

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

OIL CONSERVATION COMMISSION
BOX 871
SANTA FE, NEW MEXICO

DATE 9-27-60

RE: Proposed NSP _____

Proposed NSL _____

Proposed NFO _____

Proposed DC ✓ _____

Gentlemen:

I have examined the application dated 9-30-60
for the EPNG SJO 28-5 #42 K-21-28N-5W
Operator Lease and Well No. S-T-R

and my recommendations are as follows:

Yours very truly,

Barney Church
OIL CONSERVATION COMMISSION

NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

7-3-58

APPLICATION FOR DUAL COMPLETION

Field Name Blanco Mesa Verde & Wildcat Dakota		County Rio Arriba	Date September 22, 1960
Operator El Paso Natural Gas Company		Lease San Juan 28-5 Unit	Well No. 42 (410)
Location of Well K	Unit 31	Township 24N	Range 5E

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)	4976-5014 (Cliff House) 5356-5450 (Point Lookout)	7376-7413 (Graneros) 7422-7570 (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.

El Paso Natural Gas Co. is operator of the San Juan 28-5 Unit.

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 Co., and that on July 11, 1960, I was called to the location of the El Paso Natural Gas Company San Juan 28-5 Unit No. 42 (MD) Well located in the NESW/4 of Section 31, 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 Baker Model "D" Production Packer was set in this well at 6925 feet in accordance with the usual practices and customs of the industry.

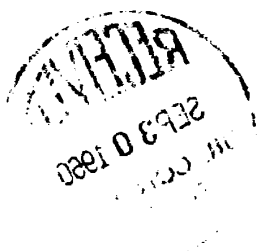
R. G. Miller

Subscribed and sworn to before me, a Notary Public, this 23rd day of July, 1960.

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

My commission expires

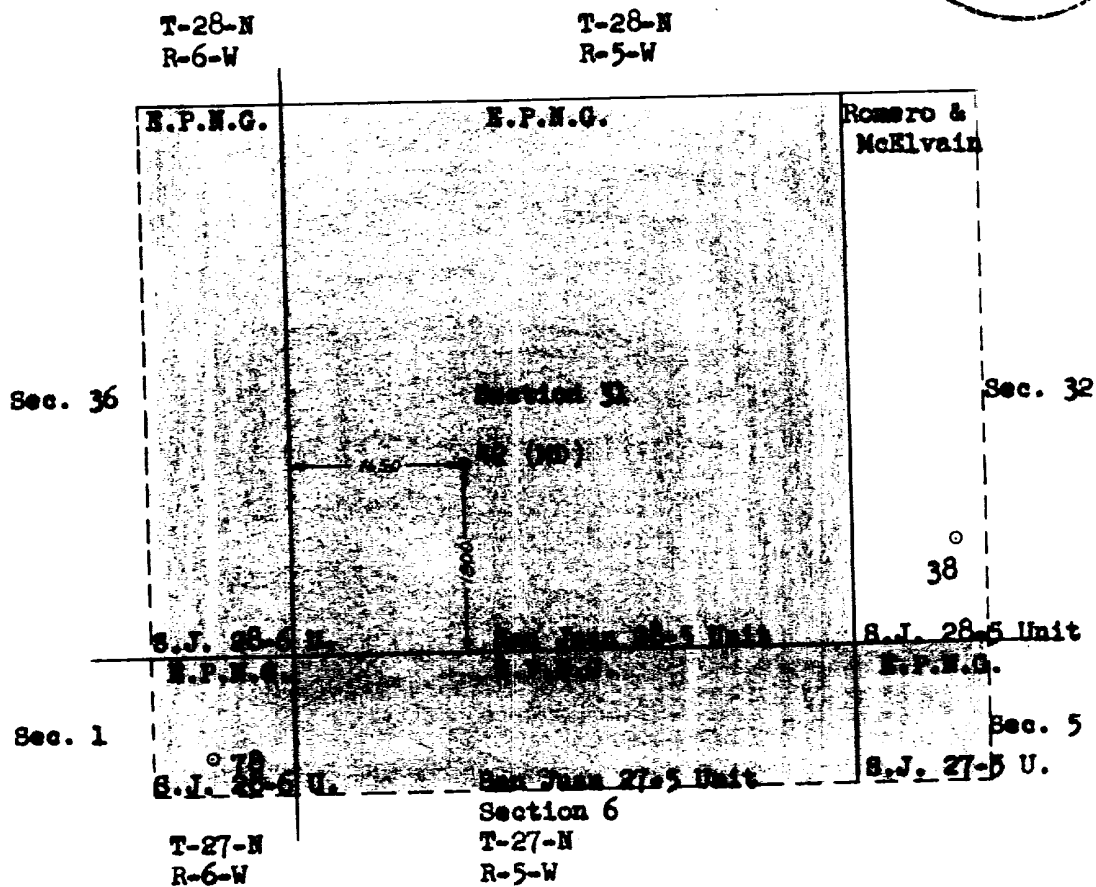
My Commission Expires 6-21-61



Handwritten signature or name

10 11 3 1950

PLAT SHOWING LOCATION OF DUALY COMPLETED
El Paso Natural Gas Co. San Juan 28-5 Unit No. 42 (MD)
and Offset Acreage



EL PASO NATURAL GAS COMPANY
EL PASO, TEXAS

SCALE

DATE

No.

DRAWN BY

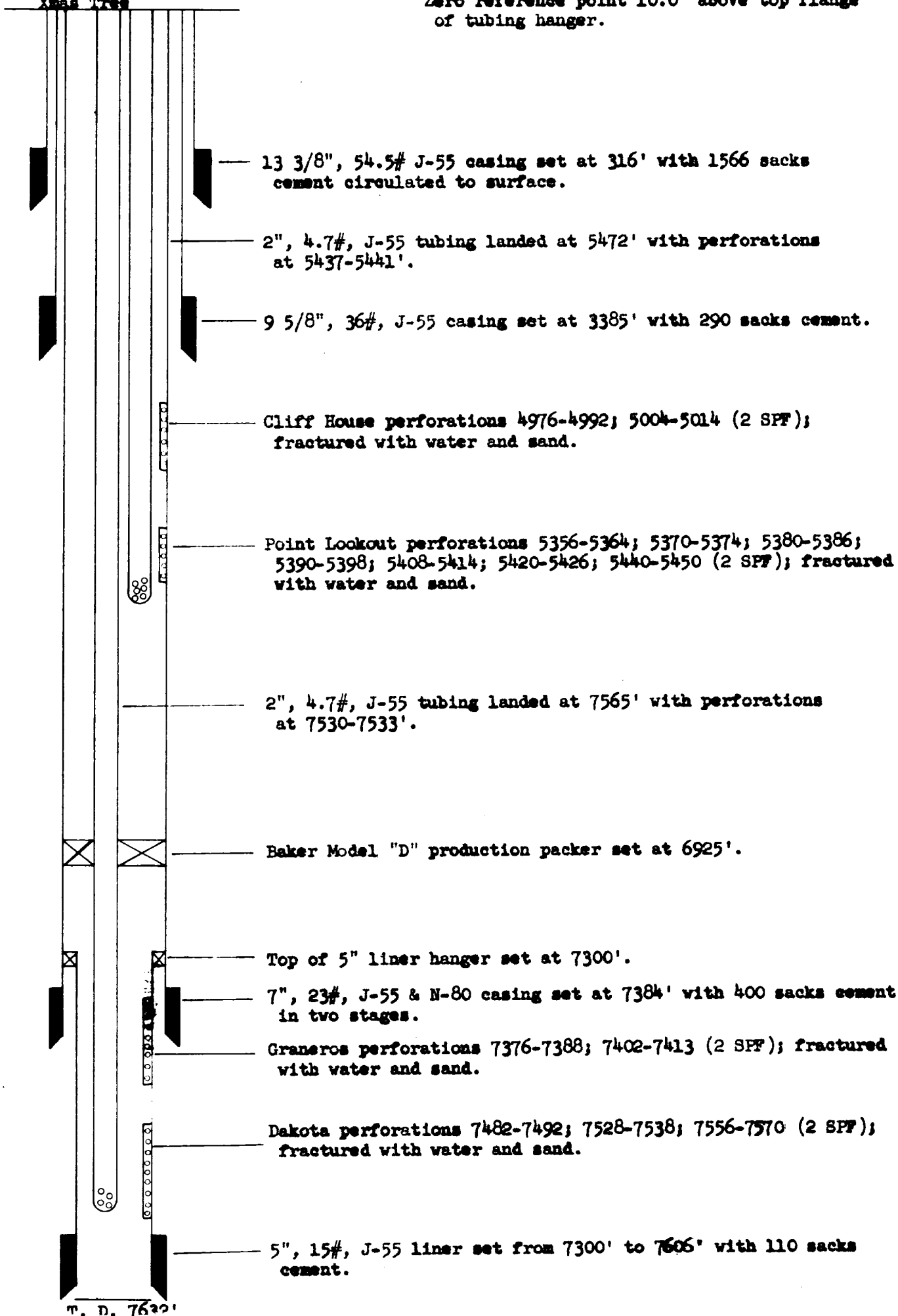
CHECKED BY

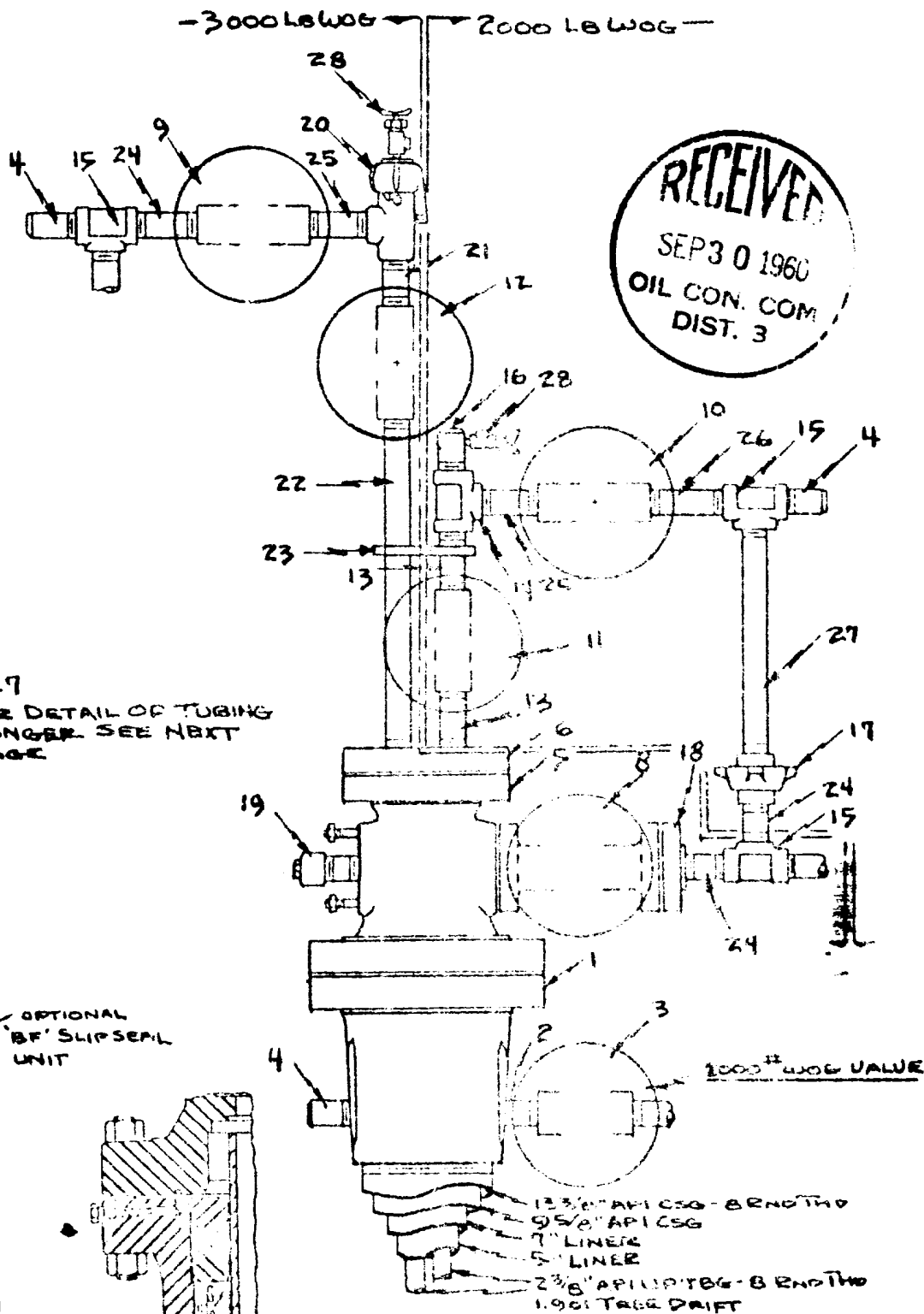
SCHEMATIC DIAGRAM OF DUAL COMPLETION
El Paso Natural Gas Co. San Juan 28-5 Unit No. 42
SW/4 Section 31, T-28-N, R-5-W



Dual String
 Xmas Tree

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





NO 7
FOR DETAIL OF TUBING
HANGER SEE NEXT
PAGE

OPTIONAL
BF SLIP SEAL
UNIT

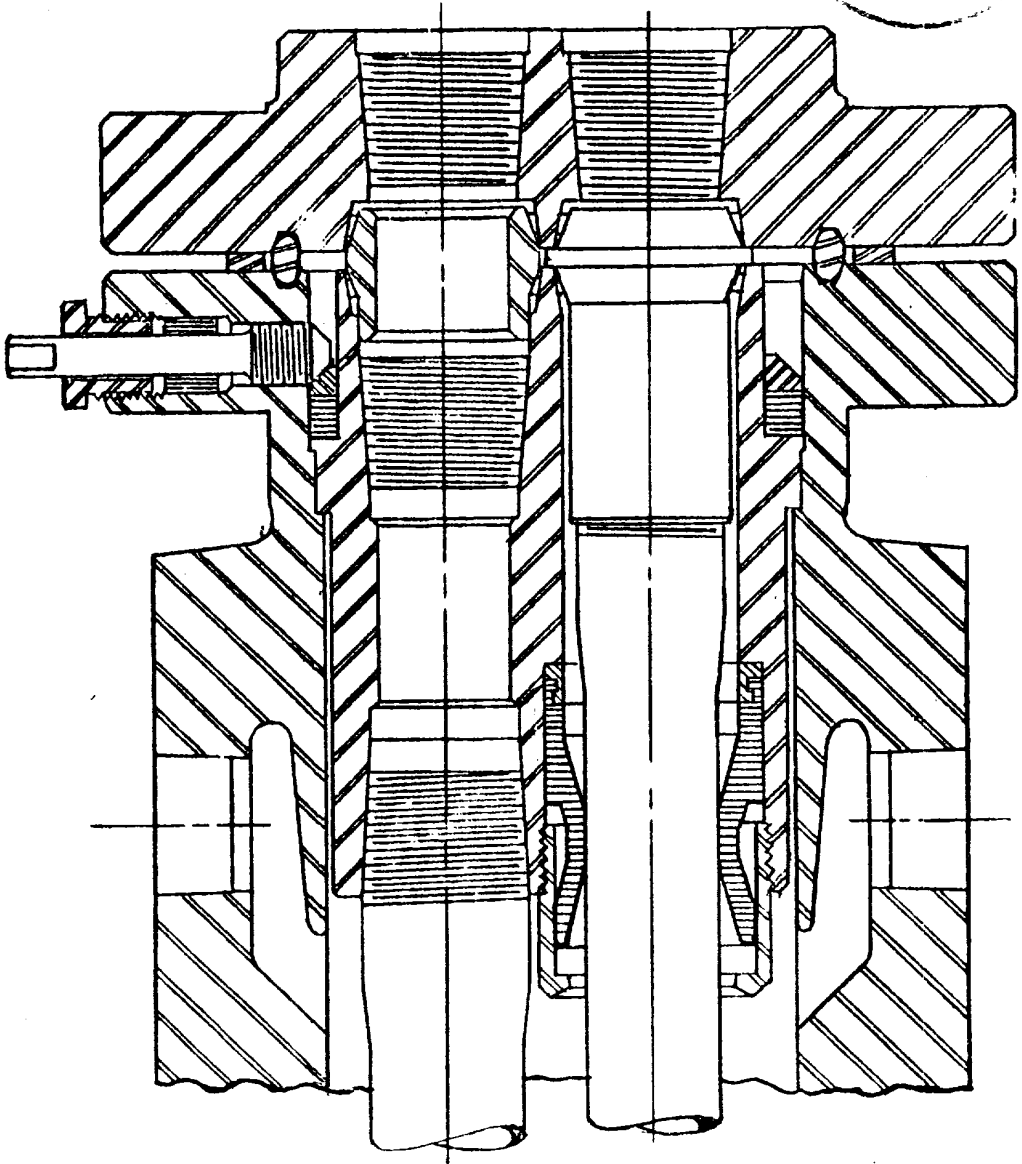
THE NATIONAL SUPPLY CO. HANSON PLANT DIVISION
EL PASO, TEXAS

EL PASO NATURAL GAS CO.

SCALE
4" = 6" SH
DRAWN

SUPERSEDED

35689



EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE August 25, 1960

Operator El Paso Natural Gas Co.	Lease San Juan 28-5 Unit No. 42 (M)
Location 1800S, 1650W; 31-28N-5W	County Rio Arriba State New Mexico
Formation Mesaverde	Pack Blanco MV
Casing Diameter 7" Set At Feet 7373	Tubing Diameter 2" H-G Set At Feet 5462
Pay Zone From 4976 To 5450	Total Depth 7632 c/o 7590 Shut In 7/13/60
Stimulation Method Sand Water Frac.	Flow Through Casing X

Choke Size, Inches .75	Pressure Constant, P 12.365	5" liner from 7300 to 7606
Shut-In Pressure, Casing 1146 (MV)	PSIG 12 PSIA 1158	Shut-In Pressure, Tubing 1148 (MV)
Flowing Pressure, P 344	PSIG 12 PSIA 356	Working Pressure, Pw 835
Temperature 68	Grav .9924	Sp. Gr. From Tables 1.041
	Grav .75	Grav .700 Eq. .9258

Initial SIPT (Dk) = 2686 psig
Final SIPT (Dk) = 2697 psig

Baker Model "D" Prod. packer at 6925

CHOKE VOLUME $Q = C \times P_1 \times F_1 \times F_2 \times F_3$

$$Q = 12.365 \times 356 \times .9924 \times .9258 \times 1.041$$

4210

MCF/D

OPEN FLOW $Q = \left(\frac{P_1^2 - P_2^2}{P_1^2 - P_2^2} \right)^n$

$Q = \left(\frac{1345600}{628191} \right)^n$

$$2.1420^{.75} \times 4210 = 1.7700 \times 4210$$

Ans 7452

MCF/D

By **Tom Grant**

Witnessed by

Lewis D. Galloway
L. D. Galloway



EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE August 4, 1960

Operator El Paso Natural Gas Company		Lease San Juan 28-5 Unit No. 42 (D)	
Location 1800S, 1650W; 31-28-5		County Rio Arriba	State New Mexico
Formation Dakota		Pool Undesignated	
Casing: Diameter 7"	Set At: Feet 7373	Tubing: Diameter 2"	Set At: Feet 7555
Pay Zone: From 7376	To 7570	Total Depth 7632 c/o 7590	Shut 7/13/60
Stimulation Method: Sand Water Frac.		Flow Through Tubing X	

Choke Size, Inches .75	Choke Constant: C 12.365	5" liner from 7300' to 7606'	
		Baker Model "D" Packer at 6925'	
Shut-In Pressure, Casing (MV) 1138	PSIG - 12 - PSIA 1150	Days Shut-In 22	Shut-In Pressure, Tubing (DK) 2656
Flowing Pressure, P 579	PSIG - 12 - PSIA 591		Working Pressure, P _w Calc. 1323
Temperature: T 78 F	F _g .9831	F _{pv} From Tables 1.048	G _g Est. .610 F _g .9918

Initial SIFP (MV) = 1151 psig

Final SIFP (MV) = 1149 psig

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

$$Q = 12.365 \times 591 \times .9831 \times .9918 \times 1.048$$

7467

MCF/D

$$\text{OPEN FLOW } A_{of} = Q \left(\frac{P_1^2 - P_w^2}{P_1^2} \right)^n$$

$$A_{of} = \left(\frac{7118224}{5367895} \right)^n$$

$$1.3260^{.75} \times 7467 = 1.2356 \times 7467$$

A_{of}

9226

MCF/D

Blew fair white mist through whole test.

TESTED BY **D. Mortensen**

WITNESSED BY

Checked By **T. B. Grant**

Lewis D. Galloway
L. D. Galloway

