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

DATE 11-22-60

OIL CONSERVATION COMMISSION
BOX 871
SANTA FE, NEW MEXICO

RE: Proposed NSP _____
Proposed NSL _____
Proposed NFO 0
Proposed DC _____

Gentlemen:

I have examined the application dated _____
for the EPNG SJU 28-5 44 M-22-28N-5W
Operator Lease and Well No. S-T-R

and my recommendations are as follows:
Approve well

Your's very truly,
Emery C. Arnold
OIL CONSERVATION COMMISSION

NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO 7-3-58

APPLICATION FOR DUAL COMPLETION

Field Name	County	Date
Blanco Mesa Verde & Wildcat Dakota	Rio Arriba	November 22, 1960
Operator	**Lease**	**Well No.**
El Paso Natural Gas Company	San Juan 28-7 Unit	44 (MD)
Location of Well — Unit: M; Section: 27; Township: 28N; 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 _____ 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	Mesa Verde	Dakota
b. Top and Bottom of Pay Section (Perforations)	5762-5904 (Point Lookout)	7812-7918 (Graneros) 7964-8126 (Dakota)
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.

M. A. Romero, Box 2011, Santa Fe, New Mexico

T. H. McElvain, 220 Shelby Street, Santa Fe, New Mexico

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES X NO ____. If answer is yes, give date of such notification November 22, 1960.

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, J. J. Tillerson, 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 September 26, 1960, I was called to the location of the El PasoNatural Gas Company San Juan 28-5 Unit No. 44 (MD) Well located in the SWSW/4 of Section 27, Township 28 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 inthis well at 7321 feet in accordance with the usual practices and customs of the industry.

John J. Tillerson

Subscribed and sworn to before me this 22nd day of November, 1960.

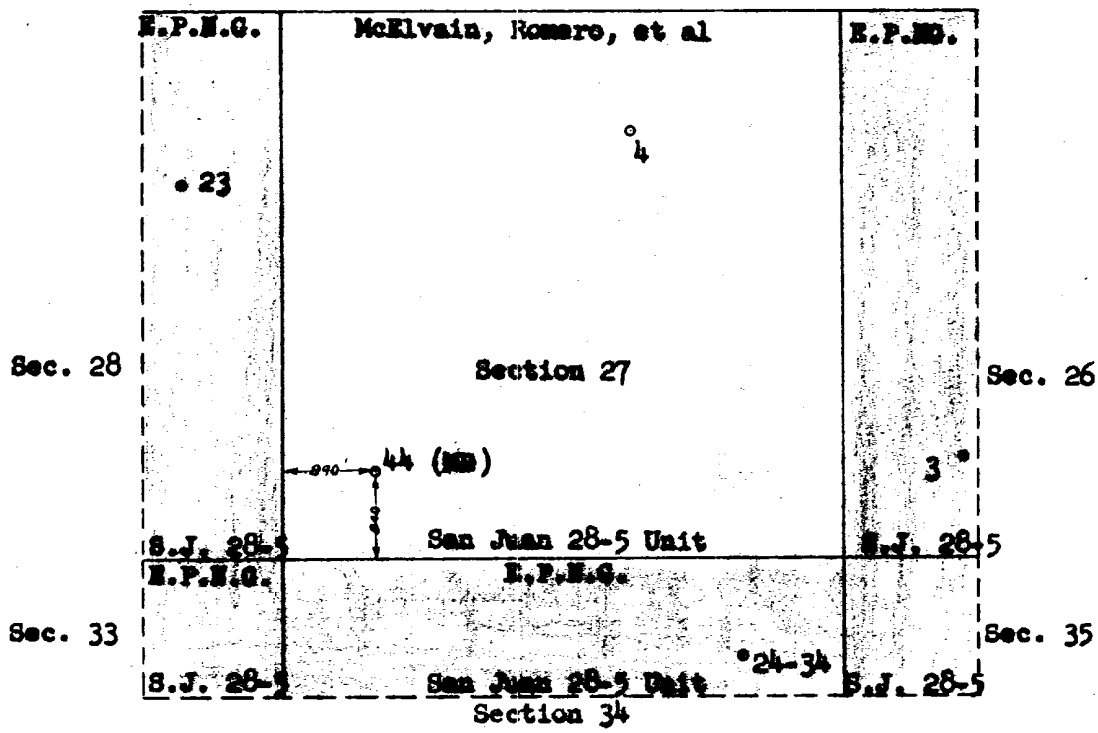
Lawrence Dais Hall
Notary Public in and for San Juan County, New Mexico

~~My commission expires October 5, 1964~~

My Commission Expires 6-21-61

PLAT SHOWING LOCATION OF DUALLY COMPLETED
El Paso Natural Gas Co. San Juan 28-5 Unit No. 44 (MD)
and Offset Acreage

T-28-N
R-5-W



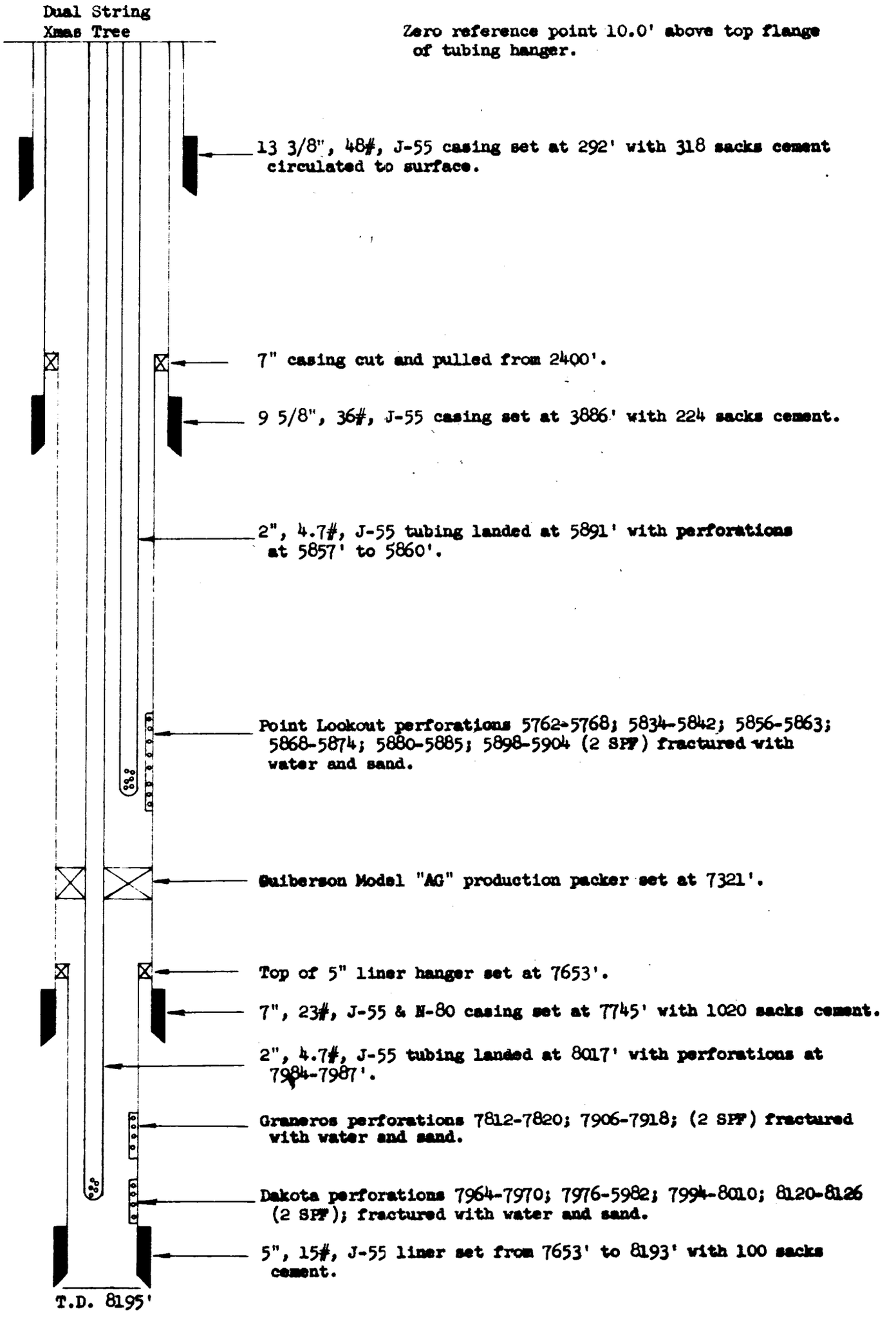
EL PASO NATURAL GAS COMPANY
EL PASO, TEXAS

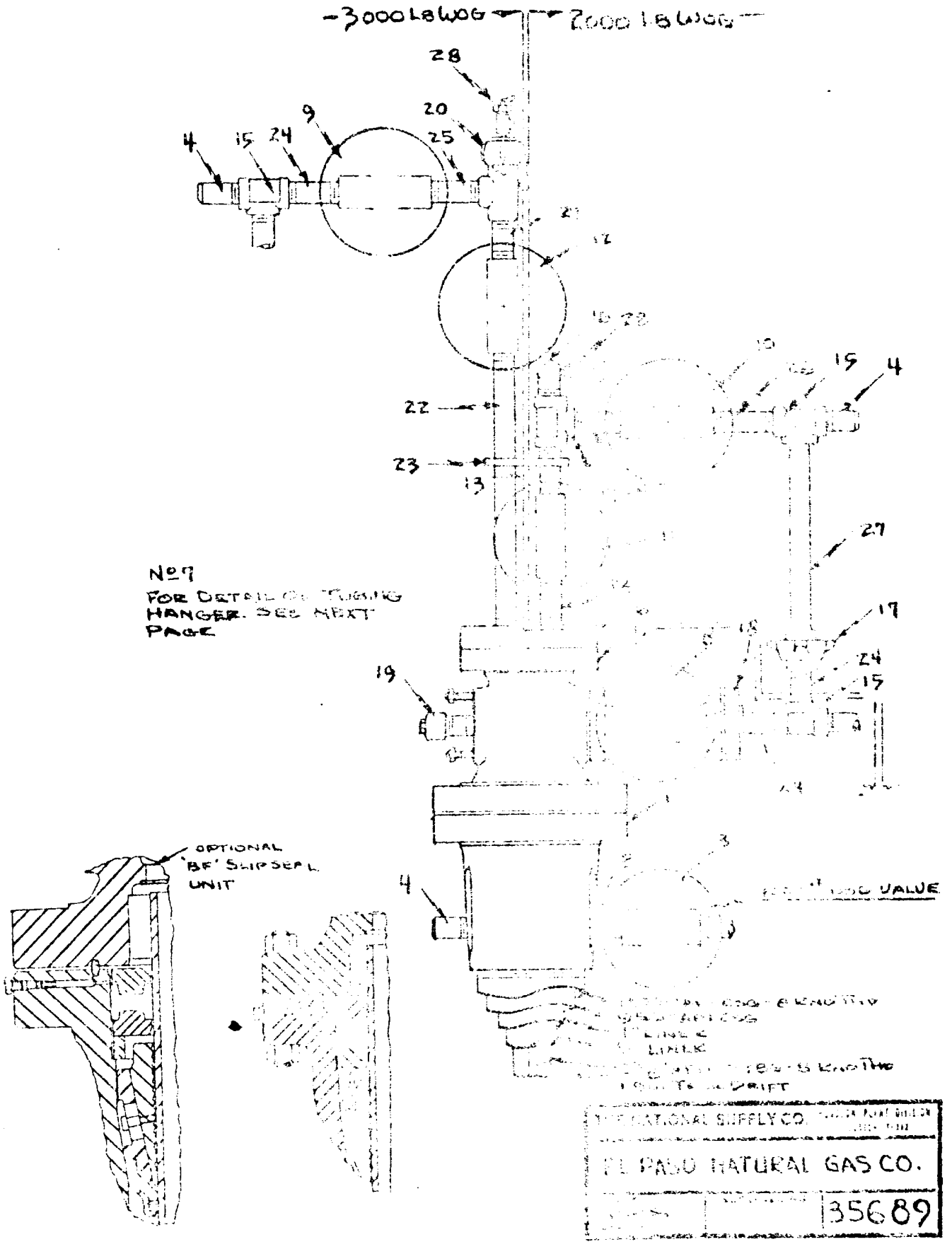
SCALE	DATE	No.
DRAWN BY	CHECKED BY	

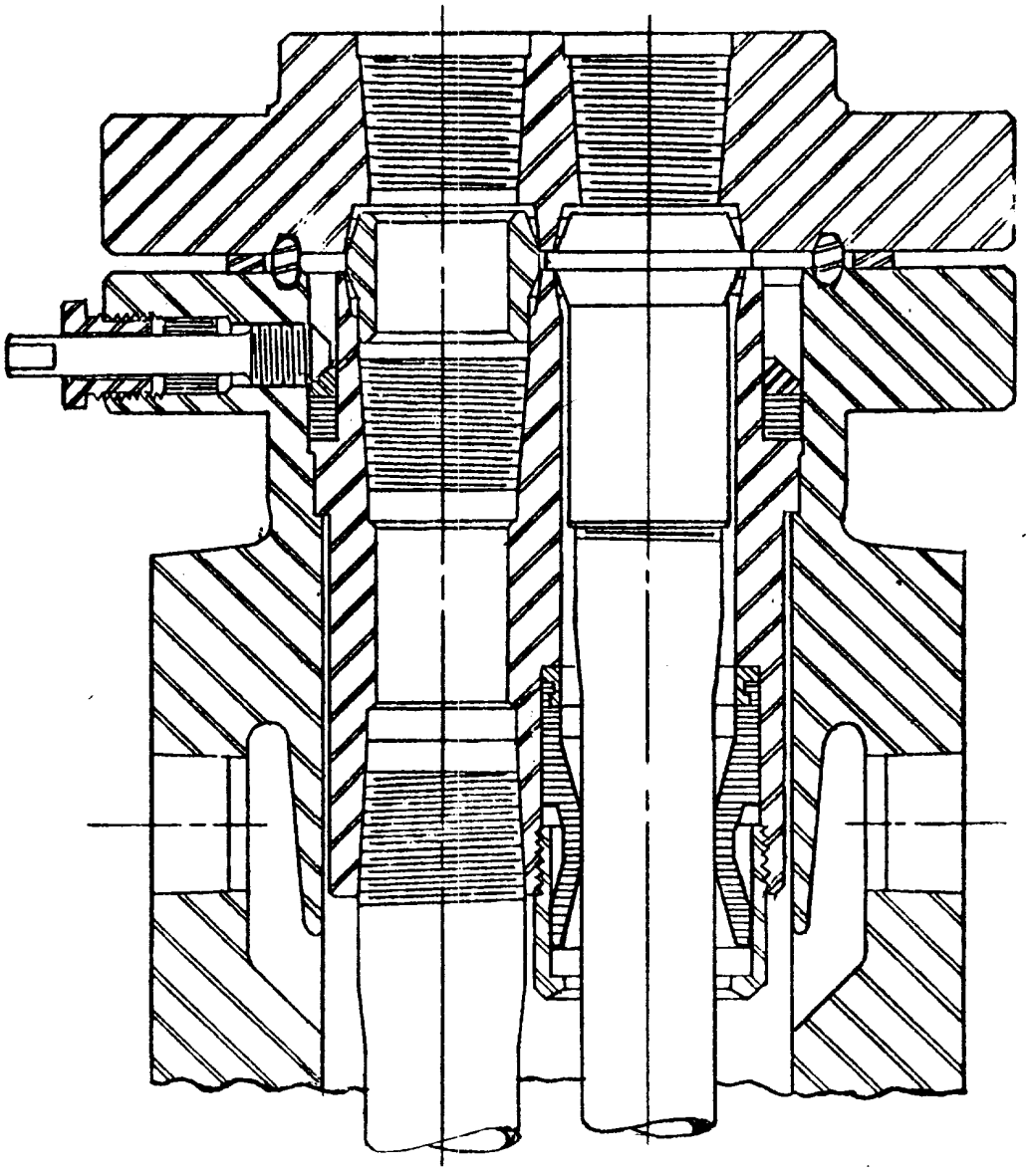
FORM 7-132R (10-56)

SCHEMATIC DIAGRAM OF DUAL COMPLETION

El Paso Natural Gas Co. San Juan 28-5 Unit No. 44 (MD)
SW/4 Section 27, T-28-N, R-5-W




-3000 LB WOG
2000 LB WOG
28
20
9
4
15
24
25
22
23
13
27
17
19
OPTIONAL
'BF' SLIPSEAL
UNIT
No 9
FOR DETAIL OF TUBING
HANGER. SEE NEXT
PAGE
EL PASO NATURAL GAS CO.
35689



THIS FORM IS NOT TO BE USED FOR REPORTING PACKER LEAKAGE TESTS IN SOUTHEAST NEW MEXICO

NEW MEXICO OIL CONSERVATION COMMISSION
NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

FORM PL-NW-1
REVISED 6-1-59

Operator: **El Paso Natural Gas Company** | Lease: **San Juan 28-5** | Well No.: **44 (MD)**

Location of Well: Unit **M** Sec. **27** Twp **28 N** Rge **5 W** | County: **Rio Arriba** | Type of Test: Initial **10-10-60** (DATE) Annual (YEAR)

	Name of Reservoir or Pool	Type of Prod. (Oil or Gas)	Method of Prod. (Flowing or Artificial Lift)	Prod. Unit (Casing or Tubing)
UPPER COMPLETION:	**Mesa Verde**	**Gas**	**Flowing**	**Tubing**
LOWER COMPLETION:	**Dakota**	**Gas**	**Flowing**	**Tubing**

SHUT-IN PRESSURE DATA BEFORE FLOW TEST NO. 1

	Hour & Date Well Shut-in	Length of Time Shut-in	Shut-in Pressure, PSIG	Stabilized Pressure
UPPER COMPLETION:	**9-26-60**	**14 days**	**(C) & (T) 998**	(XXXXX No)
LOWER COMPLETION:	**9-26-60**	**14 days**	**2688**	(XXXXX No)

FLOW TEST NO. 1

Zone Producing (Upper or Lower): **Lower** | Hour & Date Flow Started: **10:04 a.m. 10-10-60**

LAPSED TIME SINCE FLOW BEGAN	SHUT-IN ZONE PRESSURE, PSIG	WORKING COLUMN PRESSURE, PSIG		FLOWING ZONE PRESSURE, PSIG	FLOWING TEMPERATURE	REMARKS
15 min.	**1006**			**638**	**67**	
30 min.	**1006**			**542**	**67**	
45 min.	**1006**			**495**	**67**	
60 min.	**1006**			**461**	**67**	
180 min.	**1005**	**Calculated:**	**802**	**347**	**67**	

	Total Bbls.	Number Hours	Oil Rate:	Gravity	Gas Oil Ratio
OIL PRODUCED			Bbl. D		

	Rate of Flow	Tested Through
GAS PRODUCED	**4500** MCF D	(Choke XXXXXX)

REMARKS:

SHUT-IN PRESSURE DATA BEFORE FLOW TEST NO. 2

	Hour & Date Well Shut-in	Length of Time Shut-in	Shut-in Pressure, PSIG	Stabilized Pressure
UPPER COMPLETION:	**9-26-60**	**29 days**	**(C) & (T) 1043**	(XXXXX No)
LOWER COMPLETION:	**10-10-60**	**15 days**	**2700**	(XXXXX No)

FLOW TEST NO. 2

Zone Producing (Upper or Lower): **Upper** | Hour & Date Flow Started: **12 p.m. 10-25-60**

LAPSED TIME SINCE FLOW BEGAN	FLOWING ZONE PRESSURE, PSIG	WORKING COLUMN PRESSURE PSIG	SHUT-IN ZONE PRESSURE, PSIG	FLOWING TEMPERATURE	REMARKS
15 min.	**415**	**917**	**2699**	**56**	
30 min.	**351**	**836**	**2701**	**57**	
45 min.	**321**	**781**	**2703**	**59**	
1 hour	**304**	**743**	**2705**	**60**	
3 hours	**223**	**581**	**2710**	**64**	

	Total Bbls.	Number Hours	Oil Rate:	Gravity	Gas Oil Ratio
OIL PRODUCED			Bbl. D		

	Rate of Flow	Tested Through
GAS PRODUCED	**2777** MCF D	(Choke XXXXXX)

REMARKS

Made light spray of Fluid for approximately 45 minutes and then cleared up.

The results of this test indicate (No Packer Leakage) (XXXXXXXXXXXX) in this well.

I hereby certify that the information herein contained is true and complete to the best of my knowledge.

OPERATOR **El Paso Natural Gas Company**

BY **H. D. Kendrick**

TITLE **Sr. Gas Engineer**

DATE

Approved _____ 19__

NEW MEXICO OIL CONSERVATION COMMISSION

BY:

TITLE:

EL PASO NATURAL GAS COMPANY

OPEN FLOW TEST DATA

DUEL COMPLETION DATE **October 25, 1960**

Operator: **El Paso Natural Gas Company**		Lease: **San Juan 28-5 No. 44 (MV)**	
Location: 840'S, 890'W, 27-28N-5W		County: **Rio Arriba**	State: **New Mexico**
Formation: **Mesa Verde**		Pool: **Blanco Mesa Verde**	
Casing: Diameter: 7"	Set At: Feet: 7745	Tubing: Diameter: 2" Hydril	Set At: Feet: 5881
Pay Zone: From: 5762	To: 5904	Total Depth: 8195 C/O 8157	Shut In: 9/26/60
Stimulation Method: **Sand/Water Frac.**		Flow Through Casing	Flow Through Tubing: X

Choke Size, Inches: .750		Choke Constant: C: 12.365		**5" Liner from 7653 to 8193 Guiberson "AG" Prod. Pkr. at 7321**	
Shut-in Pressure, Casing, (MV): 1043 PSIG	+ 12 = PSIA: 1055	Days Shut-in: 29		Shut-in Pressure Tubing (MV): 1043 PSIG	+ 12 = PSIA: 1055
Flowing Pressure: P: 223 PSIG	+ 12 = PSIA: 235			Working Pressure: Pw: 581 PSIG	+ 12 = PSIA: 593
Temperature: T 64 F	Ft: .9962	n: .75		Fpv (From Tables): 1.025	Gravity: .686 Fg: .9359

Initial SIPT (D) = 2700 psig
Final SIPT (D) = 2710 psig

CHOKE VOLUME Q = C x P_t x F_t x F_g x F_{pv}

Q = (12.365)(235)(.9962)(.9359)(1.025) = **2777** MCF D

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

Aof = $\left(\frac{1113025}{761376} \right)^n$ $(1.4618)^{.75}(2777) = (1.3298)(2777)$

Aof = **3693** MCF D

TESTED BY: **R. F. Headrick**

WITNESSED BY:

Calculated by W. D. Dawson

Checked by T. B. Grant

Lewis D. Galloway

Lewis D. Galloway

EL PASO NATURAL GAS COMPANY

OPEN FLOW TEST DATA

DUAL COMPLETION DATE October 10, 160

Operator: El Paso Natural Gas Co.		Lease: San Juan 28-5 No. 44 (D)	
Location: 840S, 890W; Sec. 27-28N-5W		County: Rio Arriba	State: New Mexico
Formation: Dakota		Pool: Undesignated	
Casing: 7"	Set At: 7745	Tubing: 2" EUE	Set At: 8007
Perforations: 7812	To: 8126	Total Depth: 8195 C/O 8157	Shut In: 9/26/60
Stimulation Method: Sand Water Frac.		Flow Through:	X

.75"	12.365	5" Liner from 7653	to 8193
Choke Press. (MV) 998	Diff. 1010	Temp. 15	Tubing Press. 2688 (Dak)
Flow Temp. 347	Gravity 359	Factor Calc.	Casing Press. 814 PSIA
Compressibility Factor 67	Fpv .9933	Fg .75	Fr 1.029
Ft .610	Fa .9918		

Initial SIPT (MV) = 998 psig
Final SIPC (MV) = 1005 psig

Guiberson "AG" Prod. Packer at 7321

$$12.365 \times 359 \times .9933 \times .9918 \times 1.029 \qquad 4500 \text{ MCF D}$$

$$\left(\quad\right)^{n}$$

$$\left(\frac{7290000}{6627404}\right)^{n} \qquad 1.0999^{.75} \times 4500 = 1.0740 \times 4500$$

4833 MCF D

R. L. Nickell, Jr.

Lewis D. Galloway

L. D. Galloway