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

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Well No.

Lease Name NORDHAUS Operator BR API# 30-045-30193 Location of Well: Unit Letter M Sec 13 Twp 031N Rge 009W Prod Name of Reservoir or Pool Type Method of Prod of Prod Medium Upper Artificial Lift Completion MV Gas Casing Lower Gas Artificial Lift Tubing Completion DK **Pre-Flow Shut-In Pressure Data** SI Press. PSIG Stabilized?(Yes or No) Hour, Date, Shut-In Length of Time Shut-In Upper Completion 70 Yes 7/13/2015 48 hours Length of Time Shut-In SI Press. PSIG Stabilized?(Yes or No) Hour, Date, Shut-In Lower Completion 0 7/13/2015 97 hours Yes Flow Test No. 1 Commenced at: 7/15/2015 Zone Producing (Upper or Lower): UPPER Prod Zone **PRESSURE** Time Lapsed Time Remarks (date/time) Since* Temperature Upper zone Lower zone 70 0 7/15/2015 1:34:59 PM 13 7/16/2015 5:06:48 PM 41 70 0 68 0 7/17/2015 1:44:03 AM 49 Production rate during test BPOD Based on: Bbls. In Hrs. Grav. GOR Oil: MCFPD; Test thru (Orifice or Meter) Gas Mid-Test Shut-In Pressure Data Stabilized?(Yes or No) Length of Time Shut-In SI Press. PSIG Upper Hour, Date, Shut-In Completion Stabilized?(Yes or No) SI Press. PSIG Lower Hour, Date, Shut-In Length of Time Shut-In Completion

(Continue on reverse side)

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Northwest New Mexico Packer-Leakage Test

Flow Test No. 2

mpr.	Laura d Time	Zone Producing (Upper or Lower) me PRESSURE Prod Zone				
Time (date/time)	Lapsed Time Since*	Upper zone	Lower zone	Temperature		Remarks
(dato/tillio)		Opper zone	LOWEI ZOIIC			
				Page 1		
	g test D Based on:	Bbls. In	Hrs.		Grav.	GOR
il: BPC	D Based on:	Bbls. In			Grav.	GOR
il: BPC	D Based on:				Grav.	GOR
il: BPC as emarks:	D Based on: MCFPD; Test t	hru (Orifice or M	leter)			
il: BPC as emarks:	D Based on:	hru (Orifice or M	leter)			
emarks:	D Based on: MCFPD; Test t	hru (Orifice or M	leter)			
emarks: roduced the lower (MCFPD; Test t	hru (Orifice or M	leter) ur. SI before p	roducing uppe	er zone to sale	es
emarks: roduced the lower (MCFPD; Test to mon producing) compleme information herein	hru (Orifice or Metion for one hor	leter) ur. SI before pose	roducing uppe	er zone to sale	es
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emarks: roduced the lower (hereby certify that the	MCFPD; Test to mon producing) compleme information herein	hru (Orifice or Metion for one hor	leter) ur. SI before pose	roducing uppe	er zone to sale	es
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- A packer leakage test shall be commenced on each multiply completed well within seven days after actual A packet leading the standard of the standard 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.

- 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.
- 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.

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).

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