

NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

7-3-58

APPLICATION FOR DUAL COMPLETION

Field Name Angel Peak Dakota Ext. & Angel Peak Gallup		County Santa Juan	Date March 6, 1959
Operator El Paso Natural Gas Company		Lease Huerfano Unit	Well No. 107 (OD)
Location of Well E	Unit 35	Township 27N	Range 10W

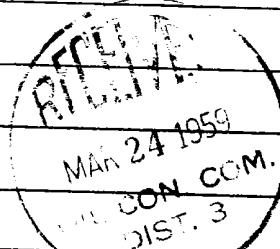
1. Has the New Mexico Oil Conservation Commission heretofore authorized the dual completion of a well in these same pools or in the same zones within one mile of the subject well? YES ☒ NO ☐
2. If answer is yes, identify one such instance: Order No. _____; Operator, Lease, and Well No.:

3. The following facts are submitted:	Upper Zone	Lower Zone
a. Name of reservoir	Gallup	Dakota
b. Top and Bottom of Pay Section (Perforations)	5990-6290	6934-7007
c. Type of production (Oil or Gas)	Oil	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.

W. R. Weaver**Pan American****WAIVERS REQUESTED. TO BE SENT UNDER SEPARATE COVER TO****Three States****SANTA FE.****Western Oil**

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 **Div. Pet. Engineer** 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.

EL PASO NATURAL GAS COMPANY

OIL WELL TEST

To: Mr. Ed E. Alsup

Date: February 20, 1959

From: Production Engineering Department

Place: Farmington, New Mexico

SUBJECT: Gas-Oil ratio test on El Paso Natural Gas Company well Huerfano
Unit No. 107 (G), NE 35-27-10, San Juan County, New Mexico.

Tested By: K. C. McBride

Location Sec. 35 T27 R10

Shut In Pressure SIPC 1177 psig; (Shut in 12 days)
SIPT 1173 psig;

Time and Date Test Started , 11:40 A.M. 2/19/59

Time and Date Test Ended 11:40 A.M. 2/20/59

Total Production 24 hours Gas 1188.7 MCF
Oil 287 Bbls.
Water 0 Bbls.

Gas-Oil Ratio 4142 Cubic Feet Per Bbl.

Producing MethodFlowing

Producing through Tubing Choke Setting 26/64 Inches

Flowing Pressure 785 psig Tubing; 500 psig Casing

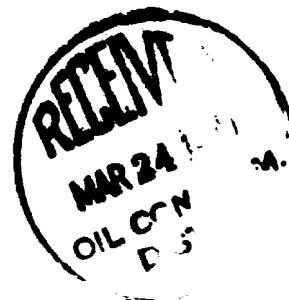
SPM _____ Length of Stroke _____

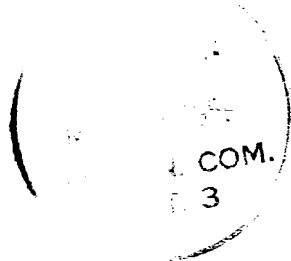
Producing Formation Gallup

Field Undesignated

KCM/nb

K.C. McBride
K. C. McBride
Production Engineer *J.T.L.K.*





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 January 27, 1959, I was called to the location of the El Paso Natural Gas Company Huerfano Unit No. 107 (GD) Well located in the SWNW/4 of Section 35, Township 27 North, Range 10 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 6345 feet in accordance with the usual practices and customs of the industry.

Mack M. Mahaffey

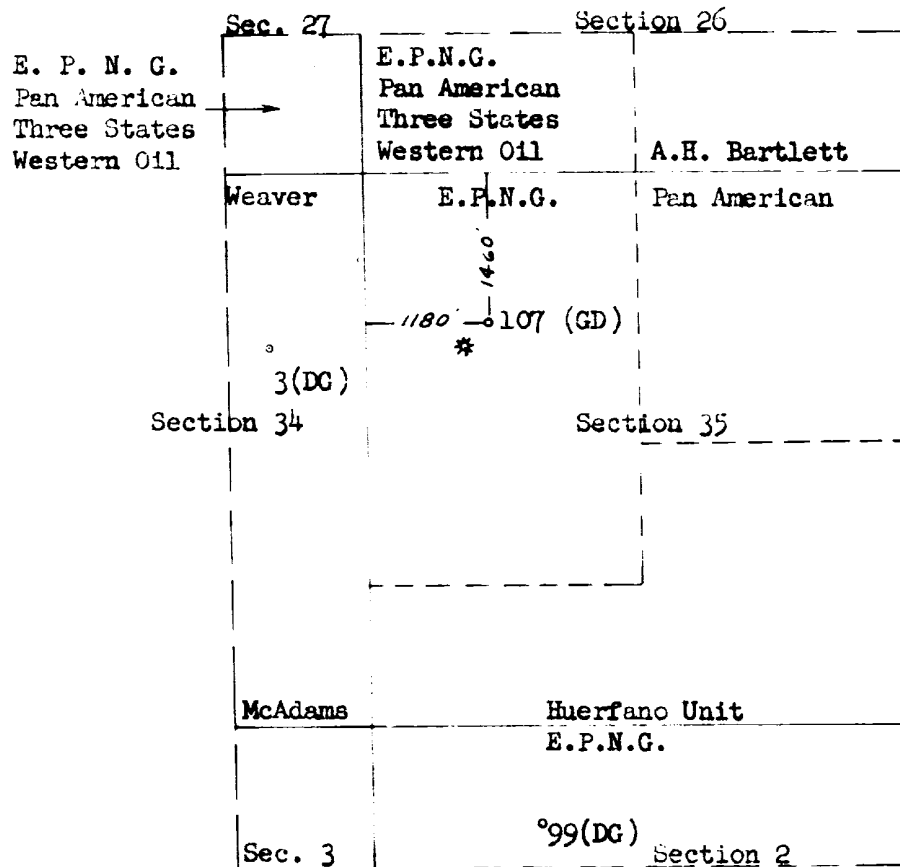
Subscribed and sworn to before me this 10th day of March, 1959.

Ken C. MacLachlan
 Notary Public in and for San Juan County,
 New Mexico

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PLAT SHOWING LOCATION OF DUALY COMPLETED
El Paso Natural Gas Co. Huerfano Unit No. 107 (GD)
and Offset Acreage

T-27-N
R-10-W



Legend:

- ⊙ - Gallup (Oil) Dakota (Gas)
- ⊙ - Gallup (Gas) Dakota (Gas)
- * - Pictured Cliffs

EL PASO NATURAL GAS COMPANY
EL PASO, TEXAS

SCALE	DATE	No.
DRAWN BY	CHECKED BY	

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE February 12, 1959

Operator El Paso Natural Gas		Lease Huerfano No. 107 (D)	
Location 1460N, 1180W; 35-27-10		County San Juan	State New Mexico
Formation Dakota		Pool Angel Peak Dakota	
Casing Diameter 7-5/8	Set At: Feet 6424	Tubing Diameter 2"	Set At: Feet 6980
Pay Zone: From 6934	To 7007	Total Depth 7017 c/o 7013	Shut in 1/31/59
Stimulation Method Sand-Oil Frac.		Flow Through Tubing X	

Choke Size, Inch .75	Choke Constant 12.365	5-1/2 liner 6382' - 7014'
Shut-In Pressure, Gas (G) 1177	PSIG - 12 - PSIA 1189	Shut-In Pressure, Tubing (D) 1845
Flowing Pressure, Gas 496	PSIG - 12 - PSIA 508	Working Pressure, Gas Calc. 1114
Temperature, T 70	F .75	Flow Through Tubing 1.066
		Gravity .735

Initial SIPT (G) = 1173 psig

Final SIPC (G) = 1181 psig

Packer at 6345

Light spray of oil throughout test.

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

$$Q = 12.365 \times 508 \times .9905 \times .9035 \times 1.066$$

5,992 MCF/D

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

$$A_{of} = \left(\frac{3,448,449}{2,207,453} \right)^n$$

$$1.5621^{.75} \times 5992 = 1.3978 \times 5992$$

A_{of} = 8,376 MCF/D

TESTED BY S.V. Roberts, M.W. Rischard and R.R. Davis

WITNESSED BY

Lewis D. Galloway
L. D. Galloway



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SCHEMATIC DIAGRAM OF DUALY COMPLETED
El Paso Natural Gas Co. Huerfano Unit No. 107 (GD)
NW Section 35, T-27-N, R-10-W

