This form is not to be used for reporting packer leakage tests in Southeast New Mexico

# NEW MEXICO OIL CONSERVATION COMMISSION

Revised 11-1-58

## NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator Northwest Pipeline Corporation Lease Rosa Unit Well No. #115

Location of Well: Unit H Sec. 22 Twp. 31N Rge. 6W County Rio Arriba

| | 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 | Gallup | Gas | Flow | Annulus |
| Lower Completion | Dakota | Gas | Flow | Tubing |

### PRE-FLOW SHUT-IN PRESSURE DATA

| | | | | |
|---|---|---|---|---|
| Upper Compl | Hour, date Shut-in July 17, 1985 | Length of time shut-in 7 Days | SI press. psig Csg. 2200 | Stabilized? (Yes or No) Yes |
| Lower Compl | Hour, date Shut-in July 17, 1985 | Length of time shut-in 7 Days | SI press. psig Tbg. 2770 | Stabilized? (Yes or No) No |

### FLOW TEST NO. 1

Commenced at (hour, date)* July 24, 1985 10:15 am | Zone producing (Upper or Lower): Lower

| Time (hour, date) | Lapsed time since* | Pressure Upper Compl. | Pressure Lower Compl. | Prod. Zone Temp. | Remarks |
|---|---|---|---|---|---|
| 07/24/85 10:30 am | 15 Mins. | Csg. 2200 | Tbg. 242 | 66° | Produced light to medium |
| 10:45 am | 30 Mins. | Csg. 2200 | Tbg. 198 | 72° | mist throughout test. |
| 11:00 am | 45 Mins. | Csg. 2200 | Tbg. 179 | 76° | |
| 11:15 am | 1 Hr. | Csg. 2200 | Tbg. 146 | 76° | |
| 12:15 pm | 2 Hrs. | Csg. 2200 | Tbg. 122 | 76° | |
| 1:15 pm | 3 Hrs. | Csg. 2200 | Tbg. 112 | 76° | Q = 1531 MCF/D. |

Production rate during test
Oil: _____ BOPD based on _____ Bbls. in _____ Hrs. _____ Grav. _____ GOR _____
Gas: _____ MCFPD; Tested thru (Orifice or Meter): T.C. .750" Positive Choke

### MID-TEST SHUT-IN PRESSURE DATA

| | | | | |
|---|---|---|---|---|
| Upper Compl | Hour, date Shut-in July 17, 1985 | Length of time shut-in 14 Days | SI press. psig Csg. 2230 | Stabilized? (Yes or No) No |
| Lower Compl | Hour, date Shut-in July 24, 1985 | Length of time shut-in 7 Days | SI press. psig Csg. 2780 | Stabilized? (Yes or No) Yes |

### FLOW TEST NO. 2

Commenced at (hour, date)** July 31, 1985 11:05 am | Zone producing (Upper or Lower): Upper

| Time (hour, date) | Lapsed time since ** | Pressure Upper Compl. | Pressure Lower Compl. | Prod. Zone Temp. | Remarks |
|---|---|---|---|---|---|
| 07/31/85 11:20 am | 15 Mins. | Csg. 686 | Tbg. 2780 | 59° | Gallup zone is produced |
| 11:35 am | 30 Mins. | Csg. 494 | Tbg. 2780 | 60° | annular flow. |
| 11:50 am | 45 Mins. | Csg. 432 | Tbg. 2780 | 62° | Unloaded to medium mist in 10 |
| 12:05 pm | 1 Hr. | Csg. 393 | Tbg. 2780 | 65° | mins. of flow, cleared to light |
| 1:05 pm | 2 Hrs. | Csg. 296 | Tbg. 2780 | 66° | fog remainder of test. |
| 2:05 pm | 3 Hrs. | Csg. 259 | Tbg. 2780 | 68° | Q = 3410 MCF/D. |

Production rate during test
Oil: _____ BOPD based on _____ Bbls. in _____ Hrs. _____ Grav. _____ GOR _____
Gas: _____ MCFPD; Tested thru (Orifice or Meter): T.C. .750" Positive Choke

REMARKS: Dakota zone produced 191 MCF.

Gallup zone produced 426 MCF.

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

Operator Northwest Pipeline Corporation

Approved: AUG 02 1985 19____
New Mexico Oil Conservation Commission

By M.S. Turnbaugh

Title Senior Engineer

By Original Signed by CHARLES GHOLSON

Title DEPUTY OIL & GAS INSPECTOR, DIST. #3

Date August 1st, 1985

skl

RECEIVED
AUG 2 - 1985
OIL CON. DIV.
DIST. 3

## NORTHWEST NEW MEXICO PACKER LEAKAGE TEST INSTRUCTIONS

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 casing 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. Offset 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 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 midway point) 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 as 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 New Mexico Oil Conservation Commission on Northwest New Mexico Packer Leakage Test Form Revised 11-1-58, 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.