

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

OIL CONSERVATION COMMISSION
BOX 871
SANTA FE, NEW MEXICO

DATE 1-4-60
12-29

RE: Proposed NSP _____

Proposed NSL _____

Proposed NFO _____

Proposed DC ✓

Gentlemen:

I have examined the application dated 12-24-59
for the EPNG Union Unit #149 N-30-27-6
Operator Lease and Well No. S-I-R

and my recommendations are as follows:

Approval

Yours very truly,

Ernest C. Smith
OIL CONSERVATION COMMISSION

NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

7-3-58

APPLICATION FOR DUAL COMPLETION

Field Name Blanco M.V. & South Blanco Dak. Ext.		County Rio Arriba	Date December 21, 1959
Operator El Paso Natural Gas Company		Lease Lincon Unit	Well No. 149 (MS)
Location of Well	Unit N	Section 30	Township 27N
		Range 6W	

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 A
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)	5166-5496	7320-7366 (Graneros) 7450-7534 (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 Company is 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 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 to 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 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, Mack M. Mahaffey, being first duly sworn upon my oath depose and say as follows:

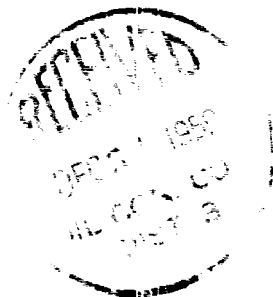
I am an employee of Baker Oil Tools, Inc., and that on November 12, 1959, I was called to the location of the El Paso Natural Gas Company Rincon Unit No. 149 (MD) Well located in the SESW of Section 30, Township 27 North, Range 6 West, N.M.P.M., for advisory service in connection with installation of a production packer. In my presence, a Baker Model "D" Production Packer was set in this well at 5680 feet in accordance with the usual practices and customs of the industry.

Mack M. Mahaffey

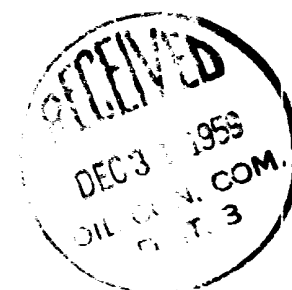
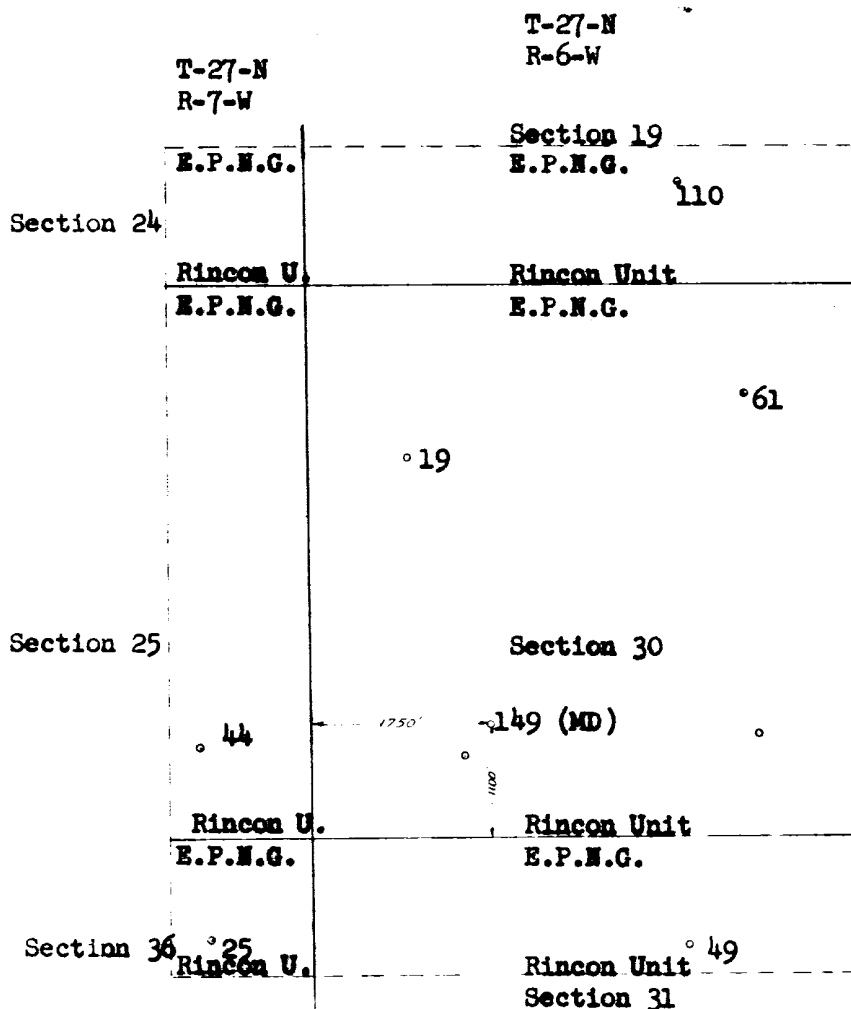
Subscribed and sworn to before me this 29th day of December, 1959.

Paul M. Melnick
Notary Public in and for San Juan County,
New Mexico

My commission expires February 24, 1960.



**PLAT SHOWING LOCATION OF DUALY COMPLETED
El Paso Natural Gas Co. Rincon Unit No. 149 (MD)
and Offset Acreage**



EL PASO NATURAL GAS COMPANY
EL PASO, TEXAS

SCALE

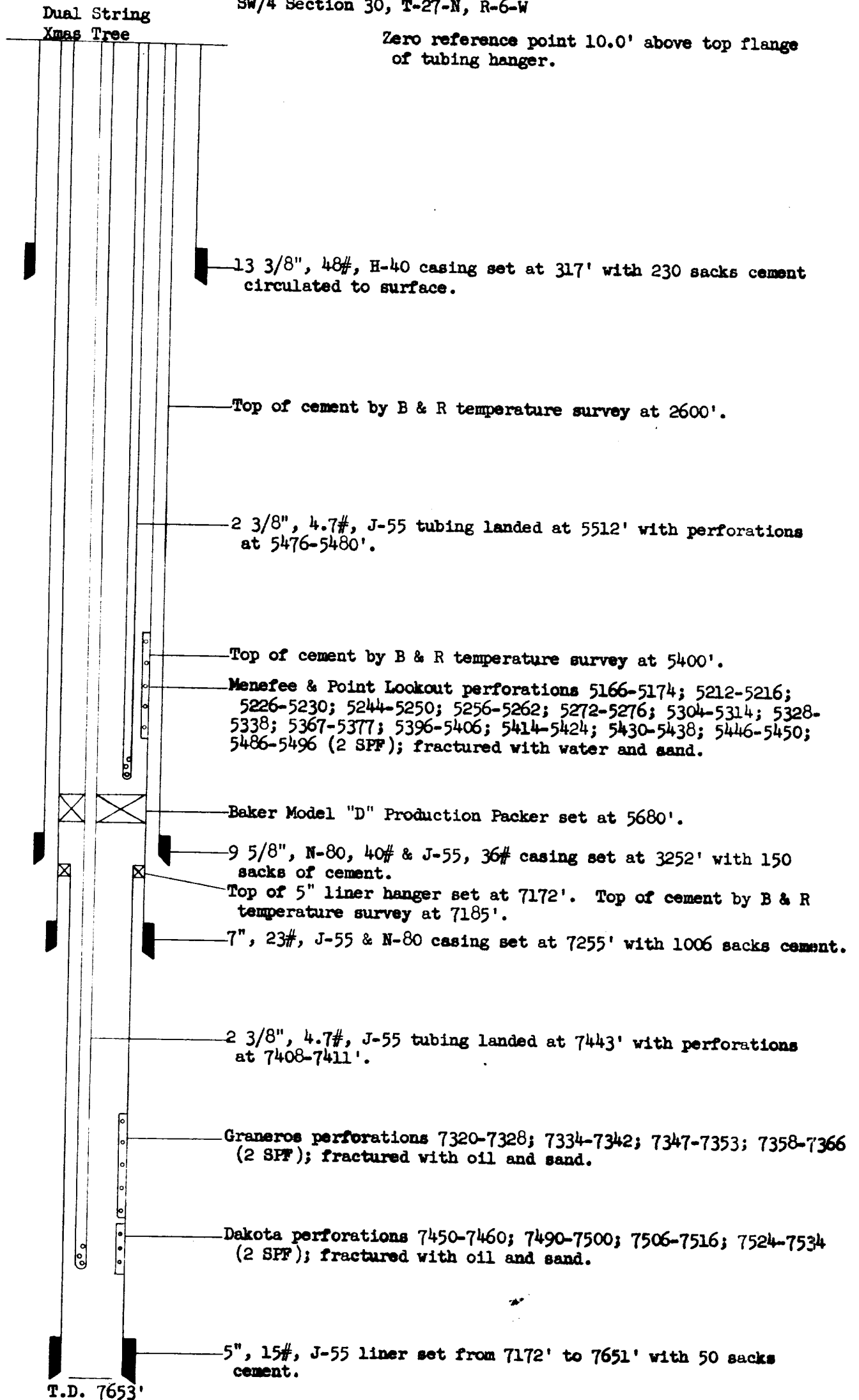
DATE

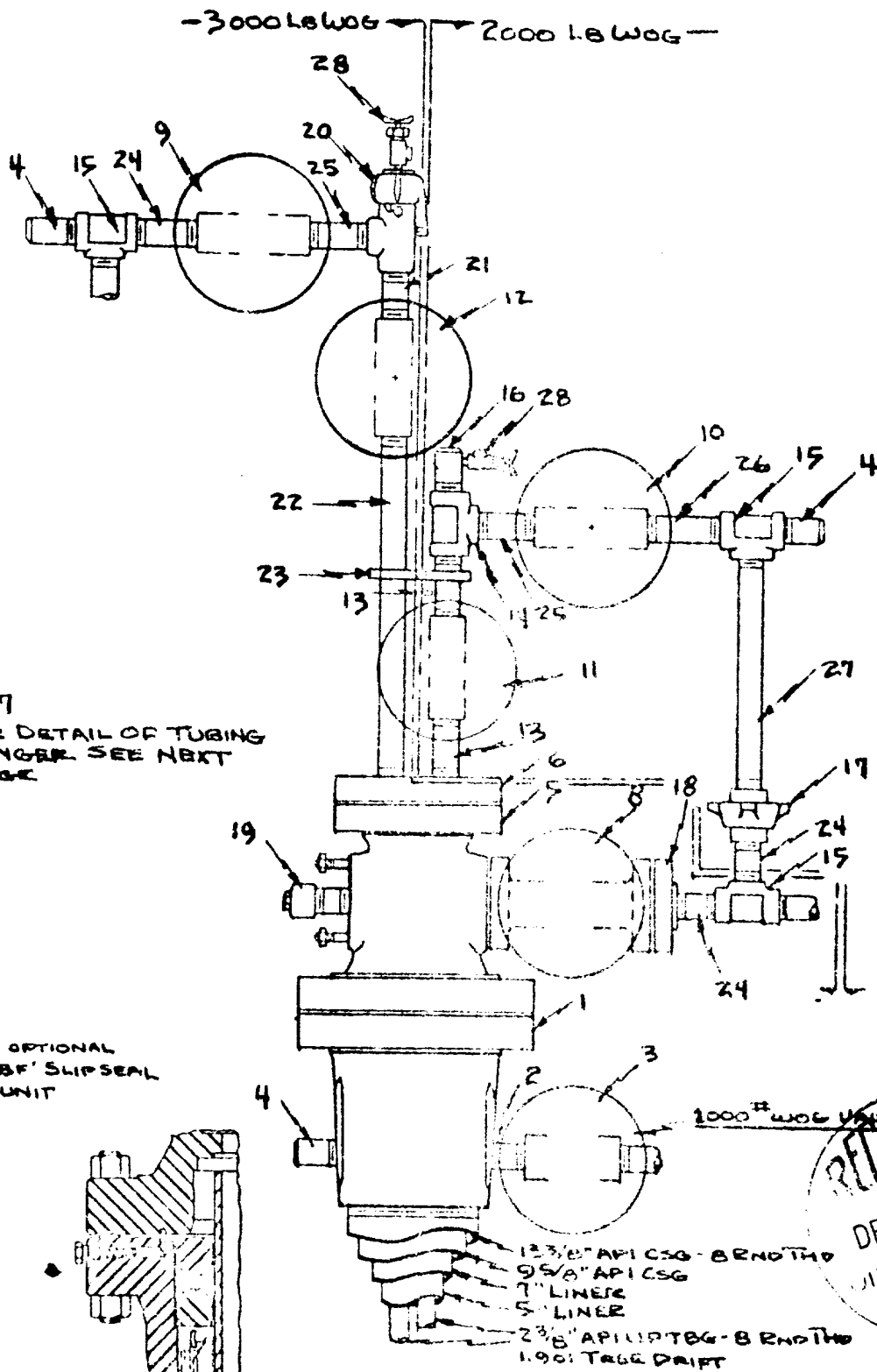
No.

DRAWN BY

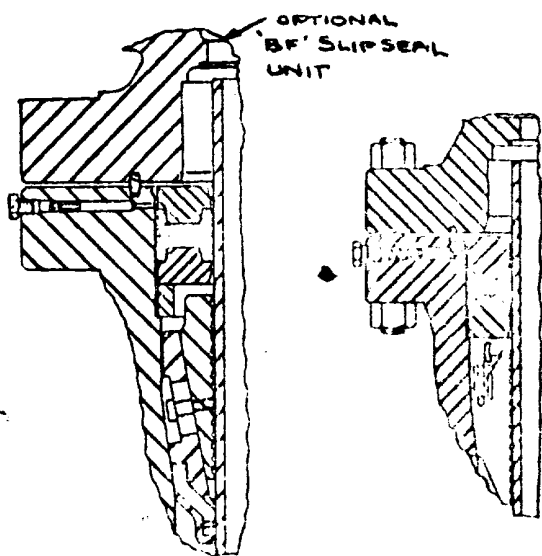
CHECKED BY

SCHEMATIC DIAGRAM OF DUAL COMPLETION
El Paso Natural Gas Co. Rincon Unit No. 149 (MD)
SW/4 Section 30, T-27-N, R-6-W





NO 7
FOR DETAIL OF TUBING
HANGER. SEE NEXT
PAGE



RECEIVED
DEC 31 1959
OIL CON. COM.
DIST. 3

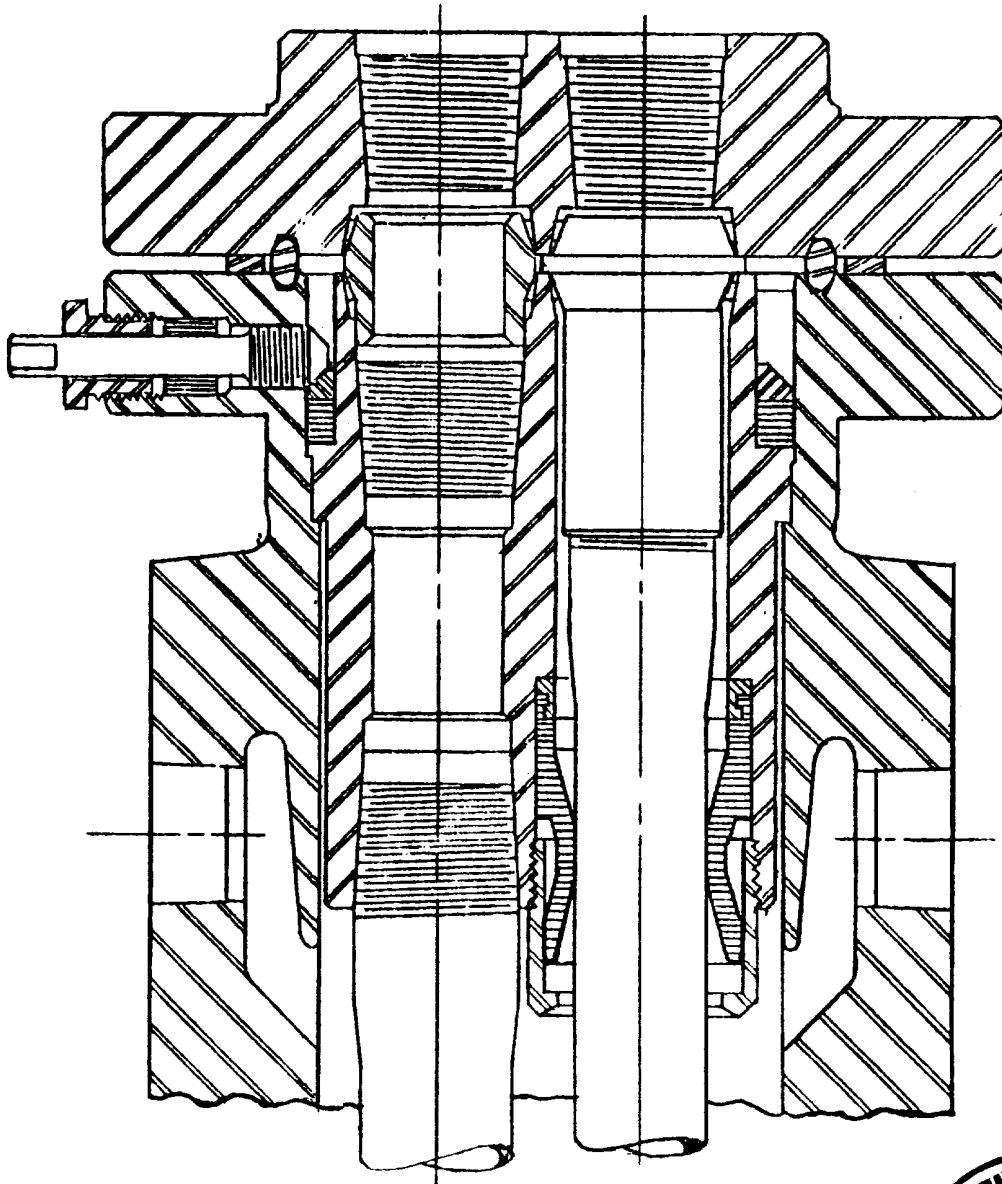
THE NATIONAL SUPPLY CO. DIVISION PLANT DIVISION
HOUSTON, TEXAS

EL PASO NATURAL GAS CO.

SCALE
4" = 6'-5"
DRAWN

SUPERSEEDING

35689



EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE November 27, 1959

Operator El Paso Natural Gas		Rincon Unit No. 149 (M)	
Location 11008, 1750W; 30-27-6		Rio Arriba New Mexico	
Formation Mesa Verde		Blanco	
Casing Diameter 7	Set At Feet 7253	Casing Diameter 2	Set At Feet 5501
Pay Zone From 5166	To 5496	Total Depth 7653 c/o 7615	Shut In: 11/12/59
Stimulation Method Sand Water Frac.		Flow Through Tubing X	

Choke Size, inches .75		Choke Constant, C 12.365	
Shut-In Pressure, Casing, PSIG 1098 (MV)	12 - PSIA 1110	Shut-In Pressure, Tubing, PSIG 1102 (MV)	12 - PSIA 1114
Flowing Pressure, Casing, PSIG 142	12 - PSIA 154	Flowing Pressure, Tubing, PSIG 162	12 - PSIA 174
Temperature, Casing, °F 59	°F -75	Temperature, Tubing, °F 1.018	Gravity .708

Initial SIPT (Dak) = 2084 psig

Final SIPT (Dak) = 2093 psig

Baker "D" Packer at 5680

CHOKE VOLUME $C \times P_1 \times F_1 \times F_g \times F_v$

$$C = 12.365 \times 154 \times 1.0010 \times .9225 \times 1.018$$

1790

MCF/D

OPEN FLOW Act

$$\left(\frac{P_1^2 - P_w^2}{P_1 - P_w} \right)^n$$

Act

$$\frac{1240996}{1210720}$$

$$1.0250^{.75} \times 1790 = 1.0187 \times 1790$$

Act

1823

MCF/D

TESTED BY S. V. Roberts

WITNESSED BY

Lewis D. Galloway
L. D. Galloway



EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE November 19, 1959

Operator El Paso Natural Gas		Lease Rincon Unit No. 149 (D)	
Location 11008, 1750W; 30-27-6		County Rio Arriba	State New Mexico
Formation Dakota		Pool Undesignated	
Casing: Diameter 5	Set At: Feet 7651	Tubing: Diameter 2	Set At: Feet 7432
Pay Zone: From 7320	To 7534	Total Depth: 7653 c/o 7615	Shut In: 11/12/59
Stimulation Method Sand Oil Frac.		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .75		Choke Constant: C 12.365		5" liner 7172 - 7651	
Shut-In Pressure, Casing (MV) 1054	PSIG	- 12 = PSIA 1066	Days Shut-In 7	Shut-In Pressure, Tubing (Dak) 1898	PSIG
Flowing Pressure: P 382	PSIG	- 12 = PSIA		Working Pressure: P _w Calc.	PSIG
Temperature: T 66	°F	n =		Fpv (From Tables) 1.039	Gravity .668

Initial SIFT (MV) = 1057 psig

Final SIPC (MV) = 1067 psig

Baker "D" Packer at 5680

CHOKE VOLUME = Q C x P_i x F_i x F_g x F_{pv}

$$Q = 12.365 \times 394 \times .9943 \times .9498 \times 1.039 = 4780 \text{ MCF/D}$$

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

$$Aof = \left(\frac{3648100}{2882475} \right)^n = 1.2656^{.75} \times 4780 = 1.1930 \times 4780$$

$$Aof = 5703 \text{ MCF/D}$$

TESTED BY S. V. Roberts

WITNESSED BY _____



Lewis D. Galloway
L. D. Galloway