

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator SOUTHLAND ROYALTY COMPANY Lease Childers Well No. 2
 Location of Well: Unit M Sec. 1 Twp. 31N Rge. 11W County San Juan

| | Name of Reservoir or Pool | Type of Prod. (Oil or Gas) | Method of Prod. (Flow or Art. Lift) | Prod. Medium (Tub. or Cag.) |
|------------------|---------------------------|----------------------------|-------------------------------------|-----------------------------|
| Upper Completion | Undesignated Fruitland | Gas | Flow | Tubing |
| Lower Completion | Blanco Pictured Cliffs | Gas | Flow | Tubing |

PRE-FLOW TEST-IN PRESSURE DATA

| Well | Hour, date | Length of time shut-in | SI press. psig | T. C. | Stabilized? (Yes or No) |
|-------|-----------------|------------------------|----------------|------------------|-------------------------|
| Upper | Shut-in 9-17-83 | 72 Hrs. | | T. 493 C. 493 | |
| Lower | Shut-in 9-17-83 | 72 Hrs. | | T. 521 | |

FLOW TEST NO. 1

Commenced at (hour, date)* 9-20-83 Zone producing (~~Upper~~ Lower): Lower

| Time (hour, date) | Lapsed time since* | Pressure | | Prod. Zone Temp. | Remarks |
|-------------------|--------------------|------------------|--------------|------------------|---------|
| | | Upper Compl. | Lower Compl. | | |
| 9-18-83 | | T. 482 C. 482 | T. 497 | | |
| 9-19-83 | | T. 489 C. 489 | T. 512 | | |
| 9-20-83 | | T. 493 C. 493 | T. 521 | | |
| 9-21-83 | 24 Hrs. | T. 497 C. 497 | T. 454 | | |
| 9-22-83 | 48 Hrs. | T. 501 C. 501 | T. 454 | | |

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

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

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. | | |
| | | | | | |
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| | | | | | |
| | | | | | |

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: _____ 19 _____
 Oil Conservation Division
 By _____
 Title _____
 Date _____

Operator SOUTHLAND ROYALTY COMPANY
 By James W. Smith
 Title District Field Foreman
 Date September 23, 1983



NEW MEXICO OIL CONSERVATION DIVISION PACKER LEAKAGE TEST INSTRUCTIONS

1. Packer leakage tests shall be commenced on each multiply completed well immediately after the completion of the well, and annually thereafter until the well is abandoned. The test shall be conducted on all multiply completions within 30 days of completion and on fractured or fracture treated completions as soon as they are completed. Tests shall also be taken at any time when requested or when requested by the Division.

2. The Division shall be notified in writing of the exact time the test is to be conducted. Test operators shall also be so notified.

3. The test shall commence when both zones of the dual completion are producing and pressure stabilization has been achieved in each zone, provided that the shut-in period for each zone is not more than seven days.

4. The test shall be conducted on the dual completion while the other zone remains shut-in. The test shall be conducted for seven days in the case of a gas well and for three days in the case of an oil well. Note: If, on an initial packer test, gas is observed to be flowing to the atmosphere due to the lack of seal, the test period shall be three hours.

5. If, on a packer test No. 1, the well shall again be shut-in for a period of 30 days.

6. If a leak is indicated even though no leak was indicated on the previous test, the test shall be the same as the previous test. If the previously produced zone shall be shut-in and the other zone shall be produced.

7. Pressures for gas-zone tests must be measured on each zone with a deadweight pressure gauge at time intervals as follows: 3-hour tests: immediately prior to the beginning of each flow-period, at fifteen-minute intervals during the first hour thereof, and at hourly intervals thereafter, including one pressure measurement immediately prior to the conclusion of each flow period. 7-day tests: immediately prior to the beginning of each flow period, at least one time during each flow period (at approximately the midpoint) and immediately prior to the conclusion of each flow period. Other pressures may be taken as desired, or may be requested on wells which have previously shown questionable test data.

24-hour oil zone tests: all pressures, throughout the entire test, shall be continuously measured and recorded with recording pressure gauges, the accuracy of which must be checked at least twice, once at the beginning and once at the end of each test, with a deadweight pressure gauge. If a well is a gas-oil or an oil-gas dual completion, the recording gauge shall be required on the oil zone only, with deadweight pressures required above being taken on the gas zone.

8. The results of the above-described tests shall be filed in triplicate within 15 days after completion of the test. Tests shall be filed with the Aztec District Office of the Oil Conservation Division on Northwest New Mexico Packer Leakage Test Form Revised 10-1-78, with all deadweight pressures indicated thereon as well as the flowing temperatures (gas zones only) and gravity and GOR (oil zones only). A pressure versus time curve for each zone of each test shall be constructed on the reverse side of the Packer Leakage Test Form with all deadweight pressure points taken indicated thereon. For oil zones, the pressure curve should also indicate all key pressure changes which may be reflected by the recording gauge charts. These key pressure changes should also be tabulated on the front of the Packer Leakage Test Form.

