

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

OIL CONSERVATION COMMISSION
BOX 871
SANTA FE, NEW MEXICO

DATE 5-6-60

RE: Proposed NSP _____

Proposed NSL _____

Proposed NFO _____

Proposed DC ✓

Gentlemen:

I have examined the application dated 4-11-60
for the EPNG Co 330 29-5 #13-30 H-30-29 N-5W
Operator Lease and Well No. S-T-R

and my recommendations are as follows:

Approve

Yours 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 Blanco Mesa Verde & Wildcat Dakota		County Rio Arriba	Date April 11, 1960
Operator El Paso Natural Gas Company		Lease San Juan 29-5 Unit	Well No. 13-30 (MD)
Location of Well H	Unit 30	Township 29N	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)	(5526-5644 (Cliff House) 5808-5984 (Point Lookout))	7980-8096 (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.

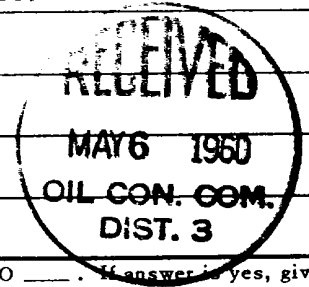
Yes b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.

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 the operator of the San Juan 29-5 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, Mack M. Mahaffey, being first duly sworn upon
my oath depose and say as follows:

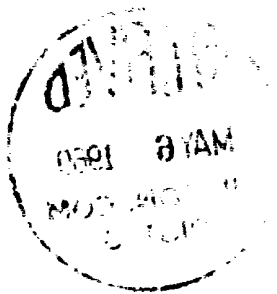
I am an employee of Baker Oil Tools, Inc., and that
on November 30, 1959, I was called to the location of the El
Paso Natural Gas Company San Juan 29-5 Unit No. 13-30 (MD) Well
located in the SENE/4 of Section 30, Township 29 North, Range 5
West, N.M.P.M., for advisory service in connection with installation of
a production packer. In my presence, a Baker Model "D" Production
Packer was set in this well at 7740 feet in accordance with the
usual practices and customs of the industry.

Mack M. Mahaffey

Subscribed and sworn to before me this 12th day of April,
1960.

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

My commission expires 6-1-61.



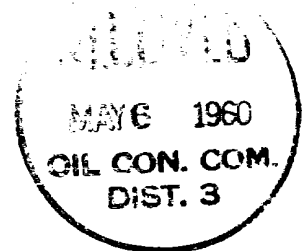
RECEIVED
MAY 6 1960

MOD. 4100
11 10 10 10

PLAT SHOWING LOCATION OF DUALY COMPLETED
El Paso Natural Gas Co. San Juan 29-5 Unit No. 13-30 (MD)
and Offset Acreage

T-29-N
R-5-W

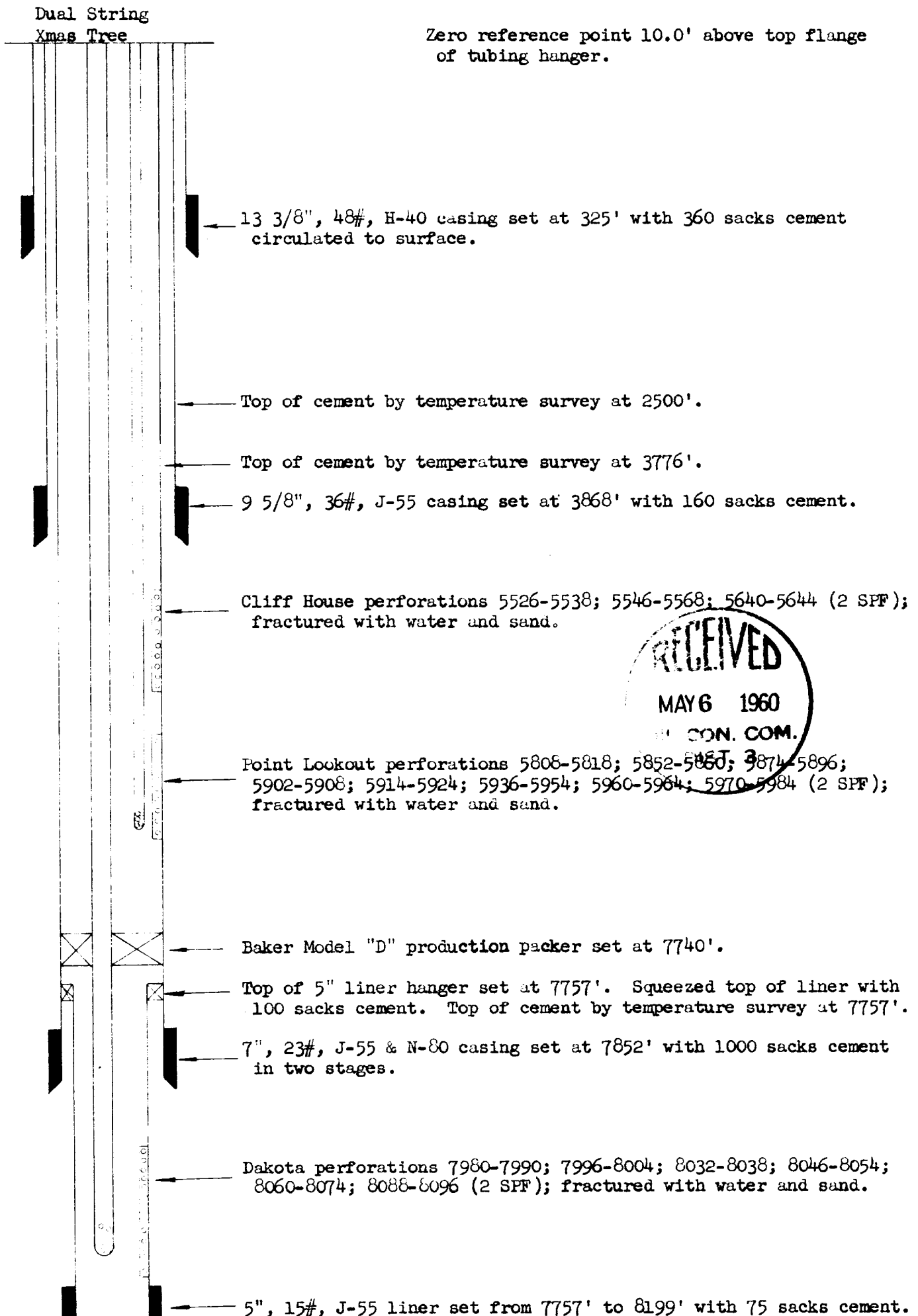
<p>Section 19 El Paso Natural Gas Co.</p>	<p>E.P.N.G. 28-20 Sec. 20</p>
<p>San Juan 29-5 Unit E.P.N.G.</p>	<p>29-5 Unit E.P.N.G.</p>
<p>Section 30</p>	<p>Sec. 29</p>
<p>San Juan 29-5 Unit El Paso Natural Gas Co.</p>	<p>29-5 Unit So. Pet. Sec. 32</p>
<p>San Juan 29-5 Unit Section 31</p>	<p>29-5 Unit</p>



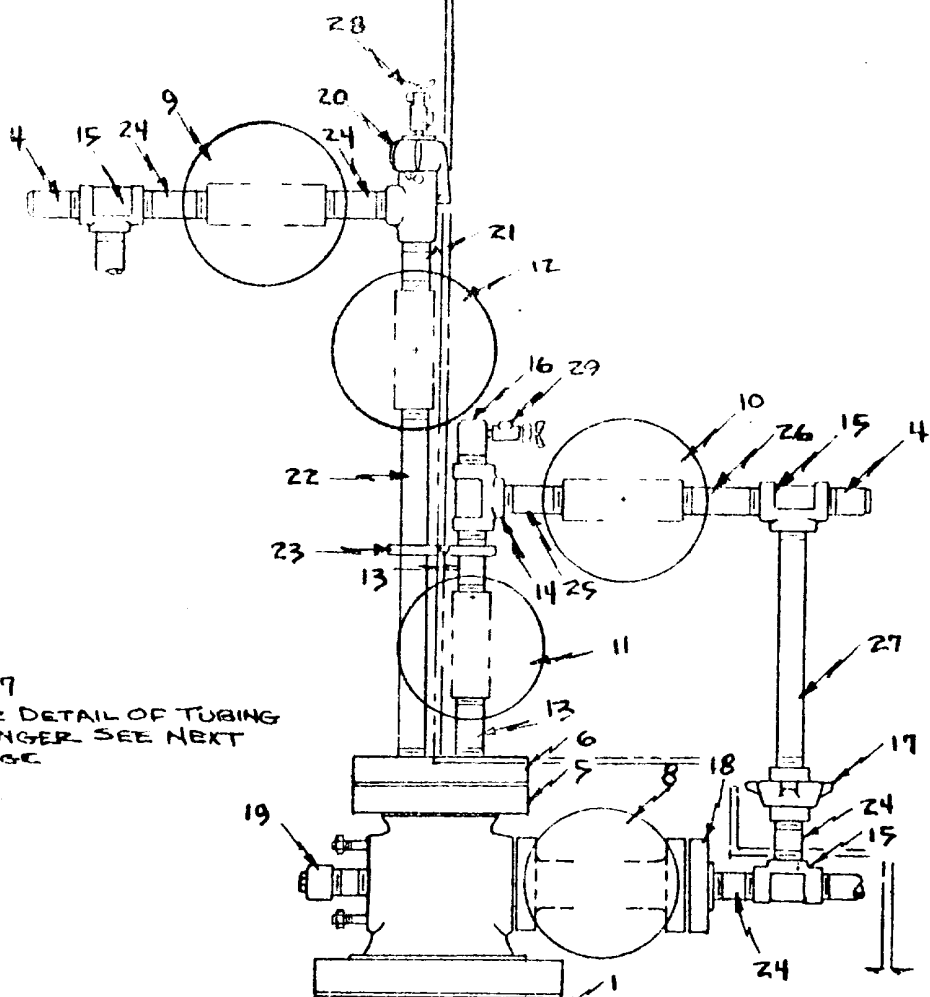
EL PASO NATURAL GAS COMPANY
EL PASO, TEXAS

<p>SCALE DRAWN BY</p>	<p>DATE CHECKED BY</p>	<p>No.</p>
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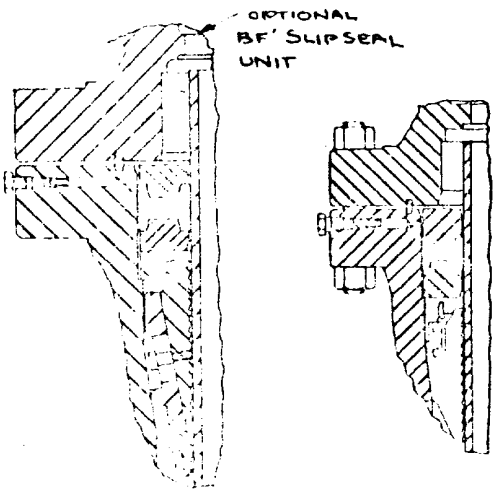
SCHEMATIC DIAGRAM OF DUAL COMPLETION
El Paso Natural Gas Co. San Juan 29-5 Unit No. 13-30 (MD)
NE/4 Section 30, T-29-N, R-5-W



-3000 LBS. - 2000 LBS.



Nº 9
FOR DETAIL OF TUBING
HANGER SEE NEXT
PAGE



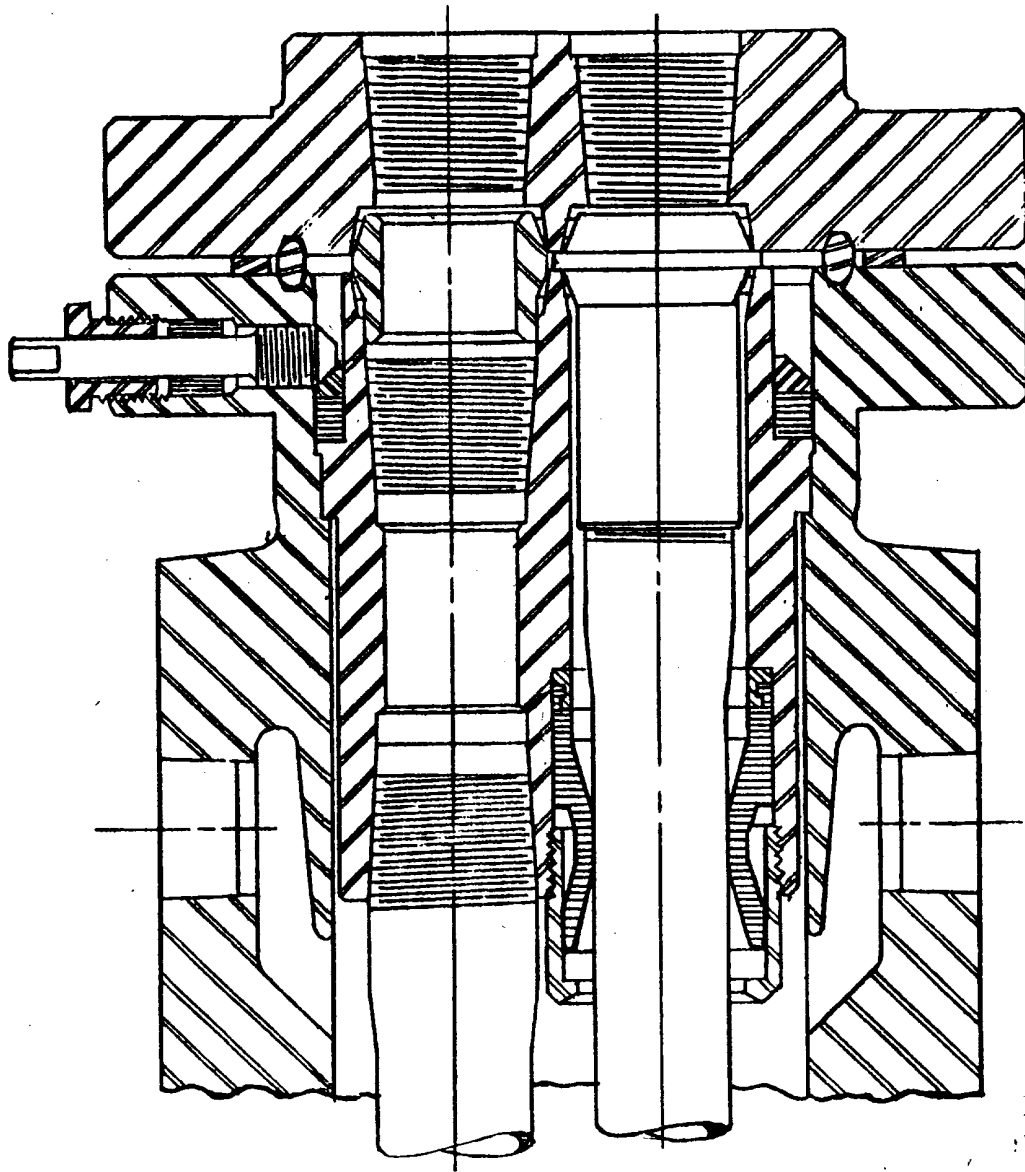
OPTIONAL
BF' SLIPSEAL
UNIT

- 13 3/8" API CSG - 8 RND THD
- 9 5/8" API CSG
- 7" LINER
- 5" LINER
- 1 1/4" API UP T8G - 10 RND THD
- 1.286 TREE DRIFT
- 2 3/8" API UP T8G - 8 RND THD
- 1.901 TREE DRIFT

1000# WOG VALVE

RECEIVED
MAY 6 1960
OIL CON. COM.
DIST. 3

THE NATIONAL SUPPLY CO. HOUSTON PLANT DIVISION HOUSTON, TEXAS		
EL PASO NATURAL GAS CO.		
SCALE 3-5-59 DRAWN D.M.	SUPERSEDING	35690



OPEN FLOW TEST DATA

CORRECTED COPY

DUAL COMPLETION

DATE March 14, 1960

Operator El Paso Natural Gas	Lease San Juan 29-5 Unit 13-30 (M)
Location 1650N, 800E; 30-29-5	County Rio Arriba State New Mexico
Formation Mesa Verde	Well Blanco
Flowing Casing 7 Set At Feet 7852	Tubing Diameter 1-1/4 Set At Feet 5970
Flowing Zone From 5526 To 5984	Total Depth 8214 c/o 8130 Shut In 2/24/60
Flowing Zone Material Sand Water Frac.	Flow Through Casing X

Choke Size .75	Pressure 12.365	Packer at 7740
Working Pressure (MV) 1087	Pressure 1099	Pressure (MV) 1087
Working Pressure (MV Csg.) 380	Pressure 392	Working Pressure (MV Tbg.) 852
Temperature 36	Temperature 1.0239	Temperature 1.046
		Gravimetric .669 Fig. .9498

Initial SIPT (D) = 1131 psig

Final SIPT (D) = 1152 psig

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

$$C = 12.365 \times 392 \times 1.0239 \times .9498 \times 1.046$$

4931

MCF/D

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

The last three flow press. readings were slightly fluctuating and there was ice in the choke upstream from the choke constriction.

$$Q = \left(\frac{1207801}{461305} \right)^n$$

$$2.6182^{.75} \times 4931 = 2.0585 \times 4931$$

ACT 10150

MCF/D



TESTED BY

W. D. Dawson

WITNESSED BY

W. B. Smith (Phillips)

CORRECTED COPY

Lewis D. Galloway
L. D. Galloway

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE January 12, 1960

Operator El Paso Natural Gas Company		Lease San Juan 29-5 Unit No. 13-30 (D)	
Location 1650N, 800E; 30-29-5		County Rio Arriba	State New Mexico
Formation Dakota		Pool Undesignated	
Casing: Diameter 5	Set At: Feet 8199	Tubing: Diameter 2	Set At: Feet 8043
Pay Zone: From 7980	To 8076	Total Depth: 8214 o/o 8130	Shut In 12/14/59
Stimulation Method Sand Water Frac.		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .75		Choke Constant: C 12.365		7" at 7852; 5" liner 7732-8199	
Shut-In Pressure, (MV) 1066	PSIG - 12 PSIA 1078	Days Shut-In 7	Shut-In Pressure, Tubing (D) 2368	PSIG - 12 PSIA 2380	
Flowing Pressure, P (D Tbg.) 60	PSIG - 12 PSIA 72		Working Pressure, Pw Calc. 161	PSIG - 12 PSIA 161	
Temperature: T 67 F	Ft. .9933		Fpv (From Tables) 1.006	Gravity .583	Eg: 1.017

Initial SIPT (MV) = 1073 psig

Final SIPC (MV) = 1074 psig

Packer at 7740

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

$$Q = 12.365 \times 72 \times .9933 \times 1.017 \times 1.006 = 905 \text{ MCF/D}$$

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

$$\text{Aof} = \left(\frac{5664400}{5638479} \right)^n \times 1.0045^{.75} \times 905 = 1.0034 \times 905$$

$$\text{Aof} = 908 \text{ MCF/D}$$

TESTED BY W. D. DawsonWITNESSED BY W. B. Smith (Phillips)

Lewis D. Galloway
L. D. Galloway

