

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator Northwest Pipeline Corporation Lease Rosa Unit Well No. #109
Location of Well: Unit M Sec. 9 Twp. 32N 31W Rge. 5W County Rio Arriba
Name of Reservoir or Pool (Oil or Gas) Type of Prod. Method of Prod. Prod. Medium
(Flow or Art. Lift) (Tbg. or Csg.)

Upper Completion	Gallup	Gas	Flow	Annulus
Lower Completion	Dakota	Gas	Flow	Tubing

PRE-FLOW SHUT-IN PRESSURE DATA

Upper Compl	Hour, date	Length of time shut-in	SI press. Csg. 2435 psig Tbg.	Stabilized? (Yes or No) No
Lower Compl	Hour, date	Length of time shut-in	SI press. Csg. 2435 psig Tbg. 1843	Stabilized? (Yes or No) Yes

FLOW TEST NO. 1

Commenced at (hour, date)*		9:45 a.m. July 9, 1985		Zone producing (Upper or Lower): Upper	
Time (hour, date)	Lapsed time since*	Pressure		Prod. Zone Temp.	Remarks
July 9, 1985 10:00 am	15 Mins.	Upper Compl.	Lower Compl.	59°	Upper zone is annular flow.
		Csg. 495 Tbg. 1843	Tbg. 1843		
10:15 am	30 Mins.	Csg. 339 Tbg. 1843	Tbg. 1843	63°	Produced heavy mist through-
		Csg. 309 Tbg. 1843	Tbg. 1843		
10:30 am	45 Mins.	Csg. 280 Tbg. 1843	Tbg. 1843	64°	out flow.
		Csg. 210 Tbg. 1843	Tbg. 1843		
10:45 am	1 Hr.	Csg. 177 Tbg. 1843	Tbg. 1843	66°	Q = 2367 MCF/D.
		Csg. 177 Tbg. 1843	Tbg. 1843		
11:45 am	2 Hrs.	Csg. 177 Tbg. 1843	Tbg. 1843	66°	Q = 2367 MCF/D.
		Csg. 177 Tbg. 1843	Tbg. 1843		
12:45 am	3 Hrs.	Csg. 177 Tbg. 1843	Tbg. 1843	66°	Q = 2367 MCF/D.
		Csg. 177 Tbg. 1843	Tbg. 1843		

Production rate during test
Oil: _____ BOPD based on _____ Bbls. in _____ Hrs. _____ Grav. _____ GOR _____
Gas: _____ MCFPD; Tested thru (Orifice or Meter): T.C. 750" Positive Choke

MID-TEST SHUT-IN PRESSURE DATA

Upper Compl	Hour, date	Length of time shut-in	SI press. Csg. 2352 psig Tbg.	Stabilized? (Yes or No) No
Lower Compl	Hour, date	Length of time shut-in	SI press. Csg. 2352 psig Tbg. 1850	Stabilized? (Yes or No) No

FLOW TEST NO. 2

Commenced at (hour, date)*		8:25 a.m. July 16, 1985		Zone producing (Upper or Lower): Lower	
Time (hour, date)	Lapsed time since **	Pressure		Prod. Zone Temp.	Remarks
July 16, 1985 8:40 am	15 Mins.	Upper Compl.	Lower Compl.	96°	Well logged in 5 mins.
		Csg. 2352 Tbg. 454	Tbg. 454		
8:55 am	30 Mins.	Csg. 2355 Tbg. 338	Tbg. 338	100°	unloaded water to heavy mist
		Csg. 2345 Tbg. 262	Tbg. 262		
9:10 am	45 Mins.	Csg. 2345 Tbg. 232	Tbg. 232	97°	throughout flow.
		Csg. 2355 Tbg. 179	Tbg. 179		
9:25 am	1 Hr.	Csg. 2355 Tbg. 152	Tbg. 152	92°	Q = 2000 MCF/D.
		Csg. 2355 Tbg. 152	Tbg. 152		
10:25 am	2 Hrs.	Csg. 2355 Tbg. 152	Tbg. 152	92°	Q = 2000 MCF/D.
		Csg. 2355 Tbg. 152	Tbg. 152		
11:25 am	3 Hrs.	Csg. 2355 Tbg. 152	Tbg. 152	92°	Q = 2000 MCF/D.
		Csg. 2355 Tbg. 152	Tbg. 152		

Production rate during test
Oil: _____ BOPD based on _____ Bbls. in _____ Hrs. _____ Grav. _____ GOR _____
Gas: _____ MCFPD; Tested thru (Orifice or Meter): T.C. 750" Positive Choke

REMARKS: Upper Zone produced 296 MCF.
Lower Zone produced 250 MCF.

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

Approved: JUL 23 1935 19
New Mexico Oil Conservation Commission
Original Signed by CHARLES GHOLSON
By _____
Title DEPUTY OIL & GAS INSPECTOR, DIST. #3

Operator Northwest Pipeline Corporation
By M. J. Turnbaugh
Title Senior Engineer
Date July 22nd, 1985

skl

JUL 23 1985
OIL CON. DIV. 1
DIST. 3

NORTHWEST NEW MEXICO PACKER LEAKAGE TEST INSTRUCTIONS

2. A packer leakage test shall be commenced on each multiple 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 Commission.
3. At least 72 hours prior to the commencement of any packer leakage test the operator shall notify the Commission in writing of the exact time the test is to be commenced. Offset operators shall also be so notified.
4. 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.
5. 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.
6. Following completion of Flow Test No. 1, the well shall again be shut-in, in accordance with Paragraph 3 above.
7. 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.

A full-page view of a blank sheet of graph paper. The page is covered by a uniform grid of small squares, typical of standard graph paper used for mathematics or engineering. There are no margins, text, or other markings on the page.