## STATE OF NEW MEXICO ENERGY and MINERALS DEPARTMENT

## OIL CONSERVATION DIVISION

Page 1 Revised 10/01/78

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

## NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

| Operator    | SOUTHLAND ROYAL                           | .TY CO. |  |                               |                                       | Lease  | HARE           |              |                 | Weil<br>No.   | 19E          |  |
|-------------|---|---------|--|-------------------------------|---------------------------------------|--|----------------|--------------|-----------------|---------------|--------------|--|
| ocation     |   |         |  |                               |                                       |  |                |              |                 | 0. N. 111.    |              |  |
| f Well:     | Unit C                                    | Sect    | 23   | Twp.                          | 29N                                   | Rge.   | 10W            | County       |                 | SAN JUA       |              |  |
|             | NAME OF RESERVOIR OR POOL                 |         |  |                               |                                       |  | TYPE OF PROD.  |              | METHOD OF PROD. |               | PROD. MEDIUM |  |
|             |   |         |  |                               |                                       | <del>                                     </del> | (Oil or Gas)   | (Flov        | v or Art. Lift) | (Tbg. c       | or Cag.)     |  |
| Upper       |   |         |  |                               |                                       |  |                |              | rı ow           | Ι,            | DC.          |  |
| Completion  | MESAVERDE                                 |         |  |                               |                                       |  | GAS FLOW       |              | FLUW            | W TBG         |              |  |
| Lower       |   |         |  |                               |                                       |  | CAO FLOW       |              | 51 OW           | w TBG         |              |  |
| ompletion   | DAKOTA                                    |         |  |                               |                                       |  | GAS FLOW       |              |                 | 1 100         |              |  |
|             |   |         |  | PRE-F                         | LOW SHUT-                             |  | SSURE DATA     |              |                 |               |              |  |
| Upper       | Hour, date shut-in Length of time shut-in |         |  |                               | SI press. psig Stabilized? (Y         |  |                | s or No)     |                 |               |              |  |
| Completion  | 5-12-95                                   |         | 7 DAYS   |                               |                                       | 225  |                |              |                 |               |              |  |
| Lower       |   |         |  |                               |                                       |  |                |              |                 |               |              |  |
| Completion  | 5-12-95 5 DAYS                            |         |  |                               |                                       |  | 240            | J            |                 |               |              |  |
|             |   |         |  |                               | FLOW TEST                             | NO. 1  | T              |              |                 | LOWED         | _            |  |
| Commenced a | t (hour,date)*                            | 5-17-   | 95   |                               |                                       |  | Zone producing |              | Lower)          | LOWER         | -            |  |
| TIME        | LAPSED TIME                               |         | PRESSURE   |                               | PROD. ZONE                            |  |                |              |                 |               |              |  |
| (hour,date) | SINCE*                                    |         | Upper Co   | Upper Completion Lower Comple |                                       | etion  | TEMP           | <del> </del> | REMAI           | CKS           |              |  |
|             |   |         |  |                               |                                       | _  |                | 1            |                 |               |              |  |
| 15-May      |   |         |  | 218                           | 22                                    | 8  |                | +-           |                 | <del></del> - |              |  |
|             |   |         |  |                               |                                       | _  |                |              |                 |               |              |  |
| 16-May      |   |         |  | 223                           | 23                                    | 9  | <del> </del>   |              |                 |               |              |  |
|             |   |         |  | _                             |                                       | _  |                | 1            |                 |               |              |  |
| 17-May      | ļ   |         |  | 225                           | 24                                    | 0  | <del></del>    |              |                 |               |              |  |
|             |   |         |  |                               |                                       | _  |                | 1            |                 |               |              |  |
| 18-May      |   |         | <u> </u>   | 229                           | 14                                    | ხ  | <del></del>    |              |                 |               |              |  |
|             |   |         | 1  |                               |                                       |  |                |              |                 |               |              |  |
| 19-May      |   |         |  | 239                           | 14                                    | Ь  | <del> </del>   | +            |                 |               |              |  |
|             |   |         |  |                               |                                       |  |                |              |                 |               |              |  |
|             | <u> </u>                                  |         | <u> </u>   |                               | <u> </u>                              |  |                |              |                 |               |              |  |
| Production  | rate during test                          |         |  |                               |                                       |  |                |              |                 |               |              |  |
|             |   |         |  |                               |                                       | ••   |                | C            |                 | GOR           |              |  |
| Oil:        | BOPD be                                   | ased on |  | Bbls.                         | in                                    | Hour   | 8              | _Grav.       |                 | GOR           |              |  |
|             |   |         |  |                               |                                       |  |                |              |                 |               |              |  |
| Gas:        |   |         | _MCFPD;  | Tested th                     | ru (Orifice or                        | Meter):  |                |              |                 |               |              |  |
|             |   |         |  |                               |                                       | . Th. 1 P.P. 1                                   | cooling DAT    |              |                 |               |              |  |
|             | <del></del>                               |         |  |                               |                                       |  | ESSURE DATA    | 1            | Stabilizad? (3  | Zee or No     |              |  |
| Upper       | Hour, date shut-in Length of time shut-in |         |  |                               | SI pres. psig Stabilized? (Yes or No) |  |                |              |                 |               |              |  |
| Completion  | <del></del>                               |         | <del>                                     </del> |                               |                                       |  | 1-             |              | Stabilizad? (   | Ves or No     |              |  |
| Lower       | Hour, date shut-in                        |         | Length of  | time shut-ii                  | 1                                     | SI pro   | ess. psig      |              | Stabilized? ()  | 1 68 OL 140)  |              |  |
| Completion  | 1   |         | l  |                               |                                       |  |                |              |                 |               |              |  |

FLOW TEST NO. 2

| TIME SUNCE** Upper Completion Lower Completion TEMP. REMARKS    Completion   Comple |               | at (hour,date)**         |                                |                       | Zone producing (Upper or Lower): |                        |  |  |
|--|---------------|--------------------------|--------------------------------|-----------------------|----------------------------------|------------------------|--|--|
| Production rate during test  Oil: BOPD based on Bbls. in Hours. 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 Jahrung Reliables 19 Operator Southland Royality Co.  New Mexico Oil Conse varjon Division 1995  By Tanya Atcitty  DEPUTY OIL & GAS INSPECTOR   | TIME          | LAPSED TIME              |                                | ESSURE                |                                  |                        |  |  |
| Production rate during test  Oil: BOPD based on Bbls. in Hours. Grav. GOR  Gast: 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 Jahrny Rollinson 19 Operator Southland Royalty Co.  New Mexico Oil Conse varjen Division 1995  By Tanya Atcitty  By DEPUTY OIL & GAS INSPECTOR   | hour,date)    | SINCE**                  | Upper Completion               | Lower Completion      | TEMP.                            | REMARKS                |  |  |
| BOPD based on Bbls. in Hours. 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 Jahrny Rollinson 19 Operator Southland Royalty Co.  New Mexico Oil Conservation Division 1995  By Tanya Atcitty  DEPUTY OIL & GAS INSPECTOR   |               |                          |                                |                       |                                  |                        |  |  |
| BOPD based on Bbls. in Hours. 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 Jahruf Rollinson 19 Operator Southland Royalty Co.  New Mexico Oil Conservation Division 1995 By Tanya Atcitty  By DEPUTY OIL & GAS INSPECTOR   |               |                          |                                |                       |                                  |                        |  |  |
| BOPD based on Bbls. in Hours. 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 Jahrny Rollinson 19 Operator Southland Royalty Co.  New Mexico Oil Conservation Division 1995  By Tanya Atcitty  DEPUTY OIL & GAS INSPECTOR   |               |                          |                                |                       |                                  |                        |  |  |
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| BOPD based on Bbls. in Hours. 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 Jahrny Rollinson 19 Operator Southland Royalty Co.  New Mexico Oil Conservation Division 1995  By Tanya Atcitty  DEPUTY OIL & GAS INSPECTOR   |               |                          |                                |                       |                                  |                        |  |  |
| BOPD based on Bbls. in Hours. 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 Jahrny Rollinson 19 Operator Southland Royalty Co.  New Mexico Oil Conservation Division 1995  By Tanya Atcitty  DEPUTY OIL & GAS INSPECTOR   |               |                          |                                |                       |                                  |                        |  |  |
| BOPD based on Bbls. in Hours. Grav. GOR  Gas: MCFPD: Tested thru (Oritice or Meter):  Remarks:  I hereby certify that the information herein contained is true and complete to the best of my knowledge.  Approved January Rollinson 19 Operator Southland Royalty Co.  New Mexico Oil Conservation Division 1995  By Tanya Atcitty  DEPUTY OIL & GAS INSPECTOR  |               |                          |                                |                       |                                  |                        |  |  |
| BOPD based on Bbls. in Hours. 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 Jahrny Rollinson 19 Operator Southland Royalty Co.  New Mexico Oil Conservation Division 1995  By Tanya Atcitty  DEPUTY OIL & GAS INSPECTOR   |               |                          |                                |                       |                                  |                        |  |  |
| BOPD based on Bbls. in Hours. 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 Jahrny Rollinson 19 Operator Southland Royalty Co.  New Mexico Oil Conservation Division 1995  By Tanya Atcitty  DEPUTY OIL & GAS INSPECTOR   |               |                          |                                |                       |                                  |                        |  |  |
| MCFPD: Tested thru (Orifice or Meter):   Remarks:  | Production r  | ate during test          |                                |                       |                                  |                        |  |  |
| MCFPD: Tested thru (Orifice or Meter):   Remarks:  |               |                          |                                |                       |                                  |                        |  |  |
| MCFPD: Tested thru (Orifice or Meter):   Remarks:  |               | BOPD bas                 | ed on                          | Bbts. in              | Hours.                           | Grav. GOR              |  |  |
| Thereby certify that the information herein contained is true and complete to the best of my knowledge.  Approved Southland Royalty Co.  New Mexico Oil Conservation Division 19  By Tanya Atcitty  Title Operations Associate   | Gas:          |                          | MCFPD: Tes                     | sted thru (Orifice or |                                  |                        |  |  |
| Approved Southland Royalty Co.  New Mexico Oil Conse variety Division 1995  By Tanya Atcitty  Title Operations Associate   | Remarks:      |                          |                                |                       |                                  |                        |  |  |
| Approved Southland Royalty Co.  New Mexico Oil Conservation Division 1995  By Tanya Atcitty  Title Operations Associate  |               |                          |                                |                       |                                  |                        |  |  |
| Approved Southland Royalty Co.  New Mexico Oil Conservation Division 1995  By Tanya Atcitty  Title Operations Associate  | I hereby cert | tify that the informa    | tion herein contained          | is true and complete  | to the best of my k              | nowledge.              |  |  |
| New Mexico Oil Conse Vation Division 1995  By Tanya Atcitty  Title Operations Associate  |               | with a state of a second | THE PERSON NAMED IN COLUMN TWO |                       | •                                | -                      |  |  |
| New Mexico Oil Conse Vation Division 1995  By Tanya Atcitty  Title Operations Associate  | Approved      | John                     | my Roliensen                   | ~ 19                  | Operator                         | Southland Royalty Co.  |  |  |
| Title Operations Associate  DEPUTY OIL & GAS INSPECTOR   |               |                          |                                | 7                     | - ·                              | Tanana (Kayany Go.     |  |  |
| Title Operations Associate  DEPUTY OIL & GAS INSPECTOR   | New Mexi      | ico Oil Conservation     | UDivision 100                  | 1 1                   | Bv                               | Tanya Atcitty          |  |  |
| DEPUTY OIL & GAS INSPECTOR   |               | 00                       | ) L I J 1995                   |                       | ·                                | , a , worky            |  |  |
| DEPUTY OIL & GAS INSPECTOR   | Ву            |                          |                                | ] [                   | Title                            | Operations Associate   |  |  |
|  |               | DEPUTY (                 | OIL & GAS INSPEC               | TOR                   |                                  | - F 300110 / 100001ate |  |  |
| Date 7/12/95   | Title         | <u> </u>                 |                                |                       | Date                             | 7/12/95                |  |  |

## NORTHWEST NEW MEXICO PACKER LEAKAGE TEST INSTRUCTIONS

A packer teakage 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 connected 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 Division.

- 2. At least 72 hours prior to the commencement of any packer leakage test, the operator small notify the Division in writing of the exact time the test is to be commenced. Offset operators small 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 satisfized, provided however, that they need not remain shut-in more than seven days.
- 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 shat-in. Such test shall be continued for seven days if 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 nours.
- Following completion of flow Test No. 1, the well shall again be shul-in, in accordance with Paragrapn 3 above.
- 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 snall 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 hours 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 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 strall be required on the oil zone only, with deadweight pressures as required above being taken on the gaz zone.
- 3. 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 Division of Northwest New Mexico Packer Leakage Test form Revised 10/01/78 with all deadweight pressures indicated thereon as well as the flowing temperatures (gas zones only) and gravity and GOR (oil zones only).