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

DATE 12-5-61

OIL CONSERVATION COMMISSION
BOX 871
SANTA FE, NEW MEXICO

RE: Proposed NSP _____
Proposed NSL _____
Proposed NFO _____
Proposed DC ✓

Gentlemen:

I have examined the application dated 11-30-61

for the ERNE SJU 295 #67 B 31-27N-5W
Operator Lease and Well No. S-T-R

and my recommendations are as follows:

Approve

Yours very truly,

OIL CONSERVATION COMMISSION

NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

7-3-58

APPLICATION FOR DUAL COMPLETION

Field Name: South Blanco Pictured Cliffs & Blanco Mesa Verde		County: Rio Arriba	Date: November 30, 1961
Operator: El Paso Natural Gas Company	Lease: San Juan 27-5 Unit		Well No.: 67 (PM)
Location of Well: Unit: B	Section: 31	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 X NO ____

2. If answer is yes, identify one such instance: Order No. DC-618 ; Operator, Lease, and Well No.:

El Paso Natural Gas Company San Juan 27-5 Unit #34 (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)	3106 - 3152	4810 - 5378
c. Type of production (Oil or Gas)	Gas	Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing	Flowing

REC DEC 8 19[illegible] OIL CON. COM. DIST. 3

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.

T. F. Harrington, c/o T. K. Harrington, Box 4026, Station "A", Albuquerque, New Mexico

James Swift, Attorney for G. F. Harrington, 708 - 44th St., Des Moines 12, Iowa

Southern Petroleum Exploration, Box 192, Sistersville, West Virginia

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 November 30, 1961.

CERTIFICATE: I, the undersigned, state that I am the Area 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 H. L. OBERLY

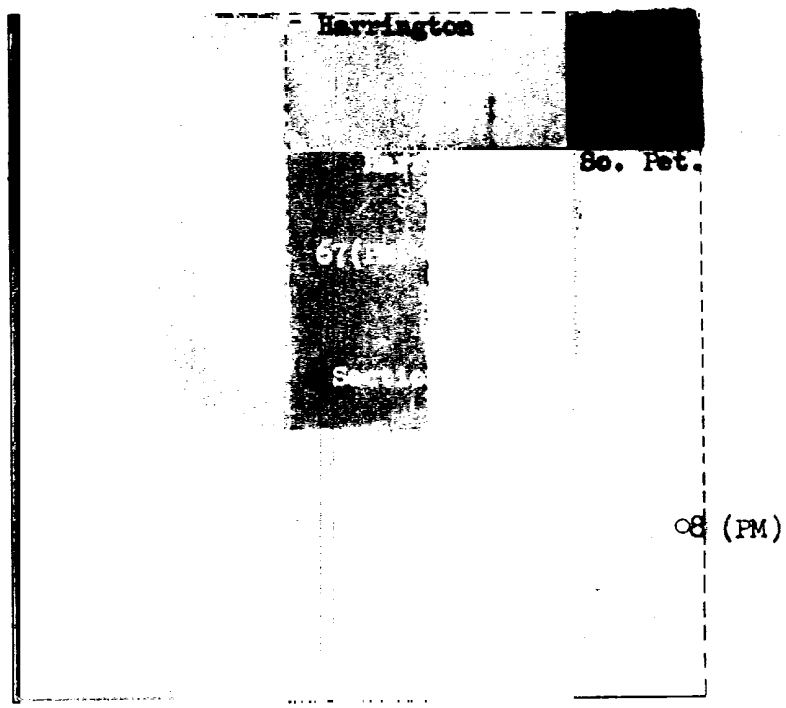
Signature

* 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. 67 (PM)
and Offset Acreage

T-27-N
R-5-W



EL PASO NATURAL GAS COMPANY
EL PASO, TEXAS

SCALE | DATE | No.
DRAWN BY | CHECKED

FORM 7-142R (7-58)

EL PASO NATURAL GAS COMPANY

OPEN FLOW TEST DATA

DUAL COMPLETION DATE **November 2, 1961**

Operator: **El Paso Natural Gas Company**		Lease: **San Juan 27-5 No. 67 (MV)**	
Location: **990'N, 1560'E, Sec. 31-27N-5W**		County: **Rio Arriba**	State: **New Mexico**
Formation: **Mesa Verde**		Pool: **Blanco**	
Casing: Diameter: **7"O.D. 20.0 lbs.**	Set At: Feet: **3275**	Tubing: Diameter: **2-1/16" O.D., 3.25 lbs.**	Set At: Feet: **5305**
Pay Zone: From: **4810**	To: **5378**	Total Depth: **5550 C/O 5520**	Shut In: **9-12-61**
Stimulation Method: **Sand/Water Frac.**		Flow Through Casing:	Flow Through Tubing: **X**

Choke Size, Inches: **0.750**		Choke Constant: C: **12.365**		**4-1/2" O.D. 9.5 lbs. Liner 3163 to 5550**			
Shut-In Pressure, Casing, PSIG: **1031 (PC)**	+ 12 = PSIA: **1043**	Days Shut-In: **51**	Shut-In Pressure, Tubing PSIG: **1065 (MV)**	+ 12 = PSIA: **1077**			
Flowing Pressure: P PSIG: **263**	+ 12 = PSIA: **275**		Working Pressure: P_w PSIG: **(Calc.)**	+ 12 = PSIA: **718**			
Temperature: T: **59** F	Ft: **1.0010**	n: **.75**	Fpv (From Tables): **1.028**	Gravity: **.653**	Fg: **.9608**		

Initial SIPT (PC) = 976 psig
Final SIPC (PC) = 1035 psig

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

Q = (12.365)(275)(1.0010)(.9608)(1.028) = **3362** MCF D

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

Aof = $\left(\frac{1,159,929}{644,405} \right)^n$ = (3362)(1.8000)$^{.75}$ = (3362)(1.5540)

Aof = **5691** MCF D

NOTE: Blew medium fog of water and distillate throughout test.

WITNESSED BY **Dannie Roberts**

WITNESSED BY

Calculated by: W. D. Dawson

Lewis D. Galloway

Lewis D. Galloway

EL PASO NATURAL GAS COMPANY

OPEN FLOW TEST DATA

DUAL COMPLETION DATE **November 14, 1961**

Operator: **El Paso Natural Gas Company**		Lease: **San Juan 27-5 No. 67 (PC)**	
Location: **990'N, 1560'E, Sec. 31-27N-5W**		County: **Rio Arriba**	State: **New Mexico**
Formation: **Pictured Cliff**		Pool: **So. Blanco PC**	
Casing Diameter: **7" O.D. 20.0 lbs.**	Set At: Feet: **3275**	Tubing Diameter: **1-1/4" O.D.**	Set At: Feet: **3129**
Pay Zone: From: **3106**	To: **3152**	Total Depth: **5550 C/O 5520**	Shut In: **9-12-61**
Stimulation Method: **Sand/Water Frac.**		Flow Through Casing: **X**	Flow Through Tubing:

Choke Size, Inches: **0.75**		Choke Constant: C: **12.365**		**4-1/2" O.D. 9.5 lbs. Liner 3163 to 5550 Prod. Pkr. at 3353**	
Shut-in Pressure, Casing: (PC) **1038** PSIG	+ 12 = PSIA: **1050**	Days Shut-in: **63**	Shut-in Pressure, Tubing: (PC) **956** PSIG	+ 12 = PSIA: **968**	
Flowing Pressure: P PSIG	+ 12 = PSIA: **88**	**100**	Working Pressure: Pw PSIG	+ 12 = PSIA: **119**	**131**
Temperature: T °F: **55**	n: **1.0048**	Fg: **.85**	Fpv (From Tables): **1.009**	Gravity: **.650**	Fg: **.9608**

Initial SIPT (MV) = 1067 psig
Final SIPT (MV) = 1066 psig

CHOKE VOLUME = C x Pt x Ft x Fg x Fpv

Q = (12.365)(100)(1.0048)(.9608)(1.009) = **1204** MCF D

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

Aof = $\left(\frac{1,102,500}{1,085,339}\right)^n$ $(1204)(1.0158)^{.85} = (1204)(1.0134)$

Aof = **1220** MCF D

Witnessed by: R. F. Headrick

Company:

Calculated by: W. D. Dawson

Lewis D. Galloway

Lewis D. Galloway

THIS FORM IS NOT TO BE USED FOR REPORTING PACKER LEAKAGE TESTS IN SOUTHEAST NEW MEXICO

W MEXICO OIL CONSERVATION COMMISSION
NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

FORM PL-NW-1
REVISED 6-1-59

Operator	Lease	Well No.
El Paso Natural Gas Company	San Juan 27-5	67 (PM)

Location of Well: Unit B Sec. 31 Twp 27 Rge 5 | County: Rio Arriba | Type of Test: Initial 11-14-61 (DATE) Annual (YEAR)

	Name of Reservoir or Pool	Oil or Gas	Flowing or Artificial Lift	Producing Casing or Tubing
UPPER COMPLETION:	Pictured Cliff	Gas	Flowing	Casing
LOWER COMPLETION:	Mesa Verde	Gas	Flowing	Tubing

SHUT-IN PRESSURE DATA BEFORE FLOW TEST NO. 1

	Hour & Date Well Shut-in	Length of Time Shut-in	Shut-in Pressure, PSIG	Stabilized Pressure
UPPER COMPLETION:	9-12-61	51 days	1031(C) 976(T)	(XXXXXX No)
LOWER COMPLETION:	9-12-61	51 days	1065	(XXXXXX No)

FLOW TEST NO. 1

Zone Producing (Upper or Lower): Lower | Hour & Date Flow Started: 11-2-61

LAPSED TIME SINCE FLOW BEGAN	SHUT-IN ZONE PRESSURE, PSIG	WORKING COLUMN PRESSURE, PSIG		FLOWING ZONE PRESSURE, PSIG	FLOWING TEMPERATURE	REMARKS
15 min.	1035			348	54	
30 min.	1035			322	54	
45 min.	1035			297	55	
60 min.	1035			278	55	
180 min.	1035	(Calc.)	706	263	59	

OIL PRODUCED: Total Bbls. | Number Hours | Oil Rate: Bbl. /D | Gravity | Gas Oil Ratio

GAS PRODUCED: Rate of Flow 3362 MCF D (Choke XXXXXX) | Tested Through •

REMARKS:

RECEIVED
DEC 8 1961
OIL CON. COM.
DIST. 3

SHUT-IN PRESSURE DATA BEFORE FLOW TEST NO. 2

	Hour & Date Well Shut-in	Length of Time Shut-in	Shut-in Pressure, PSIG	Stabilized Pressure
UPPER COMPLETION:	9-12-61	63 days	1038(C) 956(T)	(XXXXXX No)
LOWER COMPLETION:	11-2-61	12 days	1067	(XXXXXX No)

FLOW TEST NO. 2

Zone Producing (Upper or Lower): Upper | Hour & Date Flow Started: 11-14-61

LAPSED TIME SINCE FLOW BEGAN	FLOWING ZONE PRESSURE, PSIG	WORKING COLUMN PRESSURE, PSIG	SHUT-IN ZONE PRESSURE, PSIG	FLOWING TEMPERATURE	REMARKS
15 min.	321	366	1065	50	
30 min.	177	204	1066	53	
45 min.	143	167	1066	54	
60 min.	129	155	1066	55	
120 min.	102	128	1066	55	
180 min.	88	119	1066	55	

OIL PRODUCED: Total Bbls. | Number Hours | Oil Rate: Bbl. /D | Gravity | Gas Oil Ratio

GAS PRODUCED: Rate of Flow 1204 MCF D (Choke XXXXXX) | Tested Through

REMARKS

The results of this test indicate (No Packer Leakage) XXXXXXXXXXXX in this well.

I hereby certify that the information herein contained is true and complete to the best of my knowledge.

Approved 12-8 19 61
NEW MEXICO OIL CONSERVATION COMMISSION

BY: Emery C. Arnold

TITLE: Supervisor III

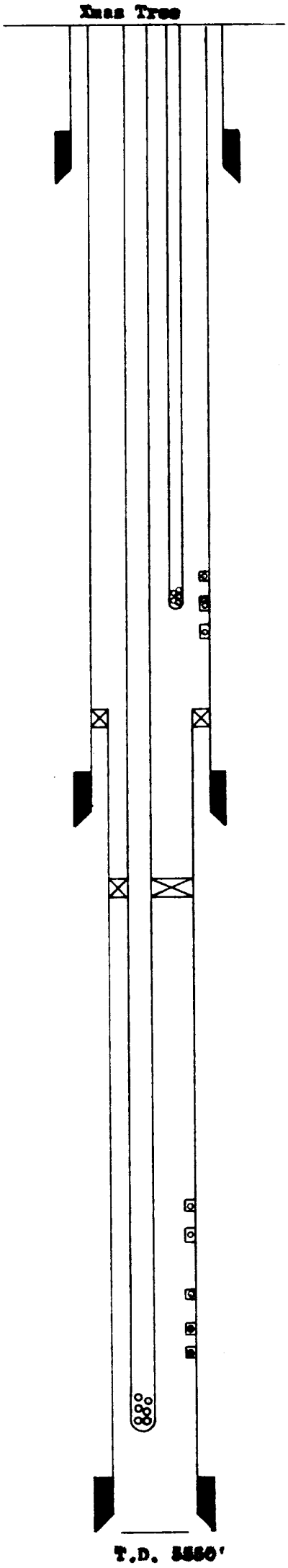
OPERATOR El Paso Natural Gas Company

BY H. L. Kendrick

TITLE Sr. Gas Engineer

DATE November 16, 1961

SCHEMATIC DIAGRAM OF DUALLY COMPLETED
El Paso Natural Gas Co. San Juan 27-5 Unit No. 67 (PM)
Section 31, T-27-N, R-5-W



10 3/4", 32.75#, H-40 set at 133' w/120 sacks cement circulated to surface.

1 1/4", 2.4#, J-55 tubing landed at 3140'.

Pictured Cliffs perforated at 3106-14; 3128-38; 3144-52 w/2 SPF/ fractured with water & sand.

4 1/2" Liner hanger set at 3162'.

7" 20#, J-55 casing set at 3275' w/130 sacks cement.

Baker Model "R" Packer set at 3353'.

4 1/2" Liner (9.5# J-55) set from 3162' to 5550' w/270 backs cement.

Cliff House perforations 4810-22; 4834-40 w/ 2 & 4 SPF; fractured with water & sand.

Point Lookout perforations 5296-5304; 5334-42; 5354-5362; 5370-78; fractured with water & sand.

2 1/16", 3.25# N-80 tubing landed at 5329'.

Bottom of 4 1/2" J-55 liner set at 5550'.

STATE OF NEW MEXICO)
)
COUNTY OF SAN JUAN)

I, R. E. Miezlaiskis, 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 September 7, 1961, I was called to the location of the El Paso Natural Gas Company San Juan 27-5 Unit No. 67 (PM) Well located in the NWNE/4 of Section 31, 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 "R" Production Packer was set in this well at 3352' in accordance with the usual practices and customs of the industry.

R. E. Miezlaiskis

Subscribed and sworn to before me, a Notary Public in and for San Juan County, New Mexico, this 6th day of December, 1961.

Dora G. Burns
Notary Public in and for San Juan County, New Mexico

My commission expires October 5, 1964.