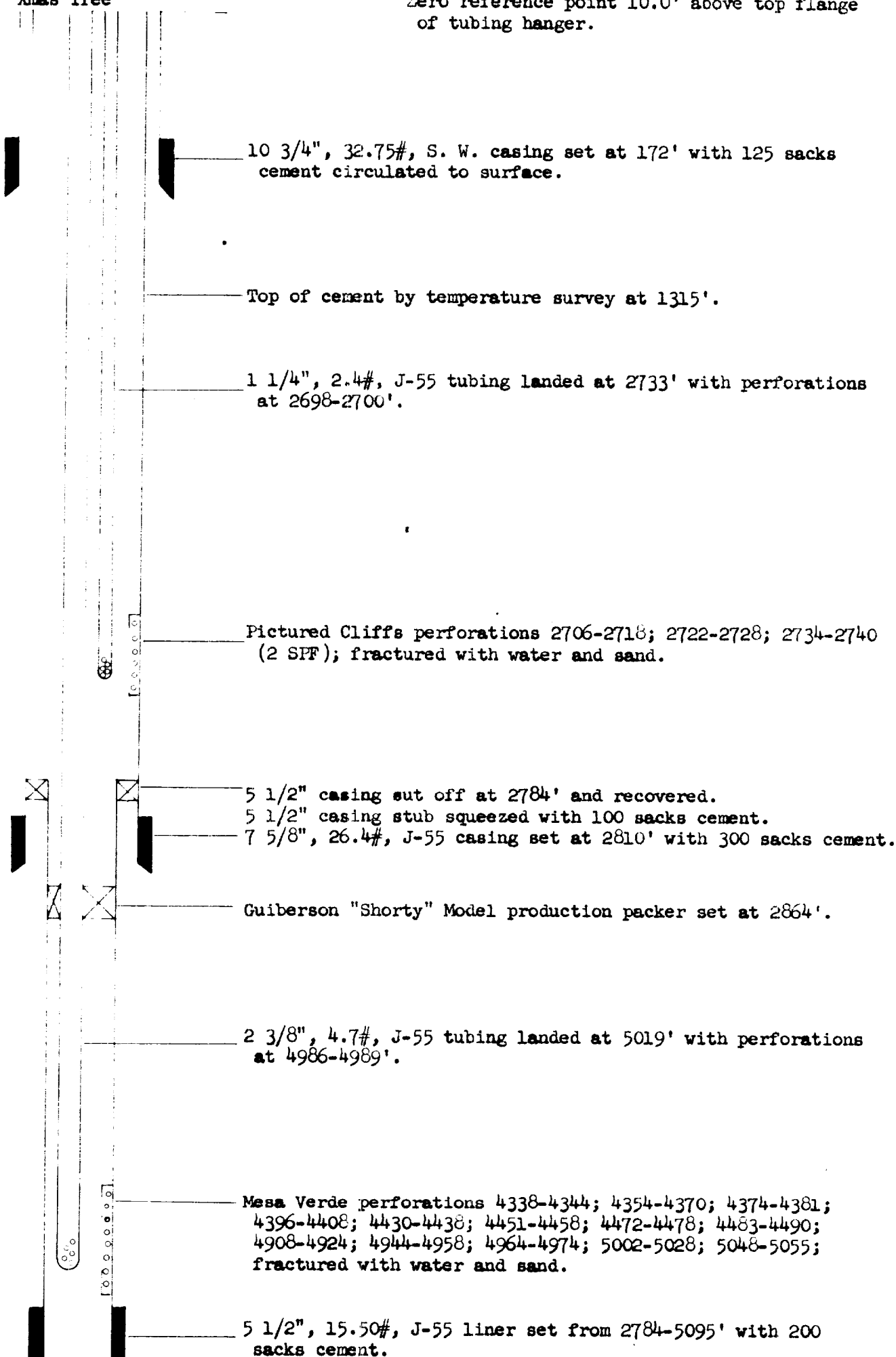


EL PASO NATURAL GAS COMPANY  
EL PASO, TEXAS

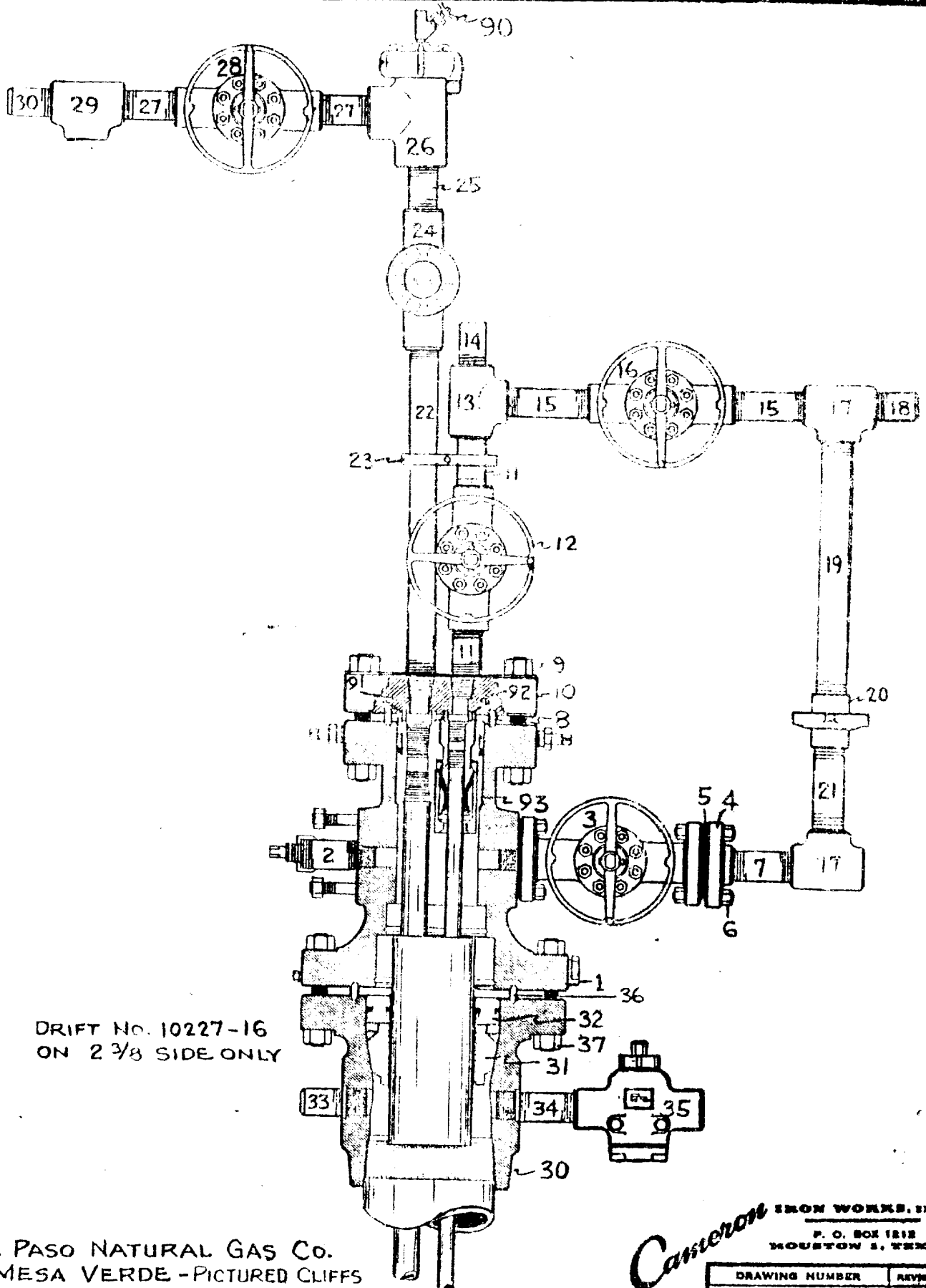
Schematic Diagram of Dually Completed  
El Paso Natural Gas Co. San Juan 28-7 Unit No. 45 (PM)  
SW/4 Section 27, T-28-N, R-7-W

Dual String  
Xmas Tree

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



T.D. 5100'



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 1818  
HOUSTON 1, TEXAS

DRAWING NUMBER	REVISION
916015	"A"

DRAWN BY E. H. DATE 3-17-59 WORKING PRESSURE 2,000 # DRIFT NO. \_\_\_\_\_

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE October 27, 1960

Operator <b>El Paso Natural Gas Company</b>		Lease <b>San Juan 28-7 No. 45 (PC)</b>	
Location <b>1700'S, 1050'W, 27-28N-7W</b>		County <b>Rio Arriba</b>	State <b>New Mexico</b>
Formation <b>Pictured Cliffs</b>		Pool <b>South Blanco P.C. (Ext.)</b>	
Casing: Diameter <b>7-5/8"</b>	Set At: Feet <b>2810</b>	Tubing: Diameter <b>1-1/4"</b>	Set At: Feet <b>2723</b>
Pay Zone: From <b>2706</b>	To <b>2740</b>	Total Depth: <b>5100</b>	Shut In <b>8-15-60</b>
Stimulation Method <b>Sand/Water Frac.</b>		Flow Through Casing <b>X</b>	Flow Through Tubing

Choke Size, Inches <b>0.75</b>		Choke Constant: C <b>12.365</b>		5-1/2" Liner from 2751 to 5095	
Shut-In Pressure, Casing, (PC) <b>987</b>		PSIG	12	PSIA	Days Shut-In <b>73</b>
Flowing Pressure: P <b>85</b>		PSIG	12	PSIA	
Temperature: <b>59</b> F		Fr <b>1.0010</b>		0.850	
				5-1/2" Liner from 2751 to 5095	
				Quiberson "Shorty" Prod. Pkr. at 2864	
				Shut-In Pressure, Tubing (PC) <b>988</b>	
				PSIG	
				12	
				PSIA	
				Working Pressure: Pw <b>87</b>	
				PSIG	
				12	
				PSIA	
				Fpv (From Tables) <b>1.011</b>	
				Gravity <b>.700</b> Fg <b>.9258</b>	

Initial SIPT (MV) = 918 psig

Final SIPC (MV) = 918 psig

CHOKE VOLUME =  $Q \cdot C \cdot P_i \cdot F_p \cdot F_g \cdot F_{av}$

$$Q = 12.365 \times 97 \times 1.0010 \times .9258 \times 1.011$$

1124

MCF/D

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

$$Aof = \left( \frac{1,000,000}{990,199} \right)^n \cdot (1.0098)^{.85} (1124) = (1.0083)(1124)$$

Aof 1133

MCF/D

TESTED BY Tom Grant

WITNESSED BY

Checked by W. D. Dawson

*Lewis D. Galloway*  
Lewis D. Galloway

# OPEN FLOW TEST DATA

DUAL COMPLETION

DATE August 25, 1960

El Paso Natural Gas Co.

San Juan 28-7 No. 45 (M): (OWWO)

1700S, 1050W; 27-28N-7W

Rio Arriba

New Mexico

Mesaverde

Blanco

7-5/8

2810

2"

5009

4338

5055

5100 c/o

8/15/60

Sand Water

X

.75

12.365

5-1/2" liner from 2751 to 5095

(PC) 1012

1024

9

(MV) 851

863

233

245

Calc.

471

67

.9933

.75

1.025

.670

.9463

Initial SIPT (P) = 1010 psig

Final SIPC (P) = 1017 psig

Guiberson "Shorty" Prod. Packer at 2864

$12.365 \times 245 \times .9933 \times .9463 \times 1.025$

2919

744769  
522928

$1.4242^{.75} \times 2919 = 1.3040 \times 2919$

3806

Blew a heavy fog during the entire test.

Frank Clark

Checked By W. D. Dawson

*Lewis D. Galloway*  
L. D. Galloway