

OPEN FLOW TEST DATA

DUAL COMPLETION

DATE March 13, 1959

El Paso Natural Gas

1562S, 1830E; 33-27-10

Gallup

7-5/8

5873

5720

5756

Sand Oil Frac.

Huerfano No. 106 (G)

San Juan

New Mexico

Angel Peak

2"

5653

6587 c/o 6520

Shut in 3/5/59

X

.75

12.365

5-1/2 liner 5822-6586

(G)

1114

1126

8

(G)

1114

1126

365

377

888

900

78

.75

1.044

.720

Initial SIPT (D) = 1937 psig

Final SIPT (D) = 1951 psig

Packer at 5795

12.365 x 377 x .9831 x .9129 x 1.044

4368

Well unloaded solid stream of heavy yellow oil in 3 minutes. Diminished to medium dense yellow fog and finally to a light yellow fog in 15 minutes.

1267876
457876

2.7690^{.75} x 4368 = 2.1490 x 4368

9,387

S. V. Roberts

Wayne Baxter

Lewis D. Galloway
L. D. Galloway

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Q₁ = 12.365 x 377 x .9831 x .9129 x 1.044

12.365 x 377 x .9831 x .9129 x 1.044

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WCF

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EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE March 20, 1959

Operator El Paso Natural Gas		Lease Huerfano No. 106 (D)	
Location 15628, 1830E; 33-27-10		County San Juan	State New Mexico
Formation Dakota		Post Undesignated	
Casing Diameter 7-5/8	Set At Feet 5873	Tubing Diameter 2"	Set At Feet 6460
Flow Zone Feet 6409	Flow Zone Feet 6485	Total Depth 6587 c/o 6520	Shut in 3/5/59
Stimulation Method Sand Oil Frac.		Flow Through Casing	Flow Through Tubing X

Choke Size (Inches) .75	Flow Rate (GPM) 12.365	5-1/2 liner 5822 - 6586
Shut-in Pressure (Casing) (G) 1123	PSIA 1135	Shut-in Pressure (Tubing) (D) 1968
Flowing Pressure (P) 230	PSIG 242	Working Pressure (Pw) Calc. 501
Temperature 75	Gravity .75	Fpv from Tables 1.029

Initial SIPT (G) = 1122 psig
Final SIPC (G) = 1132 psig

Packer at 5795

CHOKE VOLUME $Q = C \times R \times F \times F_v \times F_g$

$$Q = 12.365 \times 242 \times .9859 \times .9005 \times 1.029$$

2733

MCF/D

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

$$Q = \left(\frac{3920400}{3669399} \right)^n$$

$$1.0684^{.75} \times 2733 = 1.0508 \times 2733$$

$$Q = 2872$$

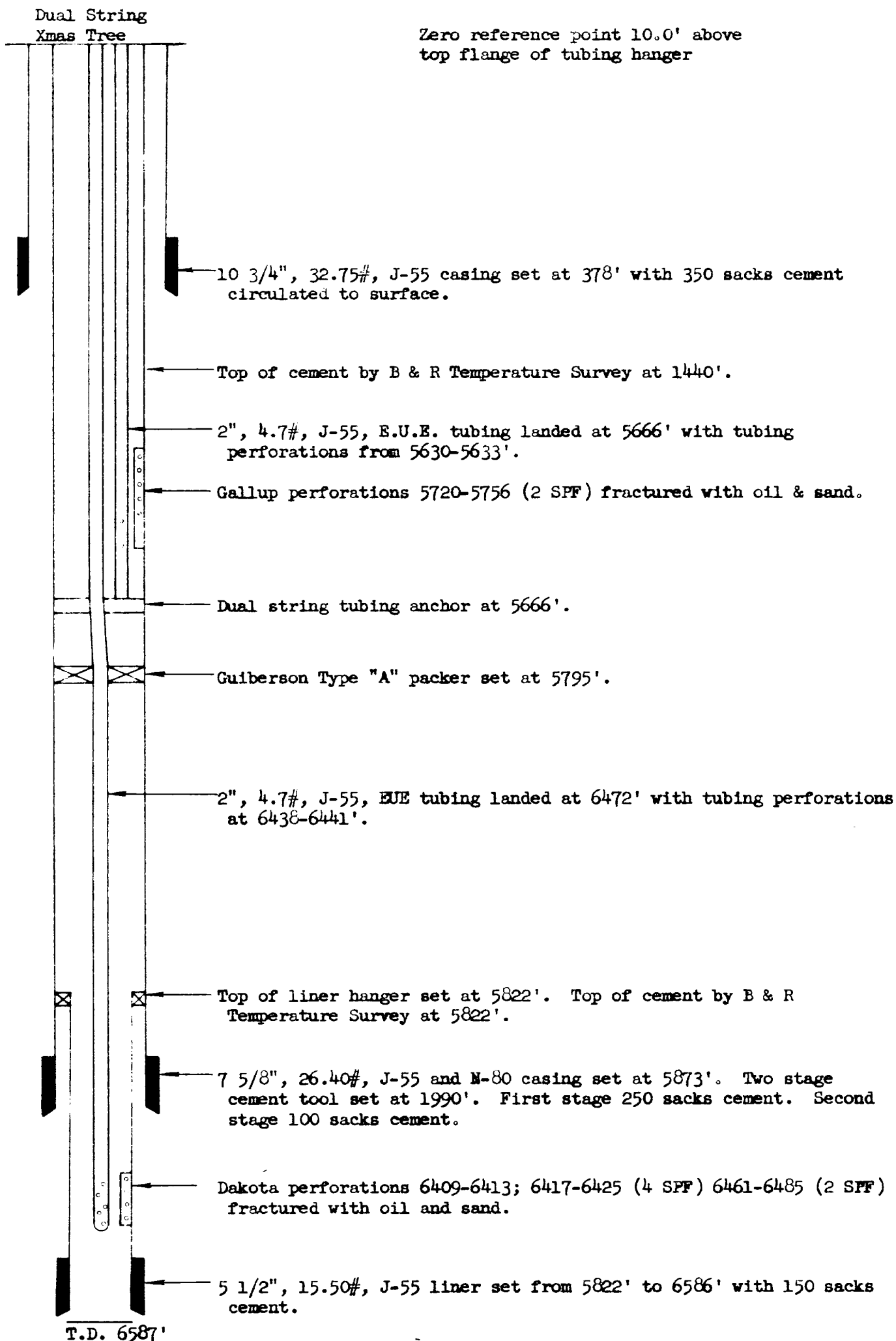
MCF/D

By **R. R. Davis**

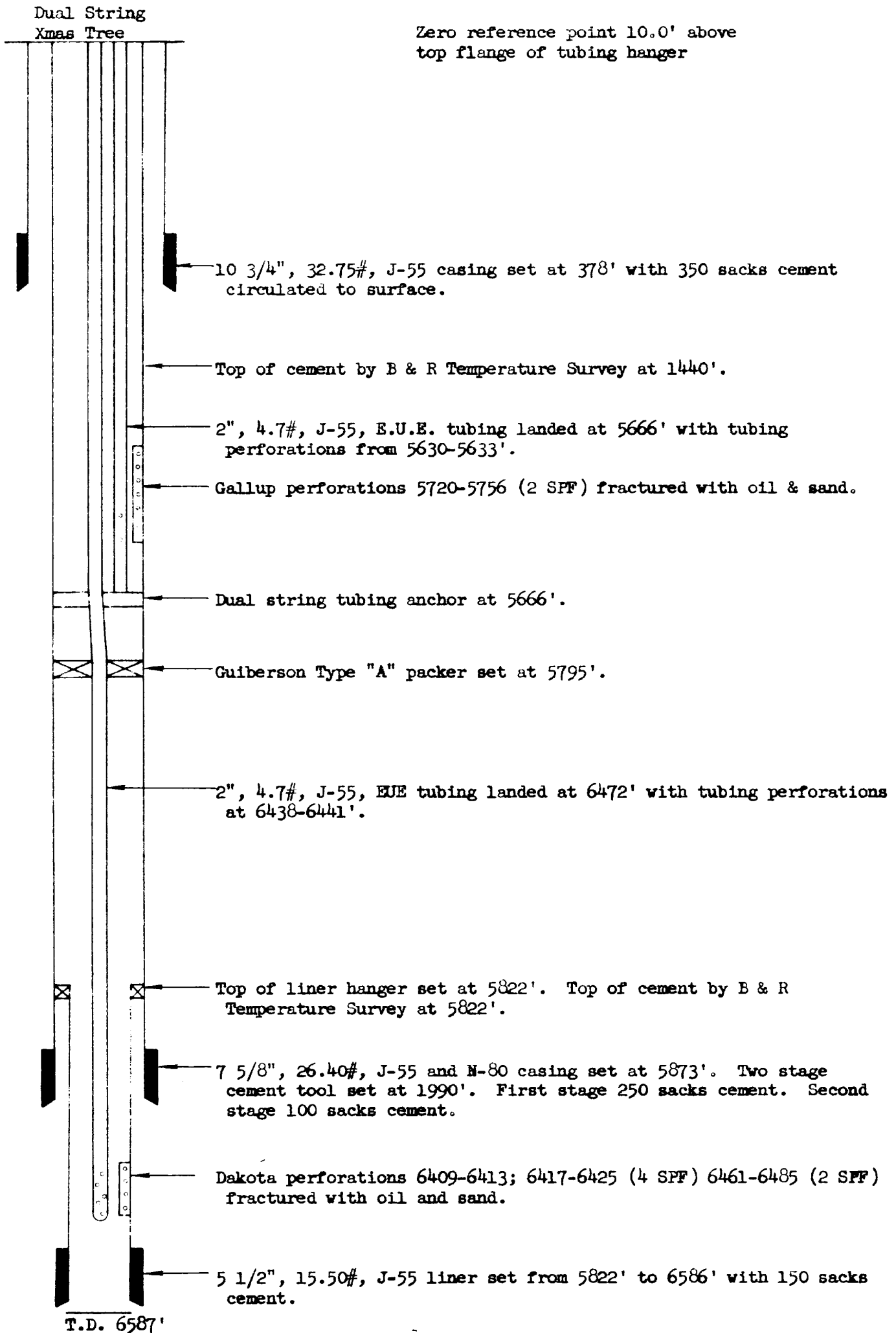
Witnessed by

L. D. Galloway
L. D. Galloway
by *H.H.*

Schematic Diagram of Dually Completed
El Paso Natural Gas Co. Huerfano Unit No. 106 (GD)



Schematic Diagram of Dually Completed
El Paso Natural Gas Co. Huerfano Unit No. 106 (GD)



PLAT SHOWING LOCATION OF DUALY COMPLETED
El Paso Natural Gas Co. Huerfano Unit No. 106 (GD)
and Offset Acreage

T-27-N

R-10-W

Sec. 28

El Paso Natural Gas Co.

E.P.N.G.

Sec. 27

El Paso Natural Gas Co. W.R.Weaver

82

Section 33

Sec. 34

106(GD)

96 (P&A)
Oroco

22

Huerfano Unit

El Paso Natural Gas Co. E.P.N.G.

T-26-N

R-10-W

67

Sec. 3

Huerfano Unit

Huerfano U.

Sec. 4

EL PASO NATURAL GAS COMPANY
EL PASO, TEXAS

DATE _____ No. _____
BY _____

2

STATE OF NEW MEXICO

COUNTY OF SAN JUAN

I, A. T. Fry, being first duly sworn upon my oath depose
and say as follows:

I am an employee of Guiberson Corporation, and that on
March 4, 1959, I was called to the location of the El Paso
Natural Gas Company Huerfano Unit No. 106 (GD) Well located in the
NWSE/4 of Section 33, 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 Guiberson Type "A" Production Packer was
set in this well at 5795 feet in accordance with the usual practices
and customs of the industry.

A. T. Fry

Subscribed and sworn to before me this 22nd day of April, 1959.

Walter D. Schaefer
Notary Public in and for San Juan County,
New Mexico

My commission expires February 24, 1960.



CONFIDENTIAL

CONFIDENTIAL

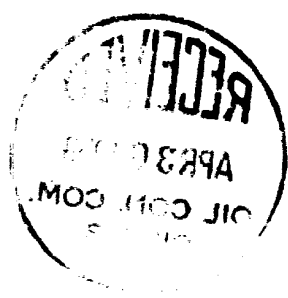
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CONFIDENTIAL

CONFIDENTIAL

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NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

7-3-58

APPLICATION FOR DUAL COMPLETION

Field Name Angel Peak Gallup & Angel Peak Dakota Ext.		County San Juan	Date April 21, 1959
Operator El Paso Natural Gas Company		Lease Huerfano Unit	Well No. 106 (GD)
Location of Well J	Section 33	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)	5720-5756	6409-6485
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.

W. R. Weaver - Waiver requested. To be sent to Santa Fe under separate cover.

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. Petroleum 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.

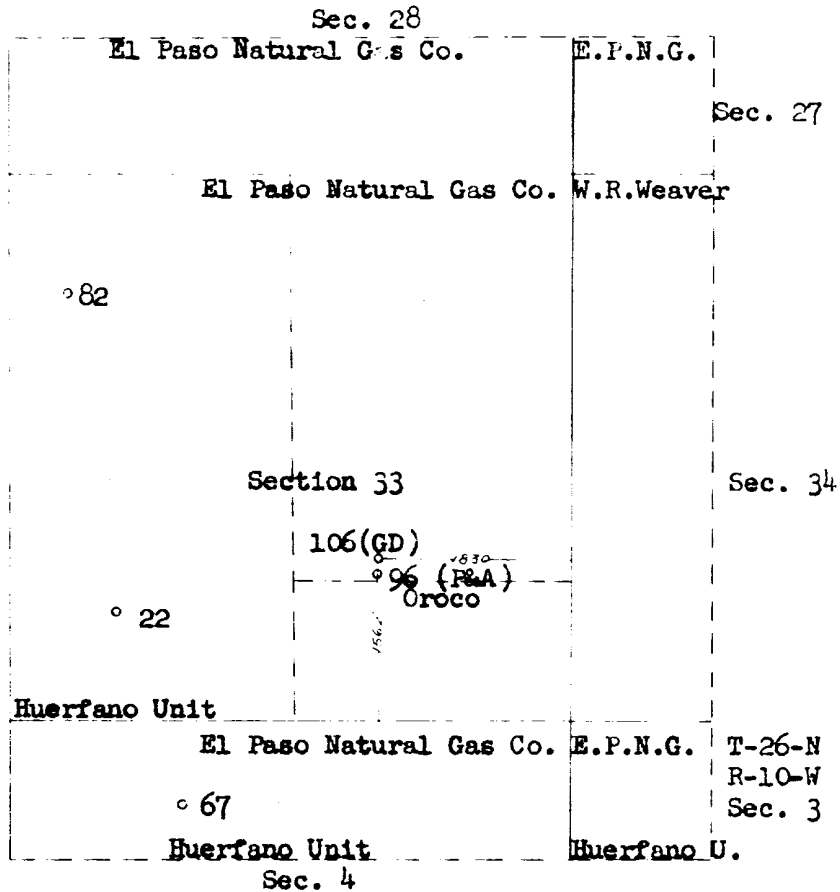
ORIGINAL SIGNED E. S. OBERLY

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.

PLAT SHOWING LOCATION OF DUALY COMPLETED
El Paso Natural Gas Co. Huerfano Unit No. 106 (GD)
and Offset Acreage

T-27-N
R-10-W



EL PASO NATURAL GAS COMPANY
EL PASO, TEXAS

DATE _____ No. _____
PREPARED BY _____

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)
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