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30-045-30013

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

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NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

| Cognition SURLINGTON RESOURCES OIL & GAS CO. Lease SUNRAY E SUNRAY | | | | | | |
|--|--|--|--|--|--|--|
| Name | | | | | | |
| Upper Completion MESAVERDE Gas Flow Tubing Lower Completion DAKOTA PRE-FLOW SHUT-IN PRESSURE DATA Upper Completion Hour, date shut-in 08/31/2001 Length of time shut-in SI press, psig 165 Stabilized? (Yes or No) Completion 08/31/2001 120 Hours 165 165 Lower Completion 08/31/2001 72 Hours 438 438 FLOW TEST NO. 1 Commenced at (hour,date)* 09/03/2001 Zone producing (Upper or Lower) LOWER TIME LAPSED TIME PRESSURE PROD. ZONE | | | | | | |
| PRE-FLOW SHUT-IN PRESSURE DATA | | | | | | |
| Upper Hour, date shut-in Completion Length of time shut-in SI press, psig Stabilized? (Yes or No) Completion 08/31/2001 120 Hours 165 Lower Completion 08/31/2001 72 Hours 438 FLOW TEST NO. 1 Commenced at (hour,date)* 09/03/2001 Zone producing (Upper or Lower) LOWER TIME LAPSED TIME PRESSURE PROD, ZONE | | | | | | |
| Completion 08/31/2001 120 Hours 165 Lower 165 165 Completion 08/31/2001 72 Hours 438 FLOW TEST NO. 1 Commenced at (hour.date)* 09/03/2001 Zone producing (Upper or Lower) LOWER TIME LAPSED TIME PRESSURE PROD. ZONE | | | | | | |
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| FLOW TEST NO. 1 Commenced at (hour.date)* 09/03/2001 Zone producing (Upper or Lower) LOWER TIME LAPSED TIME PRESSURE PROD. ZONE | | | | | | |
| Commenced at (hour.date)* 09/03/2001 Zone producing (Upper or Lower) LOWER FIME LAPSED TIME PRESSURE PROD. ZONE | | | | | | |
| TIME LAPSED TIME PRESSURE PROD. ZONE | | | | | | |
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| And the completion for the completion of the com | | | | | | |
| 0000000 | | | | | | |
| 09/04/2001 96 Hours 171 107 Lower zone flow. | | | | | | |
| 09/05/2001 120 Hours 175 111 " | | | | | | |
| 27.10.10 | | | | | | |
| 12/2 1/2 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 | | | | | | |
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| SEP 2001 RECE OD CO DIST. | | | | | | |
| To a control of the c | | | | | | |
| DISTLA | | | | | | |
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| Production rate during test | | | | | | |
| Oil BOFD based on Bbls. in Hours. Grav. GOR | | | | | | |
| The state of the s | | | | | | |
| Gas: MCFPD: Tested thru (Orifice or Meter): | | | | | | |
| | | | | | | |
| MID-TEST SHUT-IN PRESSURE DATA | | | | | | |
| Upper Hour, date shut-in Length of time shut-in SI press, psig Stabilized® (Yes or No) Completion | | | | | | |
| Lower Hour, date shut-in Length of time shut-in SI press, psig Stabilized® (Yes or No) Completion | | | | | | |

(Continue on reverse side)

FLOW TEST NO. 2

| Commenced at (hour, date)** | | | | Zone producing (Upper or Lower): | | |
|--|-------------------------|--|--------------------|------------------------------------|--------------|--|
| TIME (hour, date) | LAPSED TIME SINCE ** | PRESSURE | | PROD. ZONE | REMARKS | |
| | | Upper Completion | Lower Completion | TEMP. | REMARKS | |
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| Dun kanai an ana da | | | | | | |
| Production rate du | ring test | | | | | |
| Oil: | BC | PD based on | Bbls. in | Hours | Grav GOR | |
| Gas: | | МСҒРІ | D: Tested thru (Or | ifice or Meter): | | |
| Remarks: | | | | | | |
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| Thereby certify the | at the information her | ein contained is true | and complete to t | he best of my knowledge | <u> </u> | |
| Thereby certify the | SEP 1 8 20 | | and complete to t | ne best of my knowledge | | |
| Approved | 02/ 1020 | <u>וטע</u> 19 | 9 | Operator Burlingto | on Resources | |
| New Mexico O | il Conservation Divis | sion | | ΩI | Q_{\cdot} | |
| | a company | | | By AMOUNT | NOW? | |
| By | | | | Title Operations Associate | | |
| | | | ·. | Operations As | SOULIALE | |
| Title FRETY OIL & GAS INSPECTOR, BIST, CO. | | | | Date Wednesday, September 12, 2001 | | |

NORTHWEST NEWMEXICO PACKER LEAKAGE TEST INSTRUCTIONS

- 1. 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.
- 2 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.
- 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 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 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 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 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).