

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

OIL CONSERVATION COMMISSION
BOX 871
SANTA FE, NEW MEXICO

DATE 5-22-60

RE: Proposed NSP _____

Proposed NSL _____

Proposed NFO _____

Proposed DC ✓

Gentlemen:

I have examined the application dated 5-12-60
for the EPNG CO S1027-S#50 G-19-27N-SW
Operator Lease and Well No. S-T-R

and my recommendations are as follows:

approve

Yours very truly,

Emory C. Campbell
OIL CONSERVATION COMMISSION

NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

7-3-58

APPLICATION FOR DUAL COMPLETION

Field Name Blanco M. V. & So. Blanco Pictured Cliffs		County Rio Arriba	Date May 12, 1960
Operator El Paso Natural Gas Company		Lease San Juan 27-5 Unit	Well No. 50 (PM)
Location of Well G	Section 19	Township 27N	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 ☐
2. If answer is yes, identify one such instance: Order No. **DC-758**; Operator, Lease, and Well No.:

El Paso Natural Gas Co. San Juan 27-5 Unit No. 48 (PM)

3. The following facts are submitted:		Upper Zone	Lower Zone
a. Name of reservoir		Pictured Cliffs	Mesa Verde
b. Top and Bottom of Pay Section (Perforations)		3162-3226	5306-5410
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.



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 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, Roy 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 March 29, 1960, I was called to the location of the El Paso Natural Gas Company San Juan 27-5 Unit No. 50(PM) Well located in the SWNE/4 of Section 19, Township 27 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 "EGJ" Production Packer was set in this well at 3343 feet in accordance with the usual practices and customs of the industry.

Roy G. Miller

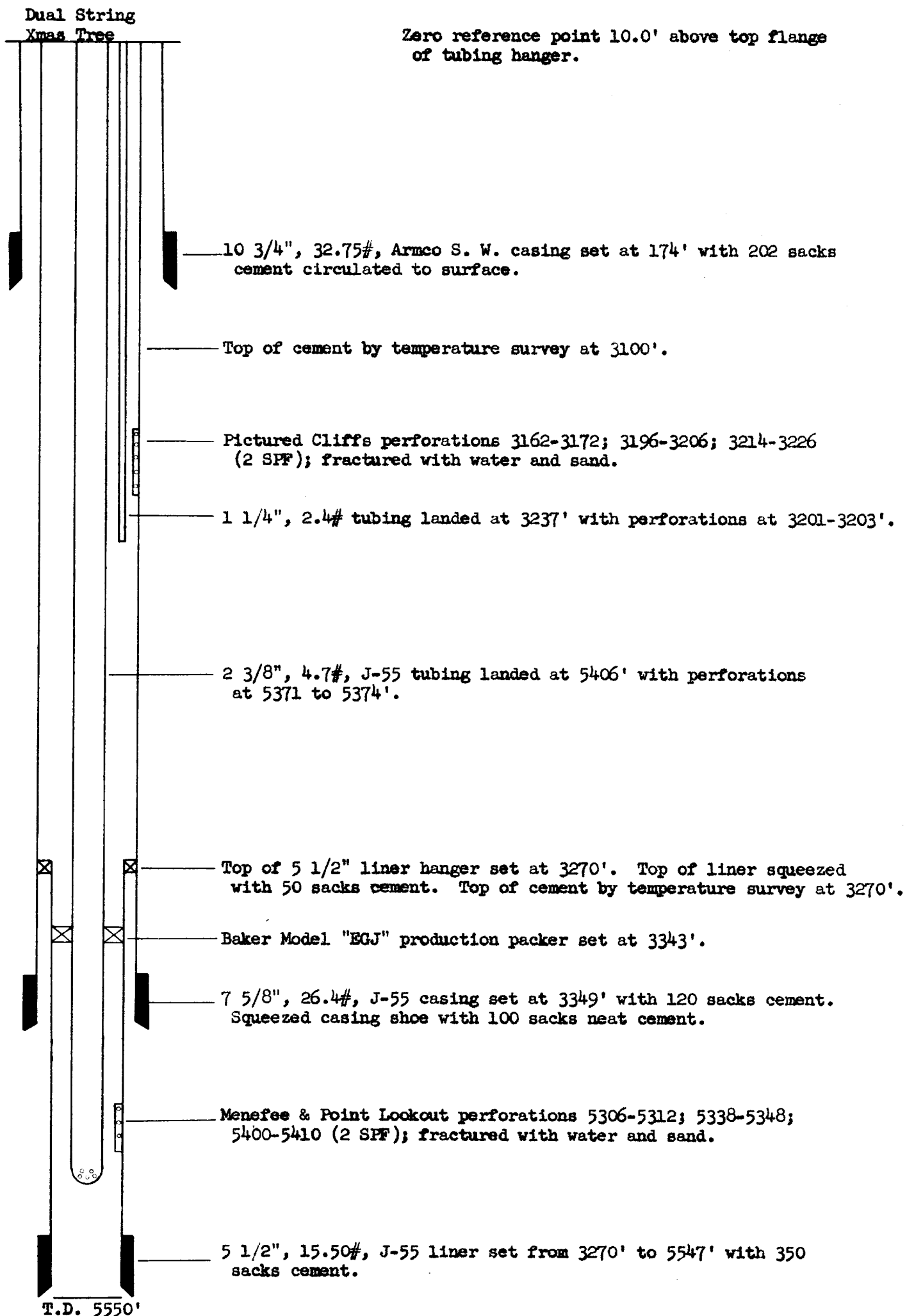
Subscribed and sworn to before me this 12th day of May, 1960.

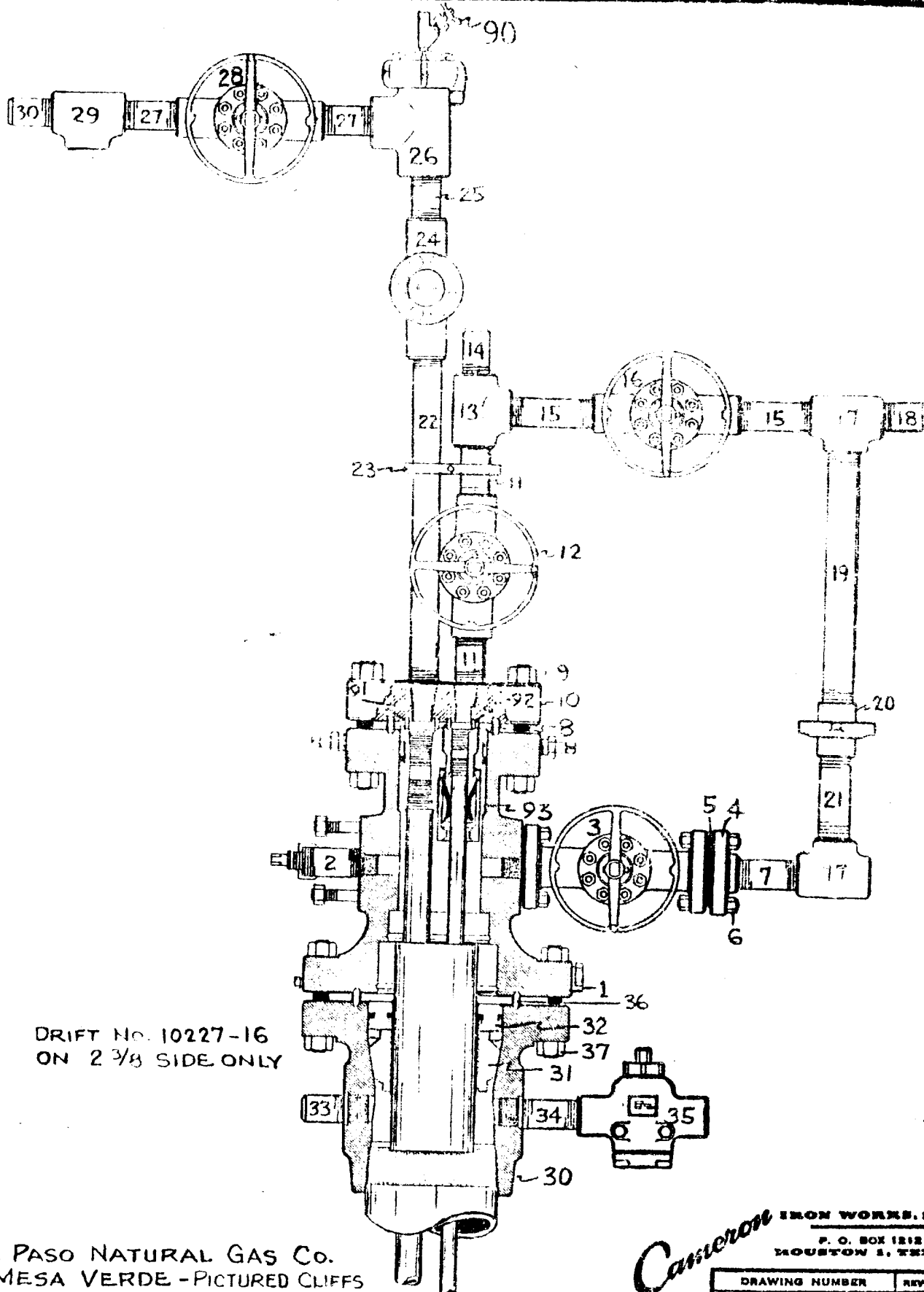
Lawrence B. Hall
Notary Public in and for San Juan County,
New Mexico

My commission expires

My Commission Expires 6-21-61

Schematic Diagram of Dual Completion
 El Paso Natural Gas Co. San Juan 27-5 Unit No. 50 (FM)
 NE/4 Section 19, T-27-N, R-5-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 1212
HOUSTON 1, TEXAS

DRAWING NUMBER	REVISION
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DRAWN BY <u>E H</u>	DATE <u>3-17-59</u>	WORKING PRESSURE <u>2,000</u> #	DRIFT NO. <u>916015</u>	"A"
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1. *Chlorophyll a* and *Chlorophyll b* were determined by the method of Arar and Collins (1987).

DATE **April 19, 1960**

Choke size, inches						Choke number					
.75						12.365					
Shut-in Pressure		PSIG	PSIA	Days Shut-In		Shut-In Pressure		PSIG	PSIA	Baker "EGJ" packer at 3343	
(PC) 1067		1079	21			(PC) 1069		1081			
Flowing Pressure		PSIG	PSIA			Working Pressure		PSIG	PSIA		
114		126			121		133				
Temperature				Elev From Surface		Grav.					
F	56	Ft	1.0039	.85	1.011	.650	Fg	.9608			

Final SIPT (MV) = 1087 psig

$$12.365 \times 126 \times 1.0039 \times .9608 \times 1.011$$

1519

MCF D

$$\text{OPEN FLOW} = \Delta p / Q \left(\begin{matrix} & & 2 \\ & & P_c \\ & 2 & \\ P_t & & P_w \end{matrix} \right)^n$$

Def $\left(\begin{array}{c} 1168561 \\ 1150872 \end{array} \right)^n$ $1519 \times 1.0153^{25} = 1519 \times 1.0130$

Act 9

1539

MACF D

S. V. Roberts

W. T. G. 55. 32.

Lewis D. Galloway
L. D. Galloway

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE April 8, 1960

Operator El Paso Natural Gas Company		Lease San Juan 27-5 No. 50 (M)	
Location 1650N, 1850E; 19-27-5		County Rio Arriba	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing: Diameter 5-1/2	Set At: Feet 5547	Tubing: Diameter 2	Set At: Feet 5396
Pay Zone: From 5306	To 5410	Total Depth: 5543 c/o 5505	Shut In 3/29/60
Stimulation Method Sand Water Frac.		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .75		Choke Constant: C 12.365		5-1/2 liner 3270 - 5547	
Shut-In Pressure, Casing, 1035 (PC)	PSIG + 12 - PSIA 1047	Days Shut-In 10	Shut-In Pressure, Tubing 1062 (MV)	PSIG + 12 - PSIA 1074	
Flowing Pressure: P 133	PSIG + 12 - PSIA 145		Working Pressure: P _w Calc.	PSIG + 12 - PSIA 286	
Temperature 60	n 1.000		F _{pv} (From Tables) 1.012	Gravity .627	F _g : .9798

Initial SIPT (PC) = 1036 psig

Final SIPT (PC) = 1038 psig

Packer at 3343

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

$$Q = 12.365 \times 145 \times 1.000 \times .9798 \times 1.012$$

1778

MCF/D

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

$$Aof \left(\frac{1153476}{1071680} \right)^n = 1.0763^{.78} \times 1778 = 1.0567 \times 1778$$

Aof 1879 MCF/D

TESTED BY **S. V. Roberts**

WITNESSED BY

Lewis D. Galloway
L. D. Galloway