

**NEW MEXICO OIL CONSERVATION DIVISION**  
**NORTHWEST NEW MEXICO PACKER LEAKAGE TEST**

Operator **PATINA SAN JUAN, INC.** Lease Name **BIG JAKE FEDERAL 26** Well No. **#05**

Location Of Well: Unit Letter **E** Sec **26** Twp **31N** Rge **13W** API # **30-045-33337**

	Name of Reservoir or Pool	Type of Prod. (Oil or Gas)	Method of Prod. (Flow or Art. Lift)	Prod. Medium (Tbg. Or Csg.)
Upper Completion	<b>Basin Fruitland Coal</b>	<i>Gas</i>	<i>Art.Lift</i>	<i>Csg.</i>
Lower Completion	<b>Basin Dakota</b>	<i>Gas</i>	<i>Flow</i>	<i>Tbg.</i>

**Pre-Flow Shut-In Pressure Data**

Upper Completion	Hour, Date, Shut-In <i>4-1-2007</i>	Length of Time Shut-In <i>16 days</i>	SI Press. Psig <i>530 psi</i>	Stabilized? (Yes or No) <i>Yes</i>
Lower Completion	Hour, Date, Shut-In <i>4-1-2007</i>	Length of Time Shut-In <i>16 days</i>	SI Press. Psig <i>1,410 psi</i>	Stabilized? (Yes or No) <i>Yes</i>

**Flow Test No. 1**

Commenced at (hour, date)* 1400Hrs 4-17-2007				Zone producing (Upper or Lower): Lower zone.	
Time (Hour, Date)	Lapsed Time Since*	Pressure Upper Compl. Lower Compl.		Prod. Zone Temp.	Remarks
					<b>RCVD MAY 3 '07 OIL CONS. DIV. DIST. 3</b>
1400Hrs 4-18-2007	24Hrs	530 psi	1,150 psi	N/A	
1400Hrs 4-19-2007	24Hrs	530 psi	1,000 psi	N/A	
1400Hrs 4-20-2007	24Hrs	540 psi	1,000 psi	N/A	
1400Hrs 4-21-2007	24Hrs	540 psi	900 psi	N/A	
1400Hrs 4-22-2007	24Hrs	540 psi	625 psi	N/A	
1400Hrs 4-23-2007	24Hrs	540 psi	800 psi	N/A	<i>W.F.S. Kutz &amp; Thompson unit down causing high line pressure. Continue to test packer.</i>
1400Hrs 4-24-2007	24Hrs	540 psi	980 psi	N/A	<i>W.F.S. high line pressure.</i>
1400Hrs 4-25-2007	24Hrs	540 psi	980 psi	N/A	<i>W.F.S. high line pressure.</i>
1400Hrs 4-26-2007	24Hrs	540 psi	1,050 psi	N/A	<i>W.F.S. high line pressure</i>
1400Hrs 4-27-2007	24Hrs	540 psi	920 psi	N/A	<i>W.F.S. line pressure coming down.</i>
1400Hrs 4-28-2007	24Hrs	550 psi	1,060 psi	N/A	<i>Seperator controller malfunction. Reset controller.</i>
1400Hrs 4-29-2007	24Hrs	550 psi	880 psi	N/A	<i>Continue to flow higher pressure zone.</i>
1400Hrs 4-30-2007	24Hrs	550 psi	265 psi	N/A	<i>DK zone pressure crossed over FC zone pressure ( Packer held O.K.)</i>
1400Hrs 5-1-2007	24Hrs	550 psi	125 psi	N/A	<i>Continue to flow DK Zone. First deliver FC zone 5-2-2007</i>

## Flow Test No. 2

Commenced at (hour, date)**				Zone producing (Upper or Lower):	
Time (Hour, Date)	Lapsed Time Since**	Pressure		Prod. Zone Temp.	Remarks
		Upper Compl.	Lower Compl.		

Production rate during test

Oil: \_\_\_\_\_ BOPD based on \_\_\_\_\_ Bbls. In \_\_\_\_\_ Hrs. \_\_\_\_\_ Grav. \_\_\_\_\_ GOR \_\_\_\_\_

Gas: \_\_\_\_\_ MCFPD; Test thru (Orifice or Meter): \_\_\_\_\_

Remarks: \_\_\_\_\_

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

Approved H. Villanueva 5/04 2007  
New Mexico Oil Conservation DivisionOperator PATINA SAN JUAN, INC.

By \_\_\_\_\_

Title PRODUCTION FOREMANBy \_\_\_\_\_  
**DEPUTY OIL & GAS INSPECTOR, DIST. #3**

Title \_\_\_\_\_

E-mail Address dwright@nobleenergyinc.com

Date

5-3-07

## Northwest New Mexico 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 case of a gas well and 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 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 hour 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 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 11-16-98, with all deadweight pressures indicated thereon as well as the flowing temperatures (gas zones only) and gravity and GOR (oil zones only).