OIL CONSERVATION COMMISSION
5 DISTRICT

DATE 10-19-64

OIL CONSERVATION COMMISSION
BOX 871
SANTA FE, NEW MEXICO

Re: Proposed NSP _____

Proposed NWU _____

Proposed NSL _____

Proposed NFO _____

Proposed DC V

Gentlemen:

I have examined the application dated 10-9-64

for the EPNG San Juan 27-4 Unit #35 N-22-27N-4W
Operator Lease and Well No. S-T-R

and my recommendations are as follows:

Approve

Yours very truly,

Ernest C. Arnold

NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO 7-3-58

APPLICATION FOR DUAL COMPLETION

Field Name	County	Date
Undesignated Pictured Cliffs & Blanco Mesa Verde	Rio Arriba	October 9, 1964

Operator	Lease	Well No.
El Paso Natural Gas Company	San Juan 27-4 Unit	35 (PM)

Location of Well	Unit	Section	Township	Range
	N	26	27N	4W

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 X NO ____
2. If answer is yes, identify one such instance: Order No. MC 1373 ; Operator, Lease, and Well No.:

Consolidated Oil & Gas, Inc. - Champlin #4-35 (PD)

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)	4136-4194	5934-6361
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.*

Yes 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.

Consolidated Oil & Gas, 1700 Broadway, Denver 2, Colorado

RECEIVED
OCT 14 1964
OIL CON. COM.
DIST. 3

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES X NO ____. If answer is yes, give date of such notification 10-9-64.

CERTIFICATE: I, the undersigned, state that I am the Area Petroleum Engineer of the El Paso Natural Gas (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.

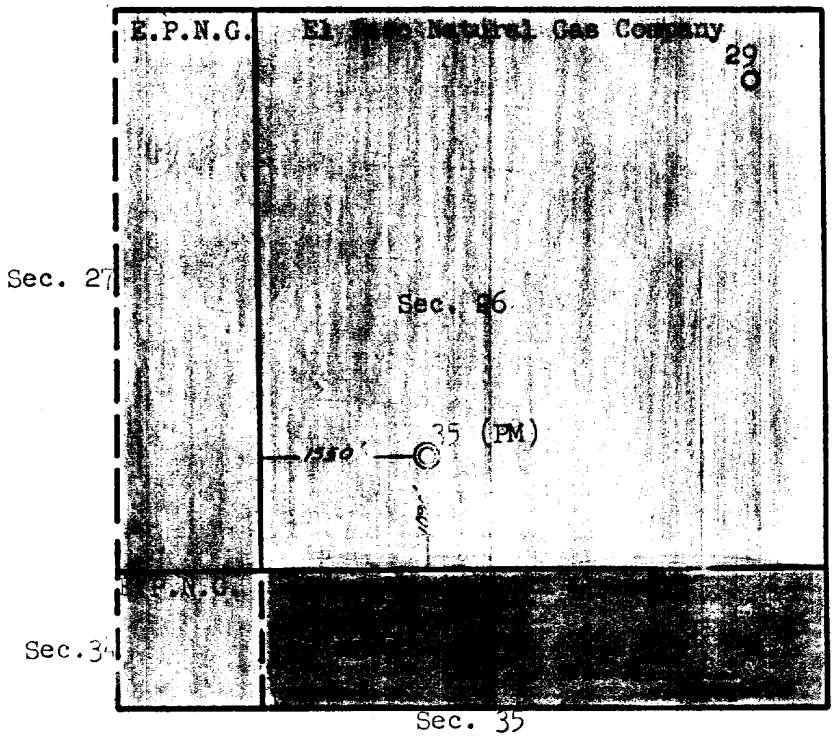
ORIGINAL SIGNED E. S. OBERLY
Signature

* 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 DUALLY COMPLETED
El Paso Natural Gas Company San Juan 27-4 Unit #35 (PM)
and Offset Acreage

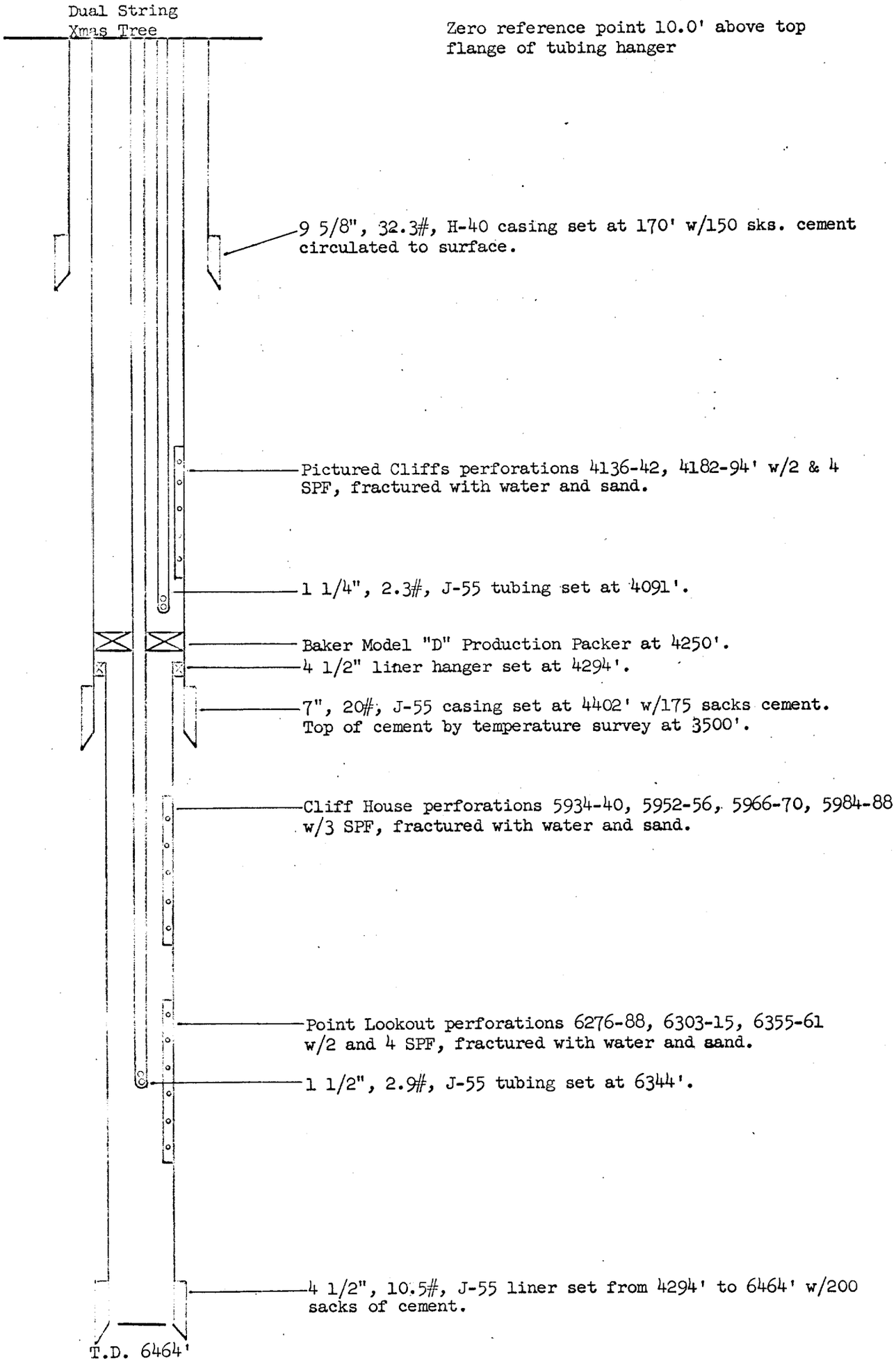
Sec. 26, T-27-N, R-4-W



EL PASO NATURAL GAS COMPANY EL PASO, TEXAS		
SCALE	DATE	No.
DRAWN BY	CHECKED BY	

FORM 7-132R (10-56)

SCHEMATIC DIAGRAM OF DUAL COMPLETION
El Paso Natural Gas Co. San Juan 27-4 Unit #35 (PM)



FORM 23-75R (REV. 1-65)

EL PASO NATURAL GAS COMPANY

OPEN FLOW TEST DATA

DUAL COMPLETION DATE September 2, 1964

Operator: El Paso Natural Gas Company		Lease: San Juan No. 35 (PC)	
Location: [illegible]		County: [illegible]	State: New Mexico
Formation: Pictured Cliffs		Pool: [illegible]	
Casing Diameter: 7"	Set At: Feet: 2122	Tubing Diameter: [illegible]	Set At: Feet: [illegible]
Pay Zone: From: 1912	To: 1954	Total Depth: 2122	Shut In: 7-27-64
Stimulation Method: Sand Water Frac.		Flow Through Casing: X	Flow Through Tubing:

Choke Size, Inches: 0.750	Choke Constant: C: 12.365	[illegible] Model "D" Packer set at 1250'	
Shut-in Pressure, Casing, PSIG: 1039 (PC)	+ 12 = PSIA: 1051	Days Shut-in: 37	Shut-in Pressure, Tubing PSIG: 1038 (PC) + 12 = PSIA: 1050
Flowing Pressure: P PSIG: [illegible]	+ 12 = PSIA: 180	Working Pressure: P_w PSIG: [illegible]	+ 12 = PSIA: 189
Temperature: T= 59 °F	n = .85	F_{pv} (From Tables): 1.016	Gravity: .650 F_g = .9608

Initial SIPT (MV) = 1166 psig
Final SIPT (MV) = 1169 psig

CHOKE VOLUME = Q = C x P_t x F_t x F_g x F_{pv}

Q = (12,365)(180)(1.0010)(.9608)(1.016) = 2175 MCF/D

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

$$\text{Aof} = \left(\frac{1101601}{1066880}\right)^n = (2175)(1.0334)^{.85} = (2175)(1.0283)$$

NOTE: Well produced very little water during test.

Aof = 2237 MCF/D

TESTED BY Herman D. Mallilly

Checked

APPROVED BY T. H. Hendrick

Lewis D. Galloway

EL PASO NATURAL GAS COMPANY

OPEN FLOW TEST DATA

DUAL COMPLETION DATE August 10, 1964

Operator: El Paso Natural Gas Company		Lease: San Juan Unit 27-4 No. 35 (MV)	
Location: 1090S, 1550W, Sec. 26, T-27-N, R-4-W		County: Rio Arriba	State: New Mexico
Formation: Mesa Verde		Pool: Blanco	
Casing: Diameter: 4.500	Set At: Feet: 6464	Tubing: Diameter: 1.900	Set At: Feet: 6334
Pay Zone: From: 5934	To: 5361	Total Depth: 6470	Shut In: 7-27-64
Stimulation Method: Sand Water Frac		Flow Through Casing:	Flow Through Tubing: X

Choke Size, Inches: 0.750	Choke Constant: C: 12.365	Baker Model "D" Packer set at 4250 ft.	
Shut-in Pressure, Casing, (PC): 1012 PSIG	+ 12 = PSIA: 1024	Days Shut-in: 14	Shut-in Pressure, Tubing (MV): 1132 PSIG + 12 = PSIA: 1144
Flowing Pressure: P: 239 PSIG	+ 12 = PSIA: 251		Working Pressure: P_w (Calc): PSIG + 12 = PSIA: 851
Temperature: T 54 °F	Ft: 1.0058 n: .75	Fpv (From Tables): 1.026	Gravity: .650 Fg .9608

ISIPT (PC) = 1010 psig
FSIPC (PC) = 1015 psig

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

$$Q = (12.365)\ (251)\ (1.0058)\ (.9608)\ (1.026) = 3077 \text{ MCF/D}$$

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

$$Aof = \left(\frac{1308736}{584535} \right)^n \quad (3077)\ (2.2389)^{.75} = (3077)\ (1.8290)$$

NOTE: Blew clear gas entire test.

$$Aof = 5628 \text{ MCF/D}$$

TESTED BY: J. B. Goodwin

CALCULATED BY: W. D. Dawson

CHECKED BY: T. B. Grant

Lewis D. Galloway

Lewis D. Galloway