

OIL CONSERVATION COMMISSION  
Aztec DISTRICT

OIL CONSERVATION COMMISSION  
BOX 871  
SANTA FE, NEW MEXICO

DATE 8-7-62

Re: Proposed NSP \_\_\_\_\_

Proposed NWU \_\_\_\_\_

Proposed NSL \_\_\_\_\_

Proposed NFO \_\_\_\_\_

Proposed DC XXX

Gentlemen:

I have examined the application dated July 19, 1962  
for the EPNG San Juan 27-5 Unit #70 (MD) G-8-27N-5W  
Operator Lease and Well No. S-T-R

and my recommendations are as follows:

approve

Yours very truly,

  
A. R. Kendrick

## NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

7-3-58

## APPLICATION FOR DUAL COMPLETION

Field Name <b>Dania Dakota &amp; Blanco Mesa Verde</b>		County <b>Rio Arriba</b>	Date <b>July 19, 1962</b>
Operator <b>El Paso Natural Gas Company</b>		Lease <b>San Juan 27-5 Unit</b>	Well No. <b>70 (MD)</b>
Location or Well <b>0</b>	Unit <b>0</b>	Section <b>8</b>	Township <b>27N</b>
		Range <b>5W</b>	

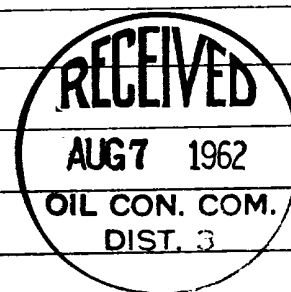
1. Has the New Mexico Oil Conservation Commission heretofore authorized the dual completion of a well in these same pools or in the same zones within one mile of the subject well? YES \_\_\_\_\_ NO X
2. If answer is yes, identify one such instance: Order No. \_\_\_\_\_ ; Operator, Lease, and Well No.:

3. The following facts are submitted:	Upper Zone	Lower Zone
a. Name of reservoir	<b>Mesa Verde</b>	<b>Dakota</b>
b. Top and Bottom of Pay Section (Perforations)	<b>5170-5716</b>	<b>7604 - 7836</b>
c. Type of production (Oil or Gas)	<b>Gas</b>	<b>Gas</b>
d. Method of Production (Flowing or Artificial Lift)	<b>Flowing</b>	<b>Flowing</b>

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.



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.

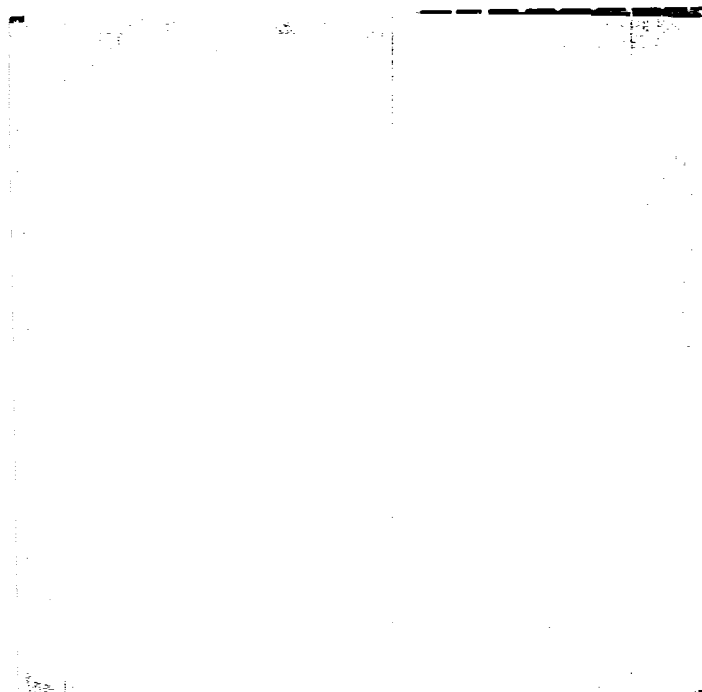
ORIGINAL SIGNED E. S. OBERLY  
Signature

- \* 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

E. P. N. G. San Juan 27-5 Unit #70 (MD)

and Offset Acreage



ILLEGIBLE

Scale: 3" = 1 Mile

EL PASO NATURAL GAS COMPANY  
EL PASO, TEXAS

SCALE \_\_\_\_\_ DATE July 10-62 No.  
DRAWN BY Jim H. CHECKED BY \_\_\_\_\_

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE June 26, 1962

Operator <b>El Paso Natural Gas Company</b>	Lease <b>San Juan Unit 27-5 No. 70 (MV)</b>
Location <b>1650'N, 1850'E, Sec. 8-27-5</b>	County <b>Rio Arriba</b> State <b>New Mexico</b>
Formation <b>Mesa Verde</b>	Pool <b>Blanco</b>
Casing Diameter <b>5-1/2</b> Set At Feet <b>5843</b>	Tubing Diameter <b>1-1/4</b> Set At Feet <b>5730</b>
Pay Zone From <b>5170</b> To <b>5716</b>	Total Depth <b>7911 c/o 7846</b> Shut In <b>6-12-62</b>
Stimulation Method <b>Sand/Water Frac.</b>	Flow Through Casing <b>X</b> Flow Through Tubing

Choke Size, Inches <b>.75</b>	Choke Constant C <b>12.365</b>	<b>Baker "D" Packer at 5797'</b>
Shut-In Pressure, Gas <b>1084 (MV)</b>	PSIG 12 PSIA <b>1096</b>	Days Shut-In <b>14</b>
Working Pressure, P <b>117</b>	PSIG 12 PSIA <b>129</b>	Shut-In Pressure, Tubing <b>496 (MV)</b>
Temperature <b>64</b>	Gravity <b>.9393</b>	Working Pressure, Pw <b>345</b>
		Flow From Tables <b>1.013</b>

Initial SIPT (DK) = 2431 psig  
Final SIPT (DK) = 2441 psig

$$Q = C \times P_c \times F_p \times F_g \times F_{pv}$$

$$Q = (12.365)(129)(.9962)(.9393)(1.013)$$

1512

MCF/D

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

$$\left( \frac{1,201,216}{1,073,767} \right)^n$$

$$(1512)(1.1186)^{.75} = (1512)(1.0874)$$

1644

MCF/D

NOTE: About 25 minutes after opening, well started blowing heavy fog of water with a slight amount of distillate. Fog continued throughout remainder of test.



W. D. Dawson

W. D. Dawson

*Lewis D. Galloway*  
Lewis D. Galloway

EL PASO NATURAL GAS COMPANY  
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE July 4, 1962

El Paso Natural Gas Company		San Juan Unit 27-5 No. 70 (DK)	
1650'N, 1350'E, Sec. 8-27-5		County	State
Dakota		Rio Arriba	New Mexico
Leasing Operator	Set At: Feet	Basin	Set At: Feet
4-1/2	7911	Tubing Diameter	7800
7604	7838	Total Depth	6-12-62
		7911 c/o 7846	Flow Through Tubing
Sand/Water Frac.			X

Initial SIPP (MV)	12.365	Baker "D" Packer at 5797'.
1087 (MV)	1099	Working Pressure, Tubing
365	377	2493 (DK)
62	.9981	Calculated
	.75	1141
		1.041
		.670
		.9463

Initial SIPP (MV) = 595 psig  
Final SIPP (MV) = 1095 psig

Q = 1.2617 x P<sub>1</sub> x F<sub>1</sub> x F<sub>g</sub> x F<sub>v</sub>

$$Q = (12.365)(377)(.9981)(.9463)(1.041)$$

4583

MCF/D

$$Q = \left( \frac{P_1}{P_2} \right)^n$$

$$Q = \left( \frac{6,275,025}{4,973,144} \right)^n$$

$$(1.2617)^{.75}(4583) = (1.1902)(4583)$$

5455

MCF/D

NOTE: Produced slugs of Distillate throughout test.

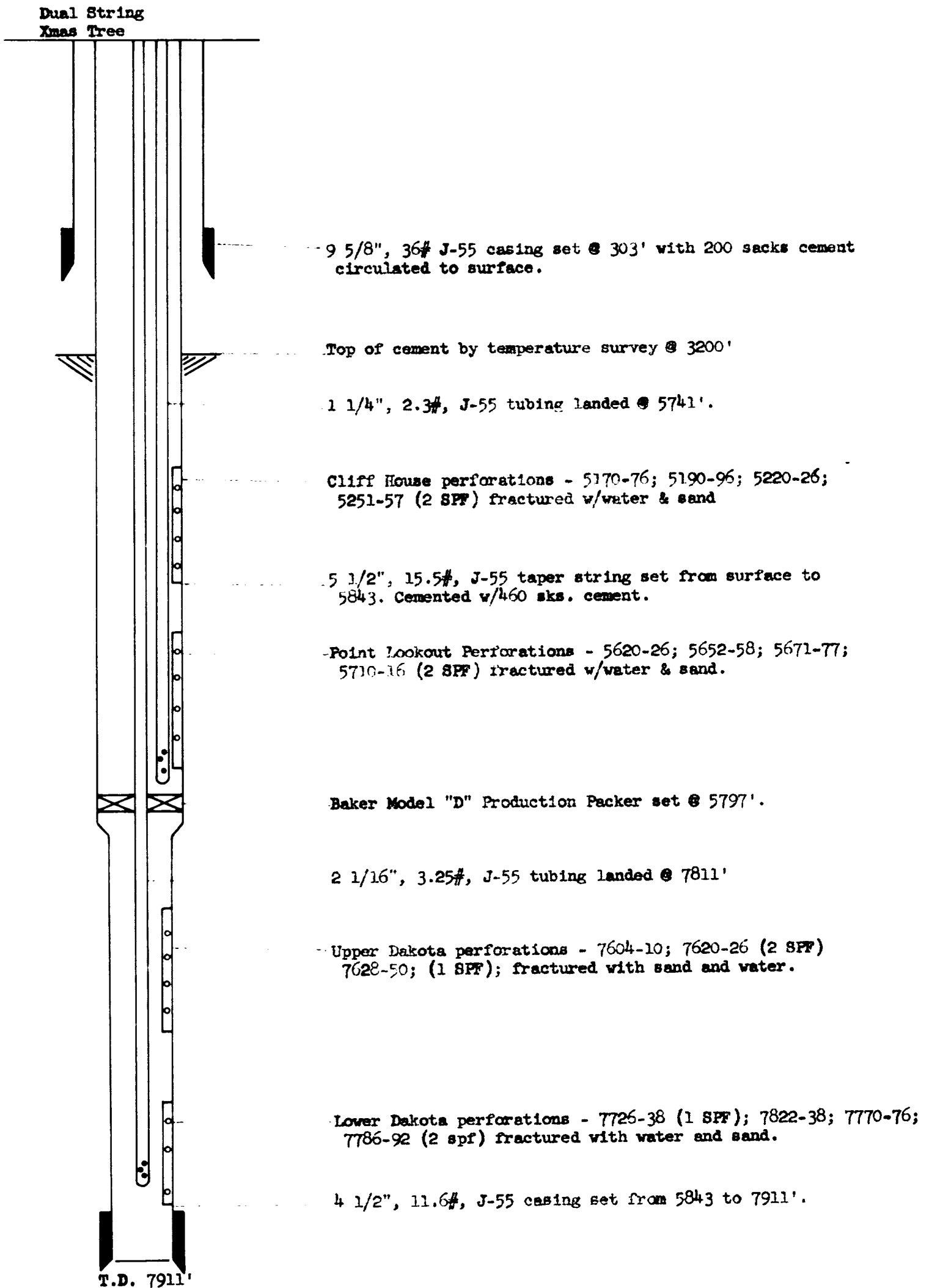
R. F. Headrick

Checked by: H. L. Kendrick

*Lewis D. Galloway*  
Lewis D. Galloway



**Schematic Diagram of Dual Completion**  
**E. P. N. G. San Juan 27-5 Unit #70 (MD)**  
**NE/4 Sec. 8, T-27-N, R-5-W**



Operator: <b>El Paso Natural Gas Company</b>		Lease: <b>San Juan Unit 27-5</b>		Well No.: <b>70 (MD)</b>	
Location of Well: <b>Unit 9 Sec. 8 Twp 27 Rge 5</b>		County: <b>Rio Arriba</b>		Type of Test: <b>Initial 7-4-62</b> Annual <b>7-4-62</b>	
UPPER Name of Reservoir or Pool: <b>Mesa Verde</b>		Oil or Gas: <b>Gas</b>		Flowing or Artificial Lift: <b>Flowing</b>	
COMPLETION: <b>Mesa Verde</b>		Gas: <b>Flowing</b>		Casing: <b>Casing</b>	
LOWER Name of Reservoir or Pool: <b>Dakota</b>		Oil or Gas: <b>Gas</b>		Flowing or Artificial Lift: <b>Flowing</b>	
COMPLETION: <b>Dakota</b>		Gas: <b>Flowing</b>		Tubing: <b>Tubing</b>	

SHUT-IN PRESSURE DATA BEFORE FLOW TEST NO. 1

UPPER	Hour & Date Well Shut-in: <b>6-12-62</b>	Length of Time Shut-in: <b>14 days</b>	Shut-in Pressure, PSIG: <b>1084(C) 496(T)</b>	Stabilized Pressure: <b>(No)</b>
COMPLETION:				
LOWER	Hour & Date Well Shut-in: <b>6-12-62</b>	Length of Time Shut-in: <b>14 days</b>	Shut-in Pressure, PSIG: <b>2431</b>	Stabilized Pressure: <b>(No)</b>
COMPLETION:				

FLOW TEST NO. 1		Zone Producing (Upper or Lower): <b>Upper</b>		Hour & Date Flow Started: <b>6-26-62</b>	
LAPSED TIME SINCE FLOW BEGAN	SHUT-IN ZONE PRESSURE, PSIG	WORKING COLUMN PRESSURE, PSIG	FLOWING ZONE PRESSURE, PSIG	FLOWING TEMPERATURE	REMARKS
15 min.	2434	362	227	60	
30 min.	2437	361	223	63	
45 min.	2438	356	191	64	
60 min.	2439	354	182	64	
180 min.	2441	345	117	64	
OIL PRODUCED		Total Bbls.	Number Hours	Oil Rate: <b>Bbl./D</b>	Gravity
GAS PRODUCED		Rate of Flow: <b>1512 MCF/D (Choke <del>restriction</del>)</b>	Tested Through	Gas Oil Ratio	

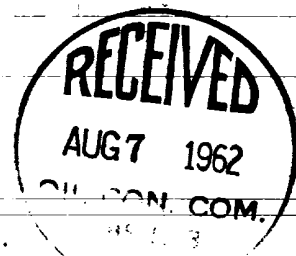
REMARKS: About 25 minutes after opening, well started blowing heavy fog of water with a slight amount of distillate.

SHUT-IN PRESSURE DATA BEFORE FLOW TEST NO. 2

UPPER	Hour & Date Well Shut-in: <b>6-26-62</b>	Length of Time Shut-in: <b>8 days</b>	Shut-in Pressure, PSIG: <b>1087(C) 595(T)</b>	Stabilized Pressure: <b>(No)</b>
COMPLETION:				
LOWER	Hour & Date Well Shut-in: <b>6-12-62</b>	Length of Time Shut-in: <b>.22 days</b>	Shut-in Pressure, PSIG: <b>2493</b>	Stabilized Pressure: <b>(No)</b>
COMPLETION:				

FLOW TEST NO. 2		Zone Producing (Upper or Lower): <b>Lower</b>		Hour & Date Flow Started: <b>7-4-62</b>	
LAPSED TIME SINCE FLOW BEGAN	FLOWING ZONE PRESSURE, PSIG	WORKING COLUMN PRESSURE, PSIG	SHUT-IN ZONE PRESSURE, PS	FLOWING TEMPERATURE	REMARKS
15 min.	479		<del>Calc.</del> <b>1093</b>	<del>Temp.</del> <b>601</b>	55
30 min.	444		<b>1094</b>	<b>603</b>	57
45 min.	421		<b>1094</b>	<b>605</b>	57
60 min.	407		<b>1094</b>	<b>605</b>	58
120 min.	385		<b>1095</b>	<b>608</b>	61
180 min.	365	(Calc.) 1129	<b>1095</b>	<b>610</b>	62
OIL PRODUCED		Total Bbls.	Number Hours	Oil Rate: <b>Bbl. D</b>	Gravity
GAS PRODUCED		Rate of Flow: <b>4583 MCF/D (Choke <del>restriction</del>)</b>	Tested Through	Gas Oil Ratio	

REMARKS:



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

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

Approved: _____	19	OPERATOR: <b>EL PASO NATURAL GAS COMPANY</b>
NEW MEXICO OIL CONSERVATION COMMISSION		BY: <b>H. L. Kendrick</b>
BY: _____		TITLE: <b>Sr. Gas Engineer</b>
TITLE: _____		DATE: <b>July 5, 1962</b>