

SOUTHEAST NEW MEXICO PACKER LEAKAGE TEST

|                                                   |                  |                  |                              |                                  |                              |                      |  |
|---------------------------------------------------|------------------|------------------|------------------------------|----------------------------------|------------------------------|----------------------|--|
| Operator<br><b>Socony Mobil Oil Company, Inc.</b> |                  |                  | Lease<br><b>C. Hardy</b>     |                                  |                              | Well<br>No. <b>3</b> |  |
| Location<br>of Well                               | Unit<br><b>C</b> | Sec<br><b>29</b> | Twp<br><b>21</b>             | Rge<br><b>37</b>                 | County<br><b>Lea</b>         |                      |  |
| Name of Reservoir or Pool                         |                  |                  | Type of Prod<br>(Oil or Gas) | Method of Prod<br>Flow, Art Lift | Prod. Medium<br>(Tbg or Csg) | Choke Size           |  |
| Upper<br>Compl                                    | <b>Blinberry</b> |                  | <b>Oil</b>                   | <b>Flow</b>                      | <b>Casing</b>                | <b>15/64</b>         |  |
| Lower<br>Compl                                    | <b>Tubb</b>      |                  | <b>Oil</b>                   | <b>Flow</b>                      | <b>Tubing</b>                | <b>24/64</b>         |  |

FLOW TEST NO. 1

Both zones shut-in at (hour, date): 10:30 AM 3/20/61

|                                                          | Upper<br>Completion                       | Lower<br>Completion  |
|----------------------------------------------------------|-------------------------------------------|----------------------|
| Well opened at (hour, date): <u>10:30 AM 3/21/61</u>     |                                           |                      |
| Indicate by ( X ) the zone producing.....                | <b>X</b>                                  |                      |
| Pressure at beginning of test.....                       | <u>1062</u>                               | <u>1035</u>          |
| Stabilized? (Yes or No).....                             | <u>Yes</u>                                | <u>Yes</u>           |
| Maximum pressure during test.....                        | <u>1490</u>                               | <u>1103</u>          |
| Minimum pressure during test.....                        | <u>600</u>                                | <u>1035</u>          |
| Pressure at conclusion of test.....                      | <u>1490</u>                               | <u>1103</u>          |
| Pressure change during test (Maximum minus Minimum)..... | <u>890</u>                                | <u>68</u>            |
| Was pressure change an increase or a decrease?.....      | <u>Decrease</u>                           | <u>Increase</u>      |
| Well closed at (hour, date): <u>10:30 AM 3/27/61</u>     | Total Time On<br>Production <u>24 Hrs</u> |                      |
| Oil Production                                           | Gas Production                            |                      |
| During Test: <u>143</u> bbls; Grav. <u>49.8</u> ;        | During Test <u>1170</u>                   | MCF; GOR <u>8182</u> |
| Remarks <u>Prod. 3 HW</u>                                |                                           |                      |

FLOW TEST NO. 2

|                                                          | Upper<br>Completion                   | Lower<br>Completion   |
|----------------------------------------------------------|---------------------------------------|-----------------------|
| Well opened at (hour, date): <u>10:30 AM 3/23/61</u>     |                                       |                       |
| Indicate by ( X ) the zone producing.....                |                                       | <b>X</b>              |
| Pressure at beginning of test.....                       | <u>1637</u>                           | <u>1141</u>           |
| Stabilized? (Yes or No).....                             | <u>Yes</u>                            | <u>Yes</u>            |
| Maximum pressure during test.....                        | <u>1638</u>                           | <u>490</u>            |
| Minimum pressure during test.....                        | <u>1637</u>                           | <u>50</u>             |
| Pressure at conclusion of test.....                      | <u>1638</u>                           | <u>420</u>            |
| Pressure change during test (Maximum minus Minimum)..... | <u>1</u>                              | <u>440</u>            |
| Was pressure change an increase or a decrease?.....      | <u>Increase</u>                       | <u>Decrease</u>       |
| Well closed at (hour, date): <u>10:30 AM 3/24/61</u>     | Total time on<br>Production <u>24</u> |                       |
| Oil Production                                           | Gas Production                        |                       |
| During Test: <u>5</u> bbls; Grav. <u>40.4</u> ;          | During Test <u>118</u>                | MCF; GOR <u>23600</u> |
| Remarks <u>Prod. 2 HW</u>                                |                                       |                       |

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

Approved \_\_\_\_\_ 19  
New Mexico Oil Conservation Commission

Operator **Socony Mobil Oil Company, Inc.**

By John M. Pierce

By [Signature]  
Title \_\_\_\_\_

Title **Production Assistant**

Date **April 6, 1961**

# PACKER LEAKAGE TEST INSTRUCTIONS

1. Packer leakage test shall be commenced on each multiple completion well within 30 days after actual completion of the well and annually thereafter as required by the order authorizing the multiple completion. The test shall be commenced on all multiple completions within 30 days after completion and/or chemical or fracture treatment, and shall be repeated if it has been done on a well during which the packer or the wellbore has been damaged. Tests shall also be taken at any time when the operator is requested to do so by the Commission.

2. Tests shall be made 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 made. Office operators shall also be so notified.

3. The packer leakage test shall commence when both zones of the dual completion are at the pressure stabilization. Both zones shall be shut-in and the pressure in each has stabilized and for a minimum of two hours thereafter, provided however, that they need not remain shut-in for more than 24 hours.

4. For Flow Test No. 1, the zone of the dual completion shall be produced at the normal rate of production while the other zone remains shut-in. The test shall be continued for a minimum of two hours thereafter, provided however, that it need not continue for more than 24 hours.

5. Following completion of Flow Test No. 1, the well shall again be shut-in and the test shall be continued with Paragraph 3 above.

6. Flow Test No. 2 shall be conducted even though no leak was indicated during Flow Test No. 1. The 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 previously shut-in zone is produced.

7. Pressures throughout the entire test shall be continuously measured and recorded with recording pressure gauges, the accuracy of which shall be at least 1% leakage psi (tested at least twice once at the beginning and once at the end, of each flow test).

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 appropriate District Office of the New Mexico Oil Conservation Commission and the New Mexico Packer Leakage Test Form Revised 11-1-58, together with the pressure recording gauge charts with all the readings of pressures that were taken indicated thereon. In lieu of filing the pressure charts, the operator may construct a pressure versus time graph for each zone of the well, indicating thereon all pressure readings that were taken on the gauge charts as well as all dead-weight pressure readings which were taken. If the pressure curve is submitted, the original charts must be permanently filed in the operator's records. The operator shall also accompany the Packer Leakage Test Form when the test period coincides with a gas-oil ratio test period.

