

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator W. C. Russell Lease Marron Well No. 46  
Location of Well: Unit K Sec. 23 Twp. 27N Rge. 8W County San Juan

Name of Reservoir or Pool		Type of Prod. (Oil or Gas)	Method of Prod. (Flow or Art. Lift)	Prod. Medium (Tbg. or Csg.)
Upper Completion	<u>Mesa Verde</u>	<u>Gas</u>	<u>Flow</u>	<u>Tbg.</u>
Lower Completion	<u>Chacra</u>	<u>Gas</u>	<u>Flow</u>	<u>Csg.</u>

PRE-FLOW SHUT-IN PRESSURE DATA

Upper Compl	Hour, date Shut-in <u>5-3-70</u>	Length of time shut-in <u>3 Days</u>	SI press. psig <u>602</u>	Stabilized? (Yes or No)
Lower Compl	Hour, date Shut-in <u>5-3-70</u>	Length of time shut-in <u>3 Days</u>	SI press. psig <u>551</u>	Stabilized? (Yes or No)

FLOW TEST NO. 1

Commenced at (hour, date)*				Zone producing ( <del>Upper</del> or Lower):	
Time (hour, date)	Lapsed time since*	Pressure		Prod. Zone Temp.	Remarks
		Upper Compl.	Lower Compl.		
<u>5-7-70</u>	<u>4 Days</u>	<u>602</u>	<u>406</u>		
<u>5-8-70</u>	<u>5 Days</u>	<u>602</u>	<u>428</u>		

Production rate during test  
Oil: \_\_\_\_\_ BOPD based on \_\_\_\_\_ Bbls. in \_\_\_\_\_ Hrs. \_\_\_\_\_ Grav. \_\_\_\_\_ GOR \_\_\_\_\_  
Gas: \_\_\_\_\_ MCFPD; Tested thru (Orifice or Meter): \_\_\_\_\_

MID-TEST SHUT-IN PRESSURE DATA

Upper Compl	Hour, date Shut-in	Length of time shut-in	SI press. psig	Stabilized? (Yes or No)
Lower Compl	Hour, date Shut-in	Length of time shut-in	SI press. psig	Stabilized? (Yes or No)

FLOW TEST NO. 2

Commenced at (hour, date)**				Zone producing (Upper or Lower):	
Time (hour, date)	Lapsed time since **	Pressure		Prod. Zone Temp.	Remarks
		Upper Compl.	Lower Compl.		

Production rate during test  
Oil: \_\_\_\_\_ BOPD based on \_\_\_\_\_ Bbls. in \_\_\_\_\_ Hrs. \_\_\_\_\_ Grav. \_\_\_\_\_ GOR \_\_\_\_\_  
Gas: \_\_\_\_\_ MCFPD; Tested thru (Orifice or Meter): \_\_\_\_\_

REMARKS: \_\_\_\_\_

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

Approved: 6-2 19 70  
New Mexico Oil Conservation Commission  
By [Signature] Title Sup. Dist. 113  
Operator W. C. Russell  
By GeoElectric, Inc. [Signature]  
Title Agent  
Date \_\_\_\_\_

# NORTHWEST NEW MEXICO PACKER LEAKAGE TEST INSTRUCTIONS

1. A packer leakage test shall be commenced on each multiply completed well within seven days after actual completion of the well, and annually thereafter as prescribed by the order authorizing the multiple completion. Such tests shall also be commenced on all multiple completions within seven days following recompletion and/or chemical or fracture treatment, and whenever remedial work has been done on a well during which the packer or the tubing have been disturbed. Tests shall also be taken at any time that communication is suspected or when requested by the Commission.
2. At least 72 hours prior to the commencement of any packer leakage test the operator shall notify the Commission in writing of the exact time the test is to be commenced. Officer operators shall also be so notified.
3. The packer leakage test shall commence when both zones of the dual completion are shut-in for pressure stabilization. Both zones shall remain shut-in until the well-head pressure in each has stabilized, provided however, that they need not remain shut-in more than seven days.
4. For Flow Test No. 1, one zone of the dual completion shall be produced at the normal rate of production while the other zone remains shut-in. Such test shall be continued for seven days in the case of a gas well and for 24 hours in the case of an oil well. Note: If, on an initial packer leakage test, a gas well is being flowed to the atmosphere due to the lack of a pipeline connection the flow period shall be three hours.
5. Following completion of Flow Test No. 1, the well shall again be shut-in, in accordance with Paragraph 3 above.
6. Flow Test No. 2 shall be conducted even though no leak was indicated during Flow Test No. 1. Procedure for Flow Test No. 2 is to be the same as for Flow Test No. 1 except that the previously produced zone shall remain shut-in while the zone which was previously shut-in is produced.

7. Pressures for six zone tests shall be recorded on each zone with a deadweight pressure gauge and at intervals as follows: During tests immediately prior to the beginning of each 15-minute test, at fifteen-minute intervals during the first hour, and at one-hour intervals thereafter. After the first hour, one pressure reading shall be taken at the end of each hour. Pressures shall be recorded at the beginning of each flow period, and at the end of each flow period, and at approximately the midway point and immediately prior to the conclusion of each flow period. Other pressure readings may be taken as desired, and may be requested by the Commission. Pressure readings shall be recorded on test data.

8. 24-hour or zone tests shall be conducted on each zone of the dual completion. The test shall be conducted by shutting in the zone to be tested, and recording the pressure on a deadweight pressure gauge. At the end of the test, the zone shall be opened and the pressure on the deadweight pressure gauge shall be recorded. If a well is a gas-oil or oil-gas dual completion, the recording gauge shall be equipped with a zone valve. The test shall be conducted as required above for each zone of the dual completion.

9. The results of the above-described tests shall be filed in triplicate within 15 days after completion of the tests. The results shall be filed with the Aztec District Office of the Commission. The results shall be filed with the Northwest New Mexico Division of the Commission. The results shall be filed with the deadweight pressures indicated thereon as well as the flowing temperatures (gas zone oil) and gravity (oil zone) of the well. The results shall be filed with the time curve for each zone of each test shall be constructed on the reverse side of the Packer Leakage Test Report. The results shall be filed with the pressure curves indicated thereon. For each zone of the dual completion, the results shall indicate all key pressure changes which may be reflected on the recording gauge charts. These key pressure changes should also be indicated on the front of the Packer Leakage Test Report.

