

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

OIL CONSERVATION COMMISSION
BOX 871
SANTA FE, NEW MEXICO

DATE 7-21-60

RE: Proposed NSP _____

Proposed NSL _____

Proposed NFO _____

Proposed DC ✓

Gentlemen:

I have examined the application dated 7-7-60
for the EPNG Canyon Largo Unit #89 M-17-24N-64W
Operator Lease and Well No. S-I-R

and my recommendations are as follows:

Agreed

Yours very truly,

Emery C. Clark
OIL CONSERVATION COMMISSION

NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

7-3-58

APPLICATION FOR DUAL COMPLETION

Field Name Devils Fork Wildcat Gallup & Dakota		County Rio Arriba		Date July 7, 1960
Operator El Paso Natural Gas Company		Lease Canyon Largo Unit		Well No. 89 (GD)
Location of Well	Unit M	Section 17	Township 24 N	Range 6 W

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	Gallup	Dakota
b. Top and Bottom of Pay Section (Perforations)	5486-5502	6288-6347 (Graneros) 6416-6458 (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.

El Paso Natural Gas is Operator of the Canyon Largo Unit

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 **Asst. Div. Petroleum Engineer** 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 F. H. WOOD

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, Ben H. Means, 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 April 28, 1960, I was called to the location of the El Paso Natural
Gas Company Canyon Largo Unit No. 89 (GD) Well located in the SWSW/4
of Section 17, Township 24 North, Range 6 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 5574 feet in accordance with the usual practices and customs of the
industry.

Benjamin H. Means

Subscribed and sworn to before me this 29th day of June,
1960.

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

Flat showing location of Dually Completed
El Paso Natural Gas Co. Canyon Largo Unit No. 89 (GD)
and offset acreage

T 24 N
R 6 W

Sec. 8

Sec. 7	Duday	
	C.L.U.	Canyon Largo Unit
Sec. 18	Germany et al	El Paso Natural Gas Company
		76
Sec. 19		Section 17
		91
	C.L.U.	89(MD) Canyon Largo Unit
Sec. 19	Germany et al	El Paso Natural Gas Company
	C.L.U.	Canyon Largo Unit
		Sec. 20

EL PASO NATURAL GAS COMPANY
EL PASO, TEXAS

SCALE

DATE

No.

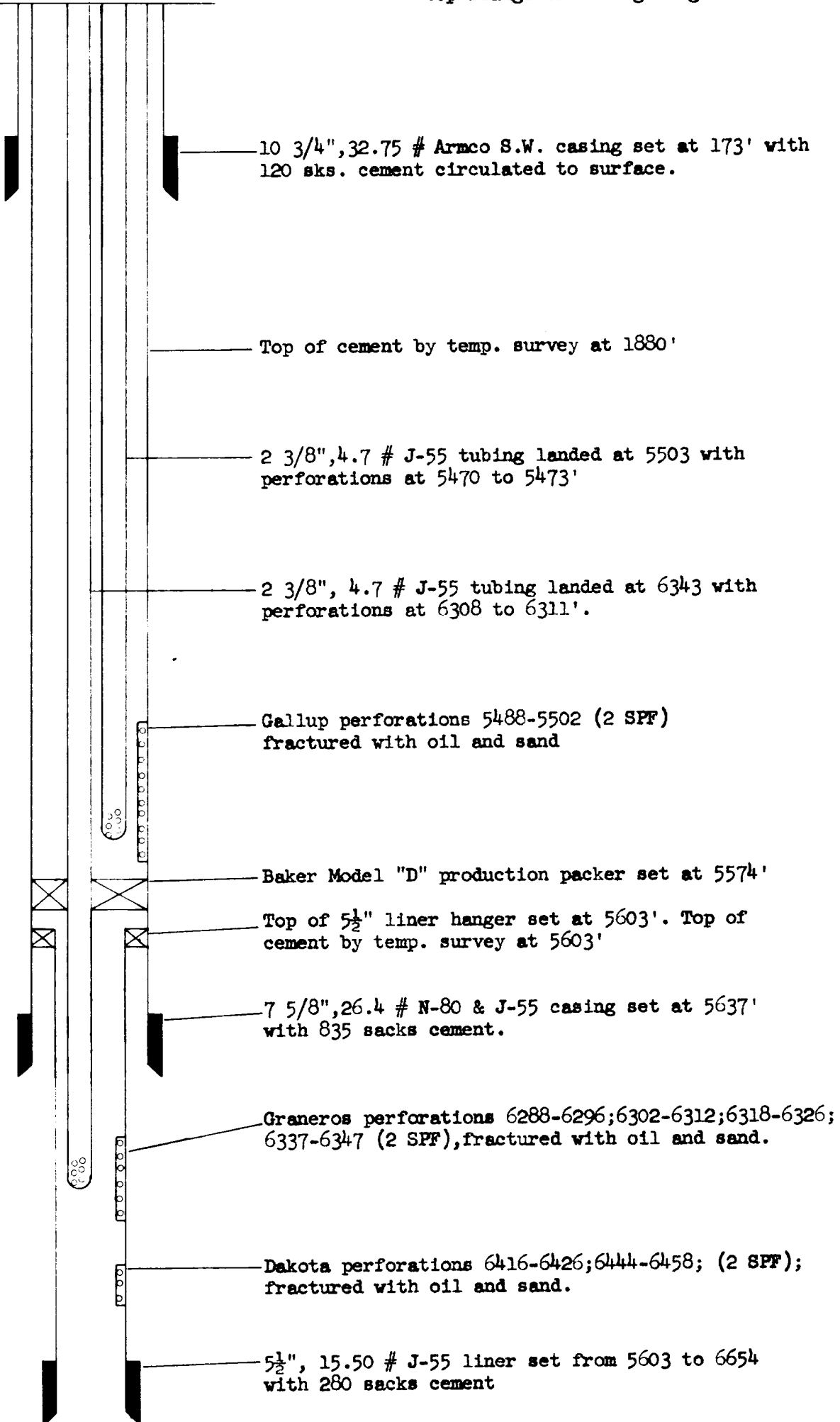
DRAWN BY

CHECKED BY

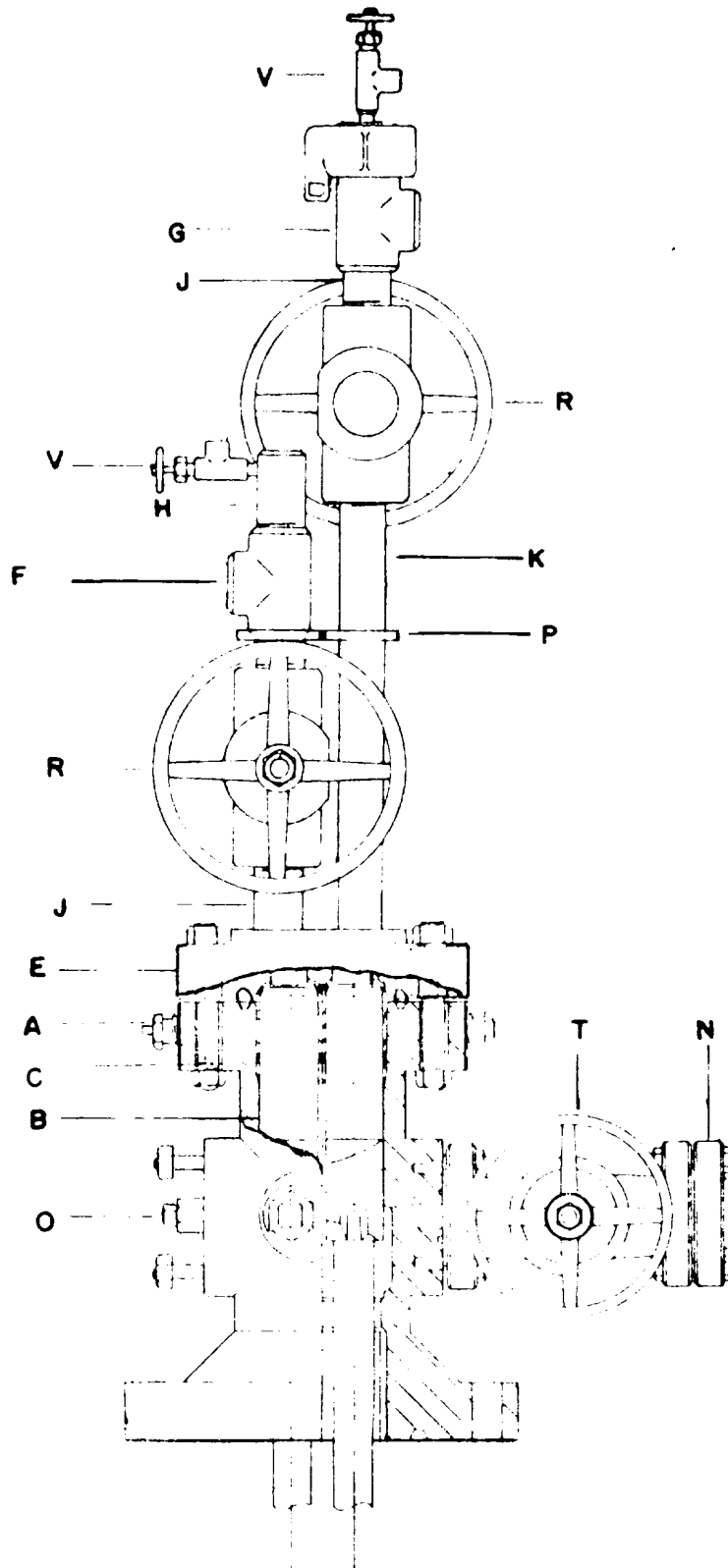
Schematic Diagram of Dual Completion
 El Paso Natural Gas Canyon Largo Unit No. 89(GD)
 S.W. 1/4 17, T 24 N, R 6 W

Dual String
 Xmas Tree

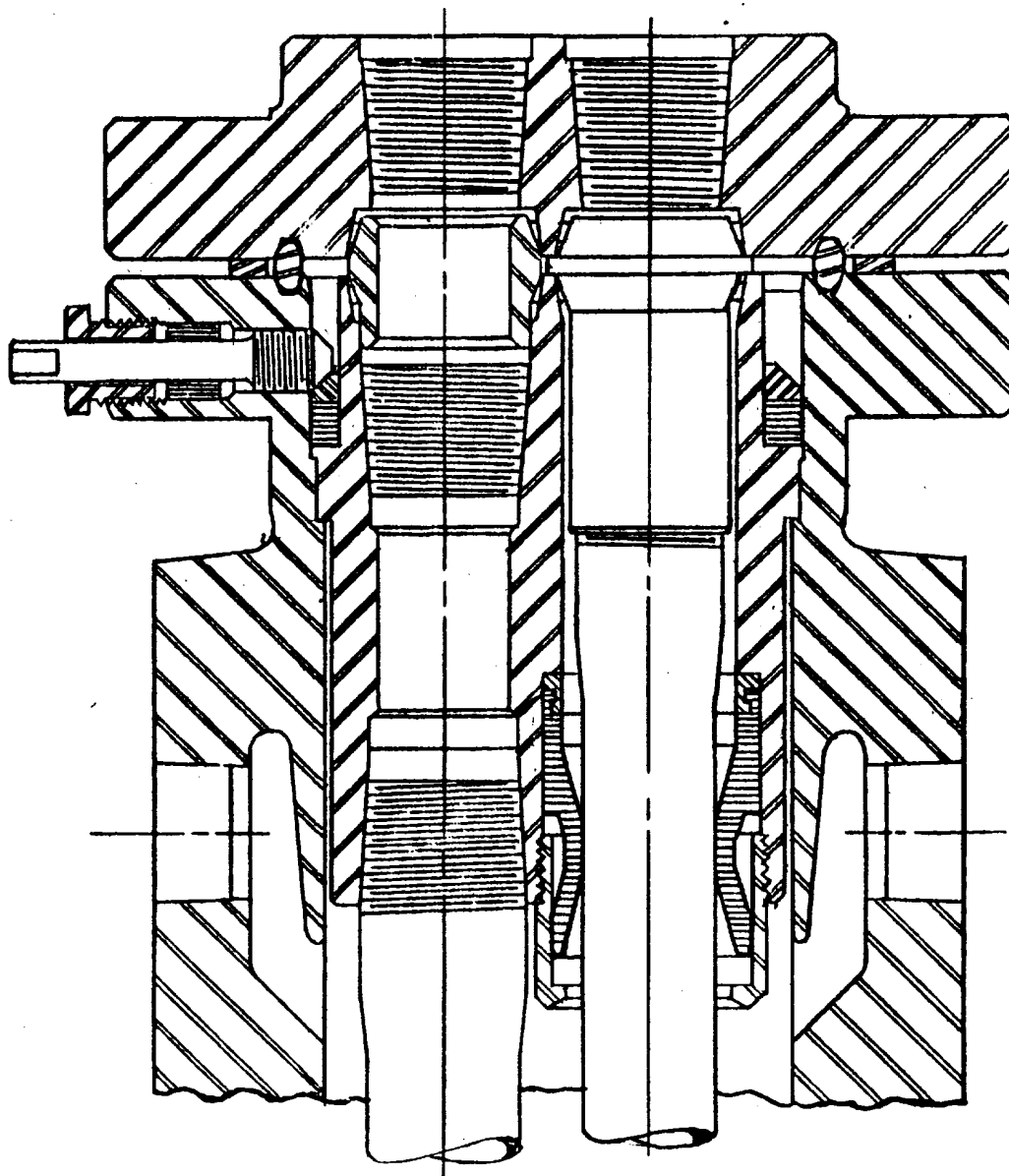
Zero reference point 10.0' above
 top flange of tubing hanger.



Total Depth 6656'



CHRISTMAS TREE ASSEMBLY NO. X-1148-U REV.13			PROPERTY OF OIL CENTER TOOL CO., INC. HOUSTON, TEXAS		
PART NO.	SCALE	PATTERN NO.	DATE 2-24-59	SIZE	FILE NO.
MATERIAL SPEC. FOR EL PASO NATURAL GAS CO			DRN. BY GOC		DWG. NO.
			CHK. BY		
			APPRVD.		



EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE June 8, 1960

Operator El Paso Natural Gas Company	Lease Canyon Largo Unit No. 89 (D)
Location 10908, 1090W; 17-24N-6W	County RioArriba State New Mexico
Formation Dakota	Pool Wildcat Dakota
Casing Diameter 5-1/2 Set At Feet 6654	Tubing Diameter 2-3/8" O.D. Set At Feet 6332
Pay Zone From 6288 To 6458	Total Depth 6664 c/o 6589 Shut in 5/20/60
Stimulation Method Sand Oil Frac.	Flow Through Casing X Flow Through Tubing X

Choke Size, Inches .75	Choke Constant C 12.365	5-1/2 liner 5603-6654
Shut-in Pressure, psia, (G) 1574	PSIG - 12 PSIA 1586	Shut-in Pressure, psia, (D) 2082
Flowing Pressure, P, 117	PSIG - 12 PSIA 129	Working Pressure, Pw, Calc.
Temperature 66 F	Gravity .9943	Flow From Tables 1.014
		.700 Fg .9258

Initial SIPT (G) = 1574 psig
Final SIPT (G) = 1583 psig

Packer set at 5574'

CHOKE VOLUME $Q = C \times P_1 \times F_1 \times F_g \times F_v$

$$Q = 12.365 \times 129 \times .9943 \times .9258 \times 1.014$$

1489

MCF/D

OPEN FLOW $Aof = Q \left(\frac{P_1^2}{P_2^2} - \frac{P_2^2}{P_a^2} \right)^n$

$$Aof = \left(\frac{4384836}{4314611} \right)^n$$

$$1.0162^{.75} \times 1489 = 1.0121 \times 1489$$

Aof

1498

MCF/D

C. R. Wagner

WITNESSED BY

Checked By Bob Nickell

Lewis D. Galloway
L. D. Galloway

OPEN FLOW TEST DATA
Corrected Copy

DUAL COMPLETION

DATE May 12, 1960

El Paso Natural Gas Company	Canyon Largo Unit No. 89 (G)
1090S, 1090W; 17-24-6	Rio Arriba New Mexico
Gallup	Devil's Fork Gallup
7-5/8	5637
5488	5502
Sand Oil Frac.	X

.75	12.365	Baker Model "D" Packer at 5574'
-	12	(G) 1573
493	505	Calc.
71	.9896	.75
		1.059
		.700
		.9258

Initial SIPT (D) = 2213 psig
Final SIPT (D) = 2242 psig

$$12.365 \times 505 \times .9896 \times .9258 \times 1.059$$

6058

Blew heavy fog of distillate entire blow period.

2512225
1469784

$$1.7092^{.75} \times 6058 = 1.4944 \times 6058$$

9053

Frank Clark

Checked By H. L. Kendrick

CORRECTED COPY

Lewis D. Galloway
L. D. Galloway