

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

OIL CONSERVATION COMMISSION
BOX 871
SANTA FE, NEW MEXICO

DATE 3-1-60

RE: Proposed NSP _____

Proposed NSL _____

Proposed NFO _____

Proposed DC ✓

Gentlemen:

I have examined the application dated 2-24-60
for the EPNG Permian Unit #1 132 R-24-27-7
Operator Lease and Well No. S-T-R

and my recommendations are as follows:

Copy sent

Yours very truly,

Francis E. Leland
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 February 24, 1960
Operator El Paso Natural Gas Company		Lease Rincon Unit	Well No. 137 (MD)
Location of Well K	Section 24	Township 27N	Range 7W

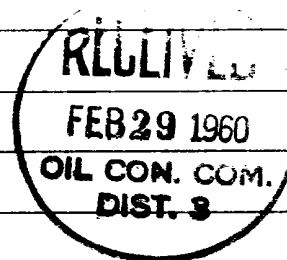
1. Has the New Mexico Oil Conservation Commission heretofore authorized the dual completion of a well in these same pools or in the same zones within one mile of the subject well? YES _____ NO X
2. If answer is yes, identify one such instance: Order No. _____ ; Operator, Lease, and Well No.:

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)	5456-5596	7474-7536 (Graneros) 7612-7686 (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.



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 Company (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, 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 15, 1960, I was called to the location of the El Paso Natural Gas Company Rincon Unit No. 137 (MD) Well located in the NESW/4 of Section 24, Township 27 North, Range 7 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 installed in this well at 6727 feet in accordance with the usual practices and customs of the industry.

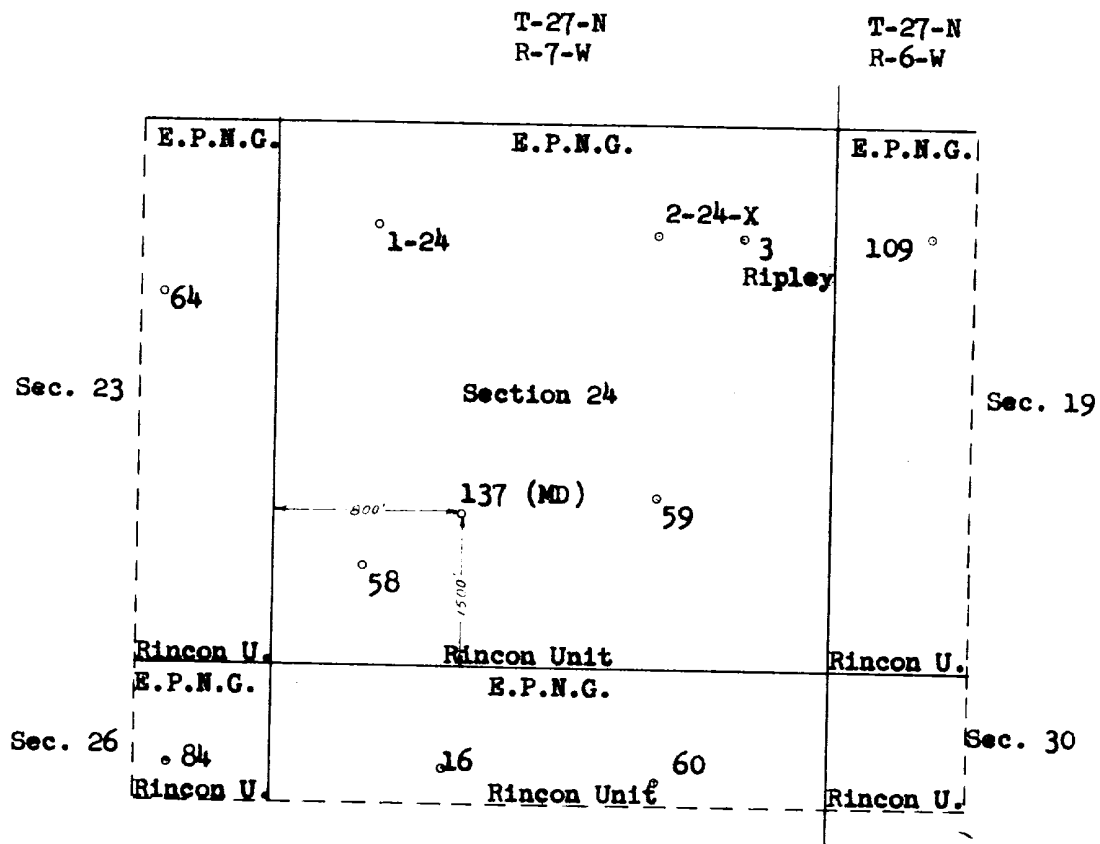
Mack M. Mahaffey

Subscribed and sworn to before me this 24th day of February, 1960.

Paul M. McClatchey
Notary Public in and for San Juan County,
New Mexico

My commission expires February 24, 1960.

**PLAT SHOWING LOCATION OF DUALY COMPLETED
El Paso Natural Gas Co. Rincon Unit No. 137 (MD)
and Offset Acreage**



EL PASO NATURAL GAS COMPANY
EL PASO, TEXAS

SCALE

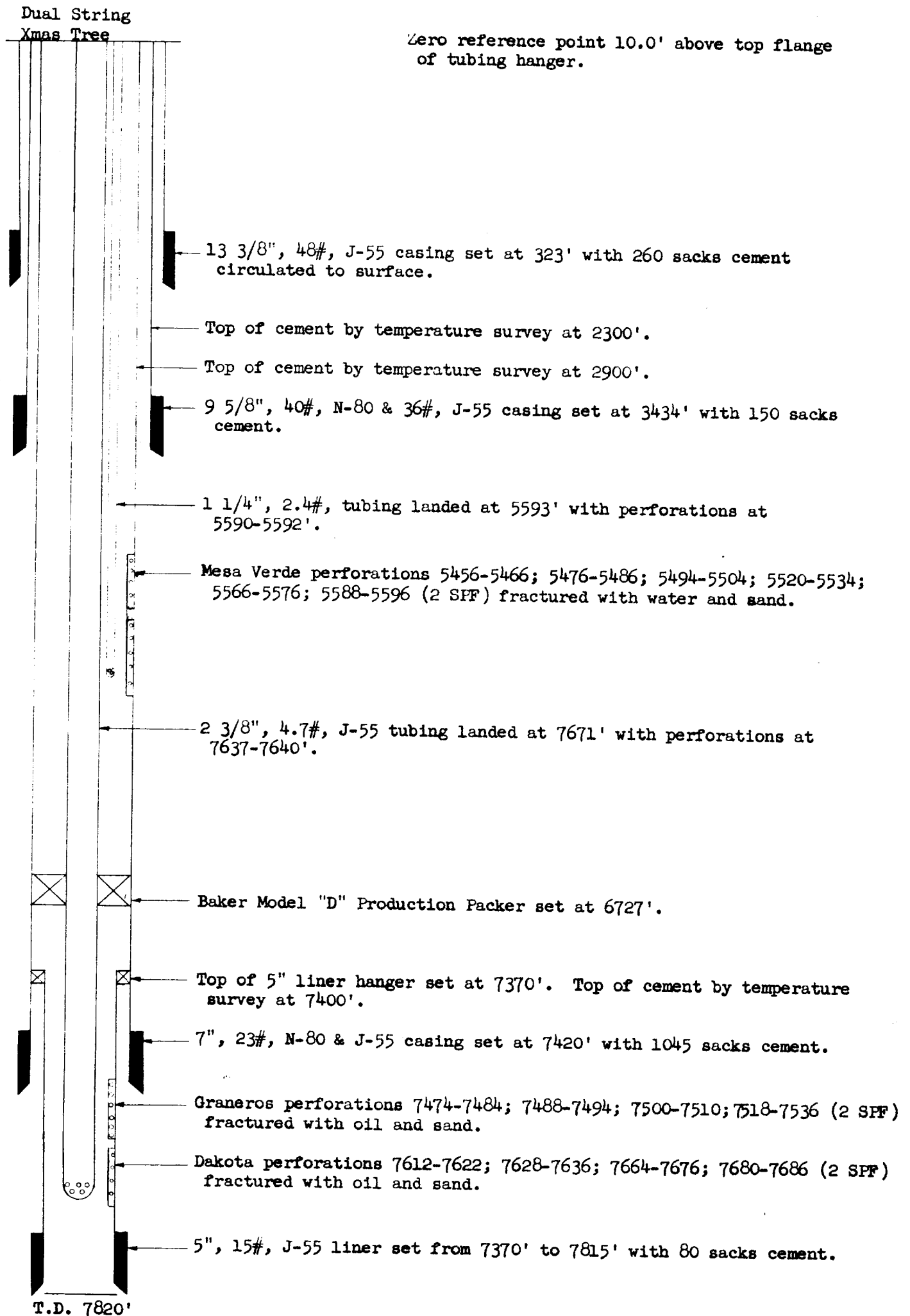
DATE

DRAWN BY

CHECKED BY

No.

SCHEMATIC DIAGRAM OF DUAL COMPLETION
El Paso Natural Gas Co. Rincon Unit No. 137 (MD)
SW/4 Section 24, T-27-N, R-7-W



EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE February 4, 1960

Operator El Paso Natural Gas Company		Lease Rincon Unit No. 137 (D)	
Location 1500S, 1800W; 24-27-7		County Rio Arriba	State New Mexico
Formation Dakota		Pool Undesignated	
Casing: Diameter 5	Set At: Feet 7815	Tubing: Diameter 2	Set At: Feet 7661
Pay Zone: From 7474	To 7686	Total Depth: c/o TTT8	Shut In 1/16/60
Stimulation Method Sand Oil Frac.		Flow Through Casing	Flow Through Tubing X

Choke Size, Inches .75		Choke Constant: C 12.365		7" at 7420, 5" liner 7370-7815	
Shut-In Pressure, Casing, PSIG 1057	12 PSIA 1069	Days Shut-In 19	Shut-In Pressure, Tubing, PSIG 2349	12 PSIA 2361	
Flowing Pressure: P, PSIG 565	12 PSIA 577		Working Pressure: P _w , PSIG Calc. 1316	12 PSIA	
Temperature: T, °F 69	F _t .9915 .75		F _{pv} (From Tables) 1.070	Gravity .700	F _g = .9258

Initial SIPT (MV) = 296 psig

Packer at 6729

Final SIPC (MV) = 1080 psig

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

$$Q = 12.365 \times 577 \times .9915 \times .9258 \times 1.070$$

7008

MCF/D

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

$$Aof = \left(\frac{5574321}{3842465} \right)^n = 1.4507^{.75} \times 7008 = 1.3218 \times 7008$$

$$Aof = 9263 \text{ MCF/D}$$

TESTED BY F. M. Clark

WITNESSED BY _____

Checked By H. L. Kendrick

Lewis D. Galloway
L. D. Galloway

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

WELL COMPLETION

DATE January 23, 1960

Operator El Paso Natural Gas		Lease Rincon Unit 137 (N)	
Location 15008, 1800W; 24-27-7		County Rio Arriba	State New Mexico
Formation Mesa Verde		Pool Blanco	
Casing Diameter 7	Set At: Feet 7420	Tubing Diameter 1-1/4	Set At: Feet 5583
Pay Zone From 5456	To 5596	Total Depth 610 TTTB	Shut In 1/16/60
Stimulation Method Sand Water Frac.		Flow Through Casing X	Flow Through Tubing

Choke Size, inches .75	Choke Constant, C 12.365	7" at 7420
Shut-In Pressure, casing, PSIG (MV) 1039	+ 12 PSIA 1051	Days Shut-In 9
Flowing Pressure, P, PSIG (MV) 61	+ 12 PSIA 73	Shut-In Pressure, Tubing, PSIG (MV) 504
Temperature, T, F 56	F _r 1.0039	Working Pressure, P _w , PSIG (MV) 204
	.75	F _{pv} (From Tables) 1.011
		Gravity .708
		F _g = .9225

Initial SIFT (Dak) = 2249 psig
Final SIFT (Dak) = 2261 psig

Baker Model D packer at 6729

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

$$Q = 12.365 \times 73 \times 1.0039 \times .9225 \times 1.011$$

845

MCF/D

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

MV Tbg. appears to be loaded. Flow oily mist first 2 hours - Diminished to negligible last hour.

$$A_{of} = \left(\frac{1104601}{1057945} \right)^n \quad 1.0441^{.75} \times 845 = 1.0329 \times 845$$

$$A_{of} = 873 \text{ MCF/D}$$

TESTED BY S. V. Roberts

WITNESSED BY _____

Lewis D. Galloway
L. D. Galloway