STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION 2002 NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST



Lease MCINTYRE Well No. 1M Operator CORDILLERA ENERGY, INC. Location Rge. 4W API# 30-039-21609 Twp. 26N Sec. 11 of Well Unit METHOD OF PROD. PROD. MEDIUM TYPE OF PROD. NAME OF RESERVOIR OR POOL (Tbg. or Csg.) (Flow or Art. Lift) (Oil or Gas) Upper **TBG FLOW GAS** MESA VERDE Completion Lower **TBG GAS FLOW** DAKOTA Completion PRE-FLOW SHUT-IN PRESSURE DATA Stabilized? (Yes or No) SI press. psig Length of time shut-in Hour, date shut-in Upper 169 ves 3 days 10/09/02 Completion Stabilized? (Yes or No) SI press. psig Length of time shut-in Hour, date shut-in Lower yes 326 3 days 10/09/02 Completion **FLOW TEST NO. 1** lower Zone producing (Upper or Lower): 10/14/02 Commenced at (hour, date) * PROD. ZONE PRESSURE TIME LAPSED TIME **REMARKS** TEMP. Lower Completion Since * Upper Completion (hour, date) tbg tbg csg Both Zones Shut In 297 158 155 10/12 Both Zones Shut In 162 317 165 10/13 Both Zones Shut In 326 169 172 10/14 Lower Zone Flowing 176 173 153 10/15 1 day Lower Zone Flowing 184 131 189 10/16 2 days Production rate during test GOR Grav. Hours Bbls. in BOPD based on Oil: Meter MCFPD: Tested thru (Orifice or Meter): 36 Gas: MID-TEST SHUT-IN PRESSURE DATA Stabilized? (Yes or No) SI press. psig Length of time shut-in Upper Hour, date shut-in Completion Stabilized? (Yes or No) Length of time shut-in SI press. psig Hour, date shut-in Lower Completion

FLOW TEST NO. 2

Commenced at (hour, date) **				Zone Producing (Upper or Lower):	
Time	LAPSED TIME	PRESSURE		PROD. ZONE	
(hour, date)	SINCE **	Upper Completion	Lower Completion	TEMP.	REMARKS
	<u> </u>				
Production	n rate during test				
Oil:	BOPD b	ased on	Bbls. in	Hrs	Grav GOR
Gas:	MCFPD: Tested thru (Orifice or Meter):				
Remarks:					
			•		
I hereby certif		erein contained is true an	d complete to the best of	my knowledge.	
Approved	***	, 20	02Oper	ator CORDILL	ERA ENERGY, INCORPORATED
New Mexic	co Oil Conservation	on Division	_	100.18	E.A.t.
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P.S.	ANY WALLES FOR		I Itie	PRODUC	CTION TECHNICIAN
Title	THE STATE OF THE S		Date	11/12/02	

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 distrubed. Tests shall also be taken at any time that communication is suspected or when requested by the Division.
- 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 notified
- 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.
- 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
 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 dead-weight pressure gauge at time intervals as follows: 3 hours tests: immediately prior to the beginning of each flow-period, at fifteen-nminute 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 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 10-01-98 with all deadweight pressures indicated thereon as well as the flowing temperatures (gas zones only) and gravity and GOR (oil zones only)