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	Má	arathon Oil	Company	Lease	Jicarilla A	Apache	Well No. 20	
Location of Well:	Unit^	1 Sec. 27	Twp26N	Rge	5w	Cou	nty <u>Rio Arriba</u>	
NAME OF RESERVOIR OR POOL			TYPE OF P			1!		
Upper Completion				Gas	Gas		Casing	
Completion Otero Chacra			Gas	Flow		Tubing		
			PRE-FLO	OW SHUT-IN P	RESSURE DATA	<u> </u>		
Upper 11 2 01		Length of time sh		SI press. psig		Stabilized? (Yes or No)		
Completion	11-3-91 Hour, date shut-in			5 days Length of time shut-in			NO Stabilized? (Yes or No)	
Lower Completion	11	L-3-91	3 0	lays	326		No	
				FLOW TEST	NO. 1			
Conimenced	at (hour, dat	o)*			Zone producing (U	pper or Lowert		
		LAPSED TIME SINCE#	PRESSURE Upper Completion Lower Completion		PROD. ZONE	REMARKS		
11-3-91					Both zones shut-in			
11-4-91			241	282		Both zo	Both zones shut-in	
11-5-91			278 301			Both zo	Both zones shut-in	
11-6-91			301	326		Both zones shut-in		
11-7-91			320	320 170		Flowing lower zone		
11-8-91 3		336	173	Flowing		lower zone		
Productio	on rate di	uring test Sta	ntic - 8.45,	Diff 3.5	, Orifice -	0.250", S	Static Spring - 250#	
Oil:BOPD based onBbls. inHoursGravGOR								
G as :			МСЕ	PD: Tested thru	(Orifice or Mete	er):		
Ja					RESSURE DATA			
Upper Completion	Hour, date shut-in Length of time shut-in			SI press, psig		Stabilized? (Yes or No)		
		Length of time shi	Length of time shut-in			Stabilized? (Yes or No)		

FLOW TEST NO 2 Commenced at (hour, date) 半中 one producing (Upper or Lower): PRESSURE TIME LAPSED TIME PROD. ZONE REMARKS SINCE ** (hour, date) **Upper Completion** Lower Completion TEMP.

Production rate during test				
Oil:BOPD based onBI	ols. in Hours Grav GOR			
Gas: MCFPD: Tested	thru (Orifice or Meter):			
Remarks:				
hereby certify that the information herein contained is true a	nd complete to the best of my knowledge.			
Approved JAN 0 6 1932 19	Operator Marathon Oil Company			
New Mexico Oil Conservation Division	By Carl A. Bagwell A. BAGwal			
Original Signed by CHARLES GMOLSON By	Tide Engineering Technician			
Title DEPUTY OR & GAS INSPECTOR, DIST. #3	Date1/3/92			

NORTHWEST NEW MEXICO PACKER LEAKAGE TEST : "ISTRUCTIONS

- 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 proscribed 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.
- 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 coinmence 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

- that the previously produced zone shall remain shut-in while the zone which was previous-
- ly shut-in is produced. Pressures for gas-zone rests 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 Azter 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).