

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

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator Northwest Pipeline Corporation Lease Rosa Unit Well No. #103
Location of Well: Unit G Sec. 10 Twp. 31N Rgc. 4W County Rio Arriba

	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	Gallup	Gas	Flow	Annulus
Lower Completion	Dakota	Gas	Flow	Tubing

PRE-FLOW SHUT-IN PRESSURE DATA

Upper Completion	Hour, date shut-in Sept. 22, 1986	Length of time shut-in 7 Days	SI press. psig Csg. 1116	Stabilized? (Yes or No) Yes
Lower Completion	Hour, date shut-in Sept. 22, 1986	Length of time shut-in 7 Days	SI press. psig Tbg. 2672	Stabilized? (Yes or No) Yes

FLOW TEST NO. 1

Commenced at (hour, date)* <u>September 29, 1986 9:50 A.M.</u>				Zone producing (Upper or Lower): <u>Lower</u>	
TIME (hour, date)	LAPSED TIME SINCE*	PRESSURE		PROD. ZONE TEMP.	REMARKS
		Upper Completion	Lower Completion		
09/29/86 10:05 am	15 Mins.	Csg. 2672	Tbg. 17	68 ⁰	Well blew dead in 20 minutes.
10:20 am	30 Mins.	Csg. 2672	Tbg. 0	68 ⁰	well is incapable of production.
10:35 am	45 Mins.	Csg. 2672	Tbg. 0	68 ⁰	Well unloaded heavy stream
10:50 am	1 Hr.	Csg. 2672	Tbg. 0	68 ⁰	of water then logged off.
11:50 am	2 Hrs.	Csg. 2672	Tbg. 0	68 ⁰	
12:50 pm	3 Hrs.	Csg. 2672	Tbg. 0	68 ⁰	Q = 0 MCF/D.

Production rate during test

Oil: _____ BOPD based on _____ Bbls. in _____ Hours. _____ Grav. _____ GOR _____

Gas: _____ MCFPD; Tested thru (Orifice or Meter): T.C. 750" Positive Choke

MID-TEST SHUT-IN PRESSURE DATA

Upper Completion	Hour, date shut-in Sept. 22, 1986	Length of time shut-in 14 Days	SI press. psig Csg. 2818	Stabilized? (Yes or No) No
Lower Completion	Hour, date shut-in Sept. 29, 1986	Length of time shut-in 7 Days	SI press. psig Tbg. 1000	Stabilized? (Yes or No) No

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OIL CON. DIV.
DIST. 3

(Continue on reverse side)

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

FLOW TEST NO. 2

Commenced at (hour, date) **		October 6, 1986 10:35 A.M.		Zone producing (Upper or Lower):		Upper	
TIME (hour, date)	LAPSED TIME SINCE **	PRESSURE		PROD. ZONE	TEMP.	REMARKS	
		Upper Completion	Lower Completion				
10/06/86 10:50 am	15 Mins.	Csg. 151	Tbg. 1066	50°		Upper zone is produced	
11:05 am	30 Mins.	Csg. 116	Tbg. 1065	52°		annular flow. Well started	
11:20 am	45 Mins.	Csg. 111	Tbg. 1063	53°		unloading heavy fog after	
11:35 am	1 Hr.	Csg. 111	Tbg. 1060	54°		45 minutes and continued	
12:35 pm	2 Hrs.	Csg. 86	Tbg. 1060	55°		throughout test.	
1:35 pm	3 Hrs.	Csg. 73	Tbg. 1060	56°		Q = 1066 MCF/D.	

Production rate during test

Oil: _____ BOPD based on _____ Bbls. in _____ Hours. _____ Gray. _____ GOR

Gas: _____ MCFPD: Tested thru (Orifice or Meter): _____ T.C. .750" Positive Choke

Remarks: _____ Dakota zone vented 0 MCF.

_____ Gallup zone vented 133 MCF.

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

Approved _____
New Mexico Oil Conservation Division
Original Signed by CHARLES GHOLSON
By _____
Title _____
DEPUTY OIL & GAS INSPECTOR, DIST. #3

Operator _____
Northwest Pipeline Corporation
By _____
M. J. Turmbaugh
Senior Engineer
Title _____
Date _____
October 10th, 1986

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 frac. cure 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. Operator operations 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 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

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).