

RECEIVED
OCT 31 1994

This form is not to be used for reporting packer leakage tests in Southeast New Mexico

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

OIL CON. DIV.
DIST. 3

Operator NORTHWEST PIPELINE CORPORATION Lease ROSA UNIT Well No. 145A

Location of Well: Unit D Sec. 16 Twp. 31N Rge. 6W County SAN JUAN

	NAME OF RESERVOIR OR POOL	TYPE OF PROD (Flow or Art. Lift)	METHOD OF PROD. (Flow or Art. Lift)	PROD. MEDIUM (Tbg. or Csg.)
Upper Completion	PICTURED CLIFFS	GAS	FLOW	TUBING
Lower Completion	MESA VERDE	GAS	FLOW	TUBING

PRE-FLOW SHUT-IN PRESSURE DATA

Upper Completion	Hour, date shut-in 1000 HOURS, 10-10-94	Length of time shut-in 48 HOURS	SI press. psig SITP = 1193, SICP = 1337	Stabilized? (Yes or No) YES
Lower Completion	Hour, date shut-in 1300 HOURS, 10-04-94	Length of time shut-in 174 HOURS	SI press. psig SITP = 1123	Stabilized? (Yes or No) YES

FLOW TEST NO. 1

Commenced at (hour, date)* 0800 MST, 10-12-94					Zone producing (Upper or Lower) LOWER	
TIME (hour, date)	LAPSED TIME SINCE*	PRESSURE			PROD. ZONE TEMP.	REMARKS
		Upper Completion		Lower Completion		
		TBG	CSG	TBG		
0830, 10-12-94	0.5 HOURS	1201	1341	268	56	IP TEST ON MV
0900, 10-12-94	1.0 HOURS	1206	1346	249	56	
0930, 10-12-94	1.5 HOURS	1206	1345	247	58	LIGHT MIST
1000, 10-12-94	2.0 HOURS	1206	1343	241	59	LIGHT MIST
1030, 10-12-94	2.5 HOURS	1207	1344	238	60	LIGHT MIST
1100, 10-12-94	3.0 HOURS	1208	1344	238	60	LIGHT MIST

Production rate during test:

Oil: NONE BOPD based on _____ BBLs. in _____ Hours, _____ Grav. _____ GOR _____

Gas: 3110 MCF/D LIGHT MIST MCF/D: Tested thru (Orifice or Meter): 2" x 3/4" PROVER

MID-TEST SHUT-IN PRESSURE DATA

Upper Completion	Hour, date shut-in 1000 HOURS, 10-10-94	Length of time shut-in 139 HOURS	SI press. psig SITP = 1221, SICP = 1396	Stabilized? (Yes or No) YES
Lower Completion	Hour, date shut-in 1100 HOURS, 10-12-94	Length of time shut-in 90 HOURS	SI press. psig SITP = 1131	Stabilized? (Yes or No) YES

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST
FLOW TEST NO. 2

Commenced at (hour, date)* 0515 MST, 10-16-94					Zone producing (Upper or Lower) UPPER	
TIME (hour, date)	LAPSED TIME SINCE*	PRESSURE			PROD. ZONE TEMP.	REMARKS
		Upper Completion		Lower Completion		
		TBG	CSG	TBG		
0545 10-16-94	0.5 HOURS	244	1052	1127	80	IP TEST ON PC
0615 10-16-94	1.0 HOURS	189	947	1130	89	UNLOAD HEAVY MIST IN 15 MINS
0645 10-16-94	1.5 HOURS	149	867	1129	90	HEAVY MIST
0715 10-16-94	2.0 HOURS	128	816	1129	90	HEAVY MIST
0815 10-16-94	2.5 HOURS	112	781	1129	91	HEAVY MIST
0815 10-16-94	3.0 HOURS	103	755	1130	91	HEAVY MIST

Oil: NONE BOPD based on _____ BBLs. in _____ Hours, _____ Grav. _____ GOR _____

Gas: 1376 MCF/D HEAVY MIST MCF/D: Tested thru (Orifice or Meter): 2" x 3/4" PROVER

Remarks: _____

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

Approved OCT 31 1994 19____
New Mexico Oil Conservation Division
By Charles Holton
Title DEPUTY OIL & GAS INSPECTOR, DIST. #3

Operator NORTHWEST PIPELINE CORPORATION
By Mark McCallister
Title Senior Engineer
Date October 26, 1994

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 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 leak 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 zoned shall remain shut-in while the zone which was previously shut-in is produced.
7. Pressures for gas-zones 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. Test 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).