

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

OIL CONSERVATION COMMISSION  
BOX 871  
SANTA FE, NEW MEXICO

DATE 12-7-60

RE: Proposed NSP \_\_\_\_\_

Proposed NSL \_\_\_\_\_

Proposed NFO \_\_\_\_\_

Proposed DC ✓

Gentlemen:

I have examined the application dated 11-30-60  
for the EPNG 5JU 28-7 #71 (PM) L-34-28-7  
Operator Lease and Well No. S-I-R

and my recommendations are as follows:

Approve  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Yours very truly,

OIL CONSERVATION COMMISSION

*A. R. Kendrick*

## NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

7-3-58

## APPLICATION FOR DUAL COMPLETION

Field Name <b>Blanco M. V. &amp; So. Blanco P. C. Ext.</b>		County <b>Rio Arriba</b>		Date <b>November 30, 1960</b>
Operator <b>El Paso Natural Gas Co.</b>		Lease <b>San Juan 28-7 Unit</b>		Well No. <b>71 (FM)</b>
Location of Well <b>L</b>	Unit <b>L</b>	Section <b>34</b>	Township <b>28N</b>	Range <b>7W</b>

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. **DC-617**; Operator, Lease, and Well No.:

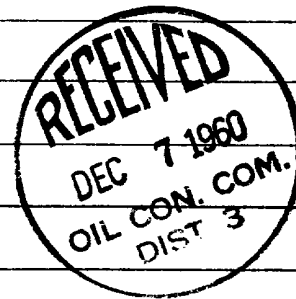
**El Paso Natural Gas Co. San Juan 28-7 Unit No. 91 (FM)**

3. The following facts are submitted:	Upper Zone	Lower Zone
a. Name of reservoir	<b>Pictured Cliffs</b>	<b>Mesa Verde</b>
b. Top and Bottom of Pay Section (Perforations)	<b>2762-2816</b>	<b>4454-4568 (Cliff House) 5032-5140 (Point Lookout)</b>
c. Type of production (Oil or Gas)	<b>Gas</b>	<b>Gas</b>
d. Method of Production (Flowing or Artificial Lift)	<b>Flowing</b>	<b>Flowing</b>

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.



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 August 23, 1960, I was called to the location of the El Paso  
Natural Gas Company San Juan 28-7 Unit No. 71 (PM) Well located  
in the NWSW/4 of Section 34, Township 28 North, Range 7 West, N.M.P.M.,  
for advisory service in connection with installation of a production  
packer. In my presence, a Guiberson Model "Shorty" Production Packer  
was set in this well at 2884 feet in accordance with the usual practices  
and customs of the industry.

  
\_\_\_\_\_

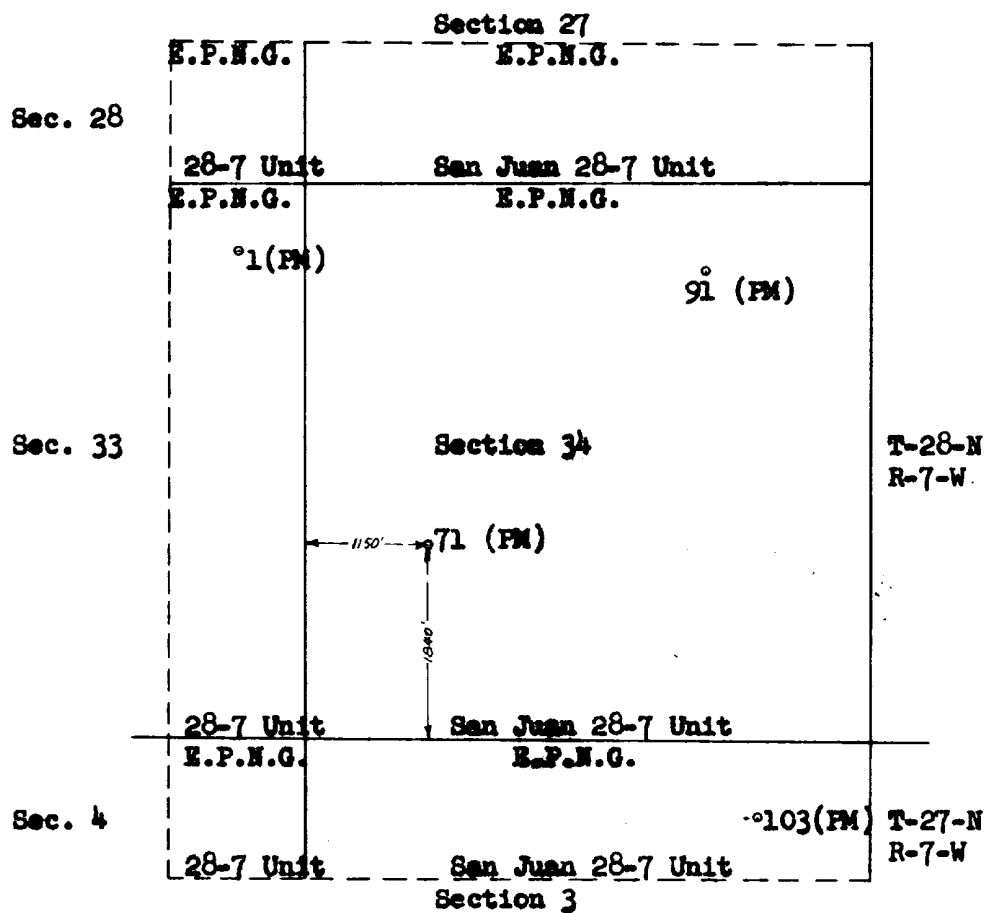
Subscribed and sworn to before me this 30th day of November,  
1960.

  
\_\_\_\_\_

Notary Public in and for San Juan County,  
New Mexico

My commission expires October 5, 1964.

**Plat Showing Location of Dually Completed  
El Paso Natural Gas Co. San Juan 28-7 Unit No. 71 (FM)  
and Offset Acreage**



EL PASO NATURAL GAS COMPANY  
EL PASO, TEXAS

SCALE

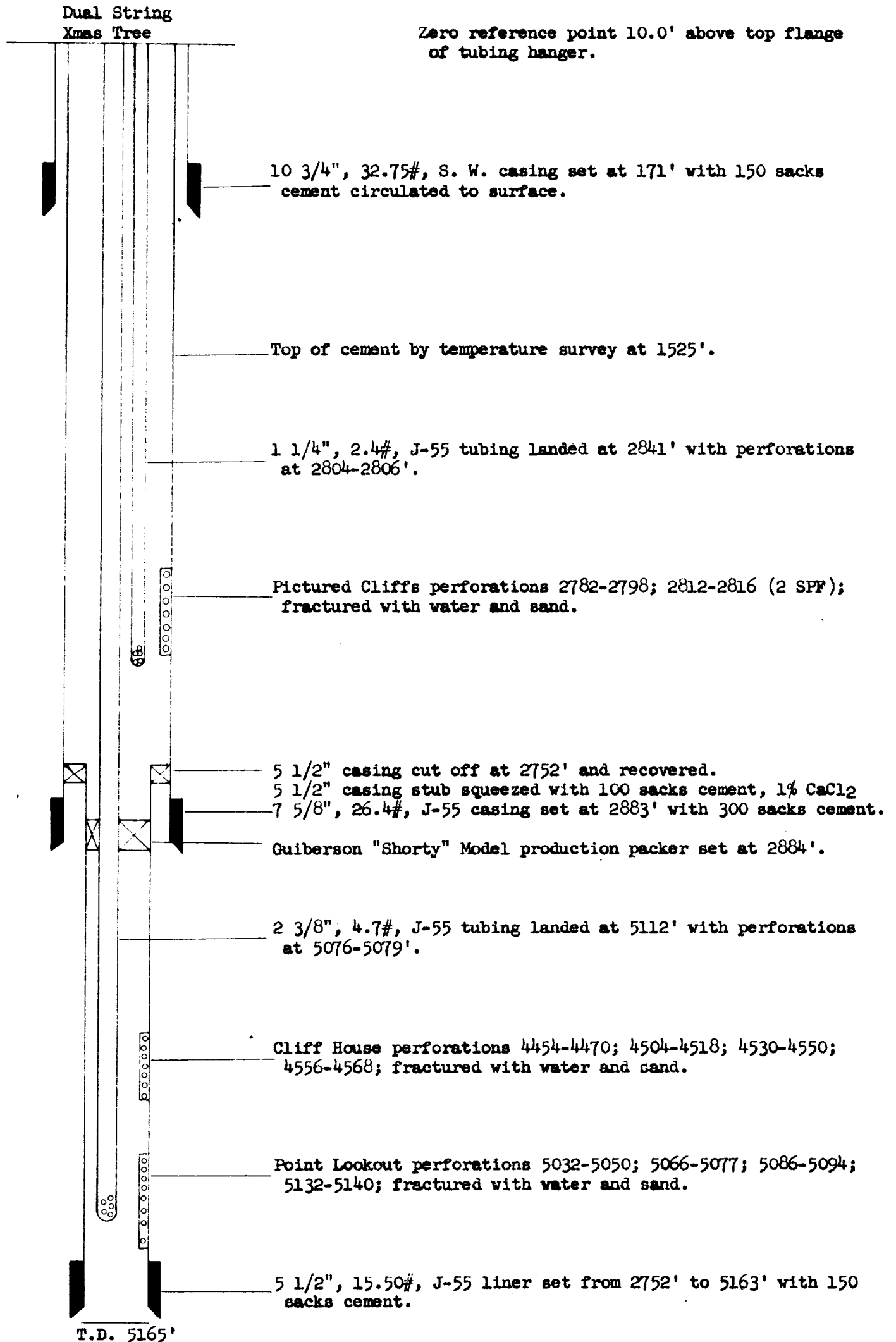
DATE

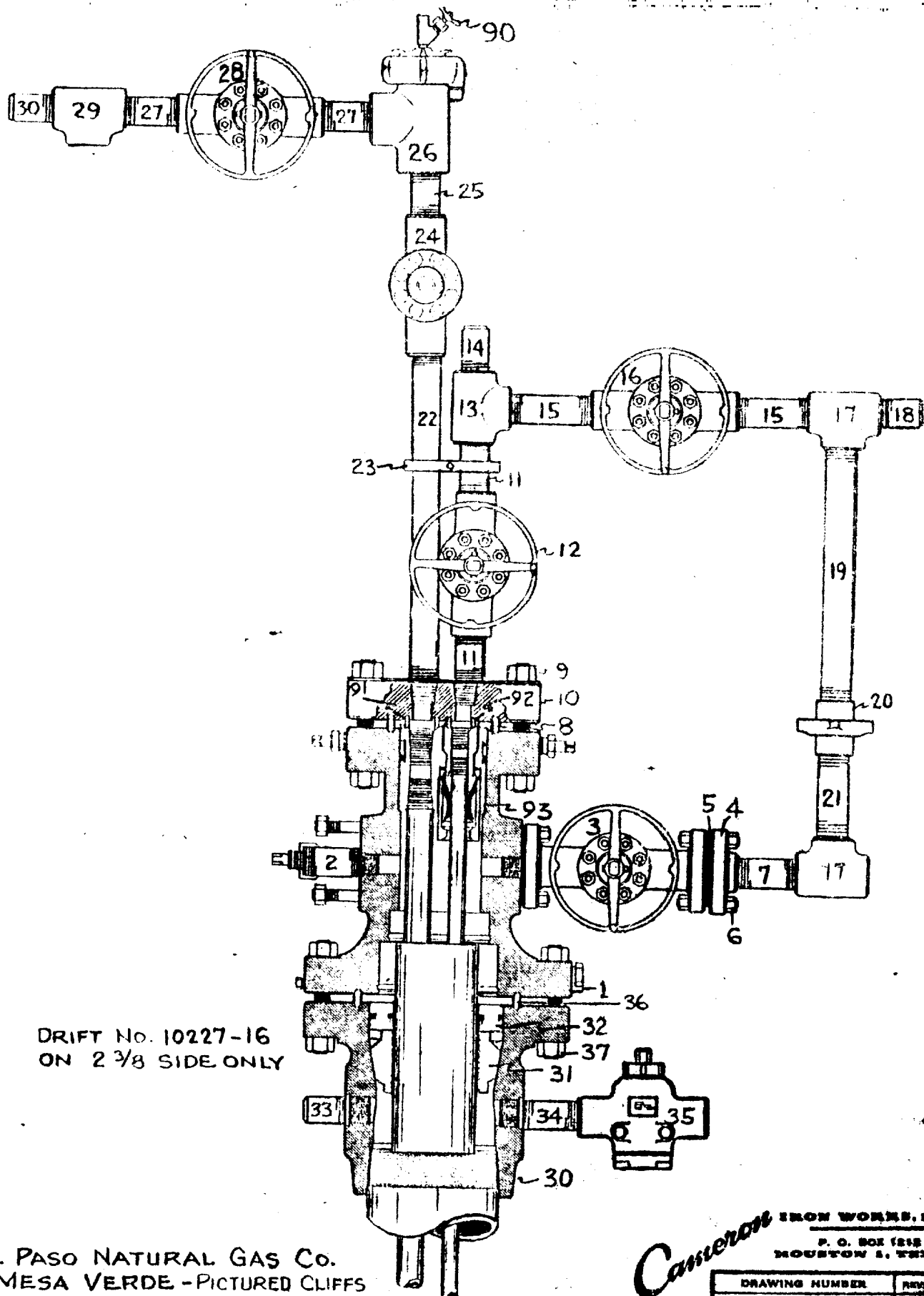
No.

DRAWN BY

CHECKED BY

Schematic Diagram of Dually Completed  
El Paso Natural Gas Co. San Juan 28-7 Unit No. 71 (PM)  
SW/4 Section 34, T-28-N, R-7-W





DRIFT No. 10227-16  
ON 2 3/8 SIDE ONLY

EL PASO NATURAL GAS Co.  
MESA VERDE - PICTURED CLIFFS

**Cameron** IRON WORKS, INC.  
P. O. BOX 1218  
HOUSTON 1, TEXAS

DRAWN BY	DATE	WORKING PRESSURE	#	DRIFT NO.	DRAWING NUMBER	REVISION
E. N.	3-17-59	2,000			916015	"A"

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE **November 3, 1960**

Operator <b>El Paso Natural Gas Company</b>		Lease <b>San Juan 28-7 No. 71 (PC)</b>	
Location <b>1840'S, 1150'W, 34-28N-7W</b>		County <b>Rio Arriba</b>	State <b>New Mexico</b>
Formation <b>Pictured Cliffs</b>		Pool <b>South Blanco PC</b>	
Casing: Diameter <b>7-5/8"</b>	Set At: Feet <b>2883</b>	Tubing: Diameter <b>1-1/4"</b>	Set At: Feet <b>2831</b>
Pay Zone: From <b>2782</b>	To <b>2816</b>	Total Depth: <b>5162 c/o 5150</b>	Shut In <b>8-23-60</b>
Stimulation Method <b>Sand/Water Frac.</b>		Flow Through Casing <b>X</b>	
		Flow Through Tubing	

Choke Size, Inches <b>.75</b>		Choke Constant: C <b>12.365</b>		5-1/2" Liner from 2852 to 5163 Guiberson "Shorty" Pkr. at 2884	
Shut-In Pressure, Casing, (PC) <b>1063</b>	PSIG	12	PSIA	Shut-In Pressure, Tubing (PC) <b>1063</b>	PSIG
					12
					PSIA
Flowing Pressure: P (Csg) <b>111</b>	PSIG	12	PSIA	Working Pressure: P <sub>w</sub> (Tbg.) <b>116</b>	PSIG
					12
					PSIA
Temperature: T <b>60 °F</b>	n			F <sub>pv</sub> (From Tables) <b>1.013</b>	Gravity <b>.680</b>
					F <sub>g</sub> <b>.9393</b>

Initial SIPT (M) = 876 psig

Final SIPT (M) = 879 psig

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

$$Q = (12.365)(123)(1.0000)(.9393)(1.013)$$

1447

MCF/D

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

$$Aof = \left( \frac{1,155,625}{1,139,241} \right)^n (1.0143)^{.65} (1447) = (1.0121)(1447)$$

Aof **1465** MCF/DTESTED BY **W. D. Dawson**

WITNESSED BY

Checked by **T. B. Grant**

*Lewis D. Galloway*  
Lewis D. Galloway

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE October 27, 1960

Operator <b>El Paso Natural Gas Company</b>		Lease <b>San Juan 28-7 No. 71 (MV)</b>	
Location <b>1840'S, 1150'W, 34-28N-7W</b>		County <b>Rio Arriba</b>	State <b>New Mexico</b>
Formation <b>Mesa Verde</b>		Pool <b>Blanco MV</b>	
Casing: Diameter <b>7-5/8"</b>	Set At: Feet <b>2883</b>	Tubing: Diameter <b>2"</b>	Set At: Feet <b>5102</b>
Pay Zone: From <b>4454</b>	To <b>5140</b>	Total Depth: <b>5163 C/O 5150</b>	Shut In <b>8-23-60</b>
Stimulation Method <b>Sand/Water Frac.</b>		Flow Through Casing	Flow Through Tubing <b>X</b>

Choke Size, Inches <b>0.750</b>		Choke Constant: C <b>12.365</b>		<b>5-1/2" Liner from 2852 to 5163</b>	
				<b>Quiberson "Shorty" Pkr. at 2884'</b>	
Shut-In Pressure, Casing, (PC) <b>1064</b>	PSIG	+ 12 = PSIA <b>1076</b>	Days Shut-In <b>65</b>	Shut-In Pressure, Tubing (MV) <b>983</b>	PSIG + 12 = PSIA (MV) <b>995</b>
Flowing Pressure: P <b>266</b>	PSIG	+ 12 = PSIA <b>278</b>		Working Pressure: P <sub>w</sub> <b>Calc.</b>	PSIG + 12 = PSIA <b>540</b>
Temperature: T <b>65</b> °F	F <sub>i</sub> <b>.9952</b>	n = <b>0.75</b>		F <sub>pv</sub> (From Tables) <b>1.028</b>	Gravity <b>.670</b> F <sub>g</sub> = <b>.9463</b>

Initial SIPT (PC) = 1064 psig

Final SIPC (PC) = 1071 psig

CHOKE VOLUME = Q = C × P<sub>i</sub> × F<sub>i</sub> × F<sub>g</sub> × F<sub>pv</sub>

$$Q = 12.365 \times 278 \times .9952 \times .9463 \times 1.028 = 3328 \text{ MCF/D}$$

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

$$Aof = \left( \frac{990,025}{698,425} \right)^n = (1.4175)^{.75} (3328) = (1.2990)(3328)$$

$$Aof = 4323 \text{ MCF/D}$$

TESTED BY Tom Grant

WITNESSED BY \_\_\_\_\_

*Lewis D. Galloway*  
Lewis D. Galloway