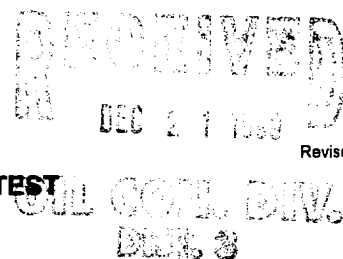


1999

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 GREYSTONE ENERGY, INC. Lease FREEMAN Well No. 1M  
Location of Well Unit C Sec. 11 Twp. 31N Rge. 13W County SAN JUAN

	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	MESA VERDE	GAS	FLOW	TBG
Lower Completion	DAKOTA	GAS	FLOW	TBG

**PRE-FLOW SHUT-IN PRESSURE DATA**

Upper Completion	Hour, date shut-in 11-27-99	Length of time shut-in 3 DAYS	SI press. psig 150	Stabilized? (Yes or No) yes
Lower Completion	Hour, date shut-in 11-27-99	Length of time shut-in 3 DAYS	SI press. psig 400	Stabilized? (Yes or No) no

**FLOW TEST NO. 1**

Commenced at (hour, date) * 11-27-99		Zone producing (Upper or Lower): LOWER			
TIME (hour, date)	LAPSED TIME Since *	PRESSURE			REMARKS
		Upper Completion	Lower Completion	PROD. ZONE TEMP.	
		csg	tbg	tbg	
11-27		140	140	260	Both Zones Shut In
11-28		150	145	330	Both Zones Shut In
11-29		160	150	400	Both Zones Shut In
11-30	1 day	160	150	65.5	Lower Zone Flowing
12-01	2 days	160	160	69.5	Lower Zone Flowing

**Production rate during test**

Oil: BOPD based on Bbls. in Hours Grav. GOR  
Gas: 71 MCFPD: Tested thru (Orifice or Meter) METER

**MID-TEST SHUT-IN PRESSURE DATA**

Upper Completion	Hour, date shut-in	Length of time shut-in	SI press. psig	Stabilized? (Yes or No)
Lower Completion	Hour, date shut-in	Length of time shut-in	SI press. psig	Stabilized? (Yes or No)

(Continue on reverse side)

## 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 Completion	Lower Completion		

Production rate during test

Oil: \_\_\_\_\_ BOPD based on \_\_\_\_\_ Bbls. in \_\_\_\_\_ Hours. \_\_\_\_\_ Grav. \_\_\_\_\_ GOR \_\_\_\_\_

Gas: \_\_\_\_\_ MCFPD: Tested thru (Orifice or Meter): \_\_\_\_\_

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

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

Approved DEC 21 1999 19\_\_\_\_

New Mexico Oil Conservation Division

ORIGINAL SIGNED BY CHARLIE T. PERMAN

By \_\_\_\_\_

DEPUTY OIL &amp; GAS INSPECTOR, DIST. #3

Title \_\_\_\_\_

Operator Greystone Energy, Inc.By Kay SchusterTitle PRODUCTION ANALYSTDate 12/17/99

## 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 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.

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 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).

OIL CONSERVATION DIVISION

1998

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Packer Leakage tests  
in Southeast New Mexico

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Revised 10/01/78

Operator CHATEAU OIL AND GAS, INC Lease FREEMAN Well No. 1M  
Location of Well Unit C Sec. 11 Twp. 31N Rge. 13W County SAN JUAN

	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	MESA VERDE	GAS	FLOW	TBG
Lower Completion	DAKOTA	GAS	FLOW	TBG

PRE-FLOW SHUT-IN PRESSURE DATA

Upper Completion	Hour, date shut-in 6-22-98	Length of time shut-in 3 DAYS	SI press. psig 247	Stabilized? (Yes or No) no
Lower Completion	Hour, date shut-in 6-22-98	Length of time shut-in 3 DAYS	SI press. psig 475	Stabilized? (Yes or No) yes

FLOW TEST NO. 1

FLOW TEST NO. 1

Commenced at (hour, date) *		6-25-98			Zone producing (Upper or Lower):		LOWER
TIME (hour, date)	LAPSED TIME Since *	PRESSURE			PROD. ZONE TEMP.	REMARKS	
		Upper Completion		Lower Completion			
6-23		csg	tbg	tbg		Both Zones Shut In	
		227	207	400			
6-24		257	207	475		Both Zones Shut In	
6-25		257	247	475		Both Zones Shut In	
6-26	1 day	257	247	171		Lower Zone Flowing	
6-27	2 days	258	248	171		Lower Zone Flowing	

Production rate during test

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

Gas: 52 MCFPD: Tested thru (Orifice or Meter) METER

MID-TEST SHUT-IN PRESSURE DATA

Upper Completion	Hour, date shut-in	Length of time shut-in	SI press. psig	Stabilized? (Yes or No)
Lower Completion	Hour, date shut-in	Length of time shut-in	SI press. psig	Stabilized? (Yes or No)

(Continue on reverse side)

## 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 Completion	Lower Completion		

Production rate during test

Oil: \_\_\_\_\_ BOPD based on \_\_\_\_\_ Bbls. in \_\_\_\_\_ Hours. \_\_\_\_\_ Grav. \_\_\_\_\_ GOR \_\_\_\_\_

Gas: \_\_\_\_\_ MCFPD: Tested thru (Orifice or Meter): \_\_\_\_\_

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

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

Approved MAR 11 1999 19\_\_\_\_  
New Mexico Oil Conservation Division

ORIGINAL SIGNED BY CHARLIE T. PERRIN

By \_\_\_\_\_

DEPUTY OIL &amp; GAS INSPECTOR, DIST. #3

Title \_\_\_\_\_

Operator CHATEAU OIL & GAS, INC.By Ray S. LeblancTitle PRODUCTION ANALYST

Date \_\_\_\_\_

## 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 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.

Flow Test No. 2 shall be conducted even though no leak was indicated during Flow

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 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).