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

## Oil Conservation Division

## Northwest New Mexico Packer-Leakage Test

Page 1 Revised June 10, 2003

| Operator COP          |                                  |                       | Lease                     | e Name SAN                             | IT             | Well No. 47A                                 |                            |  |
|-----------------------|----------------------------------|-----------------------|---------------------------|--|----------------|--|----------------------------|--|
| Location of W         | ell: Unit L                      | etter C S             | Sec 04                    | Twp 029N                               | Rge            | 005W API                                     | # 30-039-22726             |  |
|                       | Name of Reservoir or Pool        |                       | ol                        | Type<br>of Prod                        |                | Method<br>of Prod                            | Prod<br>Medium             |  |
| Upper<br>Completion   | PC                               |                       | Gas                       | Gas                                    |                |  | Tubing                     |  |
| Lower<br>Completion   | MV                               |                       | Gas                       | Gas                                    |                |  | Tubing                     |  |
|                       |                                  |                       | Pre-Flow S                | Shut-In Pressu                         | ure Data       |  |                            |  |
| Upper<br>Completion   | Hour, Date, Shut-In<br>7/31/2015 |                       |                           | Length of Time Shut-In 240 hours       |                | ss. PSIG<br>308                              | Stabilized?(Yes or No) Yes |  |
| Lower<br>Completion   | Hour, Date, Shut-In<br>7/31/2015 |                       |                           | Length of Time Shut-In 299 hours       |                | s. PSIG<br>155                               | Stabilized?(Yes or No) Yes |  |
|                       |                                  |                       | Flo                       | w Test No. 1                           |                | The edge                                     |                            |  |
| Commenced             | at:                              | 8/10/2015             |                           | Zone Pro                               | oducing (Upper | or Lower): UF                                | PPER                       |  |
| Time<br>(date/time)   |                                  | Lapsed Time<br>Since* | PRES<br>Upper zone        | PRESSURE Pro Upper zone Lower zone Ten |                | Remarks                                      |                            |  |
| 8/10/2015 11:30:04 AM |                                  | 11                    | 308                       | 155                                    |                | Started test, turned on PC to production     |                            |  |
| 8/11/2015 11:37:26 AM |                                  | 35                    | 118                       | 154                                    |                | 24 hr psi's from flowing PC formation (upper |                            |  |
| 8/12/2015 11:37:14 AM |                                  | 59                    | 117                       | 155                                    |                | 48 hr psi's                                  | 8 hr psi's                 |  |
| Production rat        | e durina te                      | est                   |                           |  |                |  |                            |  |
| Dil: BPOD Based on:   |                                  | Bbls. In              | Bbls. In Hrs.             |  | Grav.          | GOR  |                            |  |
| Gas                   |                                  | MCFPD; Test th        | nru (Orifice or M         | leter)                                 |                |  |                            |  |
|                       |                                  |                       | Mid-Test 9                | hut-In Pressu                          | ire Data       |  |                            |  |
| Upper<br>Completion   | Hour, Date, Shut-In              |                       | All III and the second of | Length of Time Shut-In                 |                | s. PSIG                                      | Stabilized?(Yes or No)     |  |
| Lower<br>Completion   | Hour, Date, Shut-In              |                       | Length                    | Length of Time Shut-In                 |                | s. PSIG                                      | Stabilized?(Yes or No)     |  |

(Continue on reverse side)

OIL CONS. DIV DIST. 3 AUG 18 2015

## Flow Test No. 2

| Time<br>(date/time)               | Lapsed Time            | PRES              | CLIDE          | D 17                          |   |  |  |
|-----------------------------------|------------------------|-------------------|----------------|-------------------------------|---|--|--|
| (date/time)                       |                        | AL INCOME SALE    | CHARLES AND    | Prod Zone                     |   |  |  |
|                                   | Since*                 | Upper zone        | Lower zone     | Temperature                   | Remarks                                 |  |  |
|                                   |                        |                   |                |                               |   |  |  |
|                                   |                        |                   |                |                               |   |  |  |
|                                   |                        |                   |                |                               |   |  |  |
|                                   |                        |                   |                |                               | 1 |  |  |
|                                   |                        |                   |                |                               |   |  |  |
|                                   |                        |                   |                |                               |   |  |  |
|                                   |                        |                   |                |                               |   |  |  |
|                                   |                        |                   | 1111           |                               |   |  |  |
|                                   |                        |                   | N THE STATE OF |                               |   |  |  |
|                                   |                        |                   |                |                               |   |  |  |
| Dil: BPOI                         | D Based on:            | Bbls. In          | Hrs.           | -                             | Grav. GOR                               |  |  |
| Gas                               | MCFPD; Test t          | nru (Orifice or M | leter)         |                               |   |  |  |
| Remarks:                          |                        |                   |                |                               |   |  |  |
| Remarks.<br>No witness ok'd by Mo | onica Keuring Produc   | ed upper zone/    | PC) took nei's | at 24 hrs and                 | at 48 hrs                               |  |  |
| 40 WIGIESS ORG DY WIG             | onioa reaning, i roduc | ca apper zone(    | i oj took para | at 27 mo and t                | at 40 mo.                               |  |  |
|                                   |                        |                   |                |                               |   |  |  |
| hereby certify that the           | e information herein   | contained is true | and complete   | to the hest of                | my knowledge                            |  |  |
| nereby certify triat the          | e information herein t |                   | and complete   | to the best of                | Thy knowledge.                          |  |  |
| Approved:                         | 17-NOV                 | 20 15             | Opera          | tor: COP                      |   |  |  |
| New Mexico Oil Co                 | onservation Division   |                   | Ву:            | By: Danny Wells               |   |  |  |
|                                   |                        |                   |                | Title: Multi-Skilled Operator |   |  |  |
|                                   | Durfam                 |                   | Title:         | Multi-Skilled                 | Operator                                |  |  |

## NORTHWEST NEWMEXICO 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 tubing have been disturbed. Tests shall also be taken at any time that communication is suspected or when requested by the Division.
- At least 72 hours prior to the commencement of any packer leakage test, the operator shall notify the Division in writing of the exact time the test is to be commenced. Offset operators shall also be so notified
- 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.
- 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 lack of a pipeline connection the flow period shall be three hours.
- 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 Division on 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)

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

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.

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.

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