NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

7-3-58

APPLICATION FOR DUAL COMPLETION

Field Name			County	Date
Blanco & So. Blanco P. C. Ext			Rio Arriba	April 28, 1959
Operator		Lease		Well No.
El Paso Natural Gas Company		San Juan 27-5 Unit		46 (PM)
Location of Well	Unit	Section	Township	Range
	M	7	27N	

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. DC-577 ; Operator, Lease, and Well No.:

San Juan 28-6 Unit No. 80 (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)	3330-3398	5475-5631 (Point Lookout)
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 Co. is the operator of San Juan 27-5 and 28-6 Units

RECEIVED
MAY 11 1959
OIL CON. COM.
DIST. 3

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.

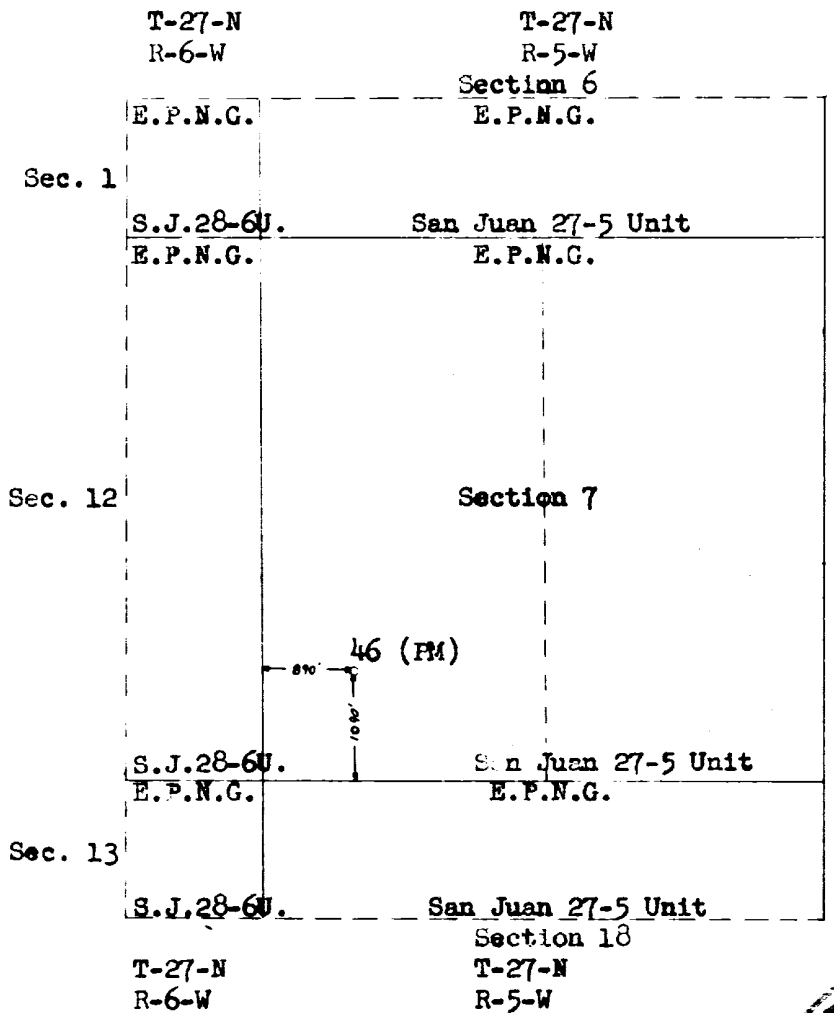
ORIGINAL SIGNED E. S. OBERLY

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.

Plat Showing Location of Dually Completed
El Paso Natural Gas Co. San Juan 27-5 Unit No. 46 (PM)
and Offset Acreage



EL PASO NATURAL GAS COMPANY
EL PASO, TEXAS

SCALE	DATE	No.
DRAWN BY	CHECKED BY	

FORM 7-132R (10-56)

STATE OF NEW MEXICO)
)
COUNTY OF SAN JUAN)

I, J. J. Tillerson, being first duly sworn upon my oath depose and say as follows:

I am an employee of El Paso Natural Gas Company, and that on March 31, 1959, I was called to the location of the El Paso Natural Gas Company San Juan 27-5 Unit No. 46 (PM) Well located in the SWSW/4 of Section 7, 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 3564 feet in accordance with the usual practices and customs of the industry.

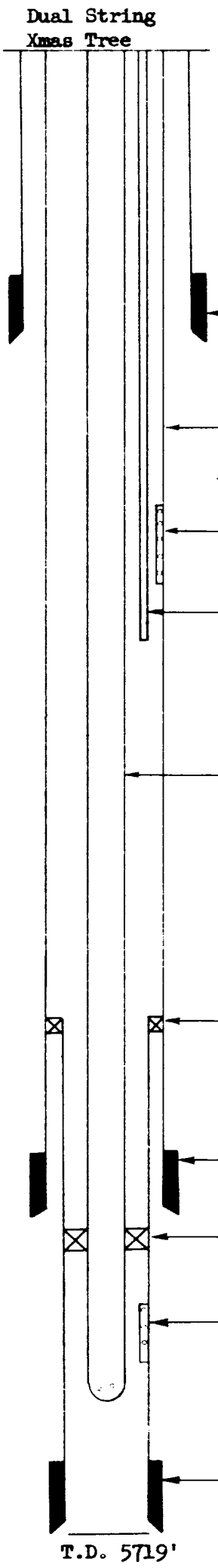
J. J. Tillerson

Subscribed and sworn to before me this 5th day of May, 1959.

Notary Public in and for San Juan County, New Mexico

My commission expires February 24, 1960.

Schematic Diagram of Dually Completed
El Paso Natural Gas Co. San Juan 27-5 Unit No. 46 (PM)
SW Section 7, T-27-N, R-5-W



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

10 3/4", 32.75#, S. W. casing set at 273' with 100 sacks cement circulated to surface.

Top of cement by B & R Temperature survey at 2900'.

Pictured Cliffs perforations 3330-3344; 3372-3380; 3390-3398 (2 SPF) fractured with water and sand.

1 1/4", 2.4# Grade "A" tubing landed at 3365' as a siphon.

2", 4.7#, J-55 tubing landed at 5561' with perforations at 5526-5529'.

Top of liner hanger at 3443'. Top of liner squeezed with 100 sacks cement. Top of cement by B & R temperature survey at 3443'.

7 5/8", 26.4#, J-55 casing set at 3504' with 126 sacks cement.

Baker Model "EGJ" production packer set at 3564'.

Point Lookout perforations 5475-5485'; 5503-5513; 5533-5543'; 5553-5563; 5591-5605; 5621-5631 (2 SPF) fractured with water and sand.

5 1/2", 15.50#, J-55 liner set from 3443' to 5717' with 230 sacks cement.

T.D. 5719'

EL PASO NATURAL GAS COMPANY

OPEN FLOW TEST DATA

DUAL COMPLETION DATE **April 10, 1959**

Operator: **El Paso Natural Gas**		Lease: **San Juan 27-5 No. 46 (M)**	
Location: **1090S, 890W; 7-27-5**		County: **Rio Arriba**	State: **New Mexico**
Formation: **Mesa Verde**		Pool: **Blanco**	
Casing: Diameter: **7-5/8**	Set At: Feet: **3504**	Tubing: Diameter: **2"**	Set At: Feet: **5551**
Pay Zone: From: **5475**	To: **5631**	Total Depth: **5719 c/o 5660**	Flow Through Casing / Tubing: **3/31/59** / **X**
Stimulation Method: **Sand Water Frac.**			

Choke Size, Inches: **12.365**	Choke Constant: C: **.75**	**5-1/2 liner 3443-5717**	
Shut-In Pressure, Casing: PSIG: **1055 (PC)** + 12 = PSIA: **1067**	Days Shut-In: **10**	Shut-In Pressure, Tubing: PSIG: **1029 (MV)** + 12 = PSIA: **1041**	
Flowing Pressure: P: PSIG: **219** + 12 = PSIA: **231**		Working Pressure: P_w: PSIG + 12 = PSIA: **Calc.**	**461**
Temperature: T: **62**	Fpv (From Tables): **.75**	Fg (From Tables): **1.025**	Gravity: **.693**

Initial SIPT (PC) = 1055 psig
Final SIPC (PC) = 1061 psig

Packer at 3564

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

Q = **12.365 x 231 x .9981 x .9325 x 1.025** = **2725** MCF D

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

Aof = $\left(\frac{1083681}{871160} \right)^n$ $1.2439^{.75}$ x 2725 = 1.1777 x 2725

Aof = **3209** MCF D

TESTED BY: **M. W. Rischard**

WITNESSED BY:

Lewis D. Galloway
L. D. Galloway

EL PASO NATURAL GAS COMPANY

OPEN FLOW TEST DATA

DUAL COMPLETION DATE **April 17, 1959**

Operator: **El Paso Natural Gas**		Lease: **San Juan 27-5 No. 46 (P)**	
Location: **1090S, 890W; 7-27-5**		County: **Rio Arriba**	State: **New Mexico**
Formation: **Pictured Cliffs**		Pool: **South Blanco**	
Casing: Diameter **7-5/8**	Set At: Feet **3504**	Tubing: Diameter **1-1/4**	Set At: Feet **3355**
Pay Zone: From **3330**	To **3398**	Total Depth: **5719 c/o 5660**	Shut In **3/31/59**
Stimulation Method: **Sand Water Frac.**		Flow Through Casing: **X**	Flow Through Tubing

Choke Size, Inches: **12.365**	Choke Constant: **.75**				
Shut-in Pressure, Casing: **1075** PSIG **1087** PSIA	Days Shut-in: **7**	Shut-in Pressure, Tubing: **1075** PSIG **1087** PSIA			
Flowing Pressure: P **167** PSIG **179** PSIA		Working Pressure: P_w **184** PSIG **196** PSIA			
Temperature: T **58**	F_t **.85**	Fpv (From Tables) **1.019**	Gravity **.670**		

Initial SIPT (MV) = 1037 psig
Final SIPT (MV) = 1040 psig

Packer at 3564

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

Q = **12.365 x 179 x 1.0019 x .9463 x 1.019** = **2138** MCF D

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

$A^{.85} = \left(\frac{1181569}{1143153} \right)^{.85}$ **$1.0336^{.85}$ x 2138 = 1.0285 x 2138**

2199 MCF D

M. W. Rischard

Lewis D. Galloway

L. D. Galloway