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

Oil Conservation Division

Northwest New Mexico Packer-Leakage Test

Page 1 Revised June 10, 2003

Operator <u>COP</u>		_ Lease	Name SAN	Well No20A						
Location of Wel	l: Unit Let	tter J	Sec	08	Twp028	<u> </u>	ge	007W API	# 30-039-22207	
	Name of Reservoir or Pool			Type of Prod			Method of Prod		Prod Medium	
Upper Completion	PC		Gas			Flow		Tubing		
Lower Completion	MV		Gas			Flow		Tubing		
	•		Pre	-Flow S	hut-In Press	ure Data	a			
Upper Hour, Date, Shut-In				Length of Time Shut-In			SI Press. PSIG		Stabilized?(Yes or No)	
Completion	6/7/20	012	108 hours			180		Yes		
Lower	Hour, Date,	Shut-In	Length of Time Shut-In			SI Press. PSIG		Stabilized?(Yes or No)		
Completion	6/7/20	012	181 hours			90		Yes		
				Flo	w Test No. 1					
Commenced a	nt: :/11/20	12 12:07:49 PN	1		Zone P	roducing	(Upper	or Lower): UF	PPER	
Time Lapsed Time				. PRESSURE P			od Zone			
(date/time	<u>.</u>	Since*		er zone	Lower zone	Tempe	erature	Remarks		
6/11/2012 12:07:49 PM 0				146 _	90		20% of lower pre Cross over = 90-		ssure zone = .20 X 90 = 18; 18 = 72 psig	
6/12/2012 12:00:0	00 PM	24		105	90					
6/13/2012 12:00:00 PM		48	48		90			(20%)		
6/14/2012 1:09:42 PM 73				62			(one more			
Production rate	during tes	t								
Oil:BPOD Based on:Bbls				s. InHrs				Grav.	GOR	
Gas		_MCFPD; Test	t thru (Ori	fice or M	eter)					
			Mid	d-Test S	hut-In Press	ure Data	1			
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)	

Northwest New Mexico Packer-Leakage Test

Flow Test No. 2

Commenced at:		Zone Producing (Upper or Lower)								
Time (date/time)	Lapsed Time	PRES	SURE	Prod Zone						
	Since*	Upper zone	Lower zone	Temperature	}	Remarks				
						•				
			·]							
			:				_			
						·				
		_								
5										
Production rate during	test		•							
Oil:BPO[l:BPOD Based on:		Hrs.		Grav.	GOR				
Gas	MCFPD; Test th	ru (Orifice or M	eter)							
		,								
Remarks:		Marie Carlos Car					1			
	- i-f			£_ £ _ £ _ £		onno anno manta na maouna em entera e e e e e e e e e e e e e e e e e e				
	e information herein co		and complete	to the best of	r my knowieag	je.				
Approved:	6/18	20 /2	Operat	Operator: COP						
New Mexico Oil Co	nservation Division		By:	By: Cole Raybon						
ву:			Title [.]	Title: Multi-Skilled Operator						
Députy C	oil & Gas Inspecto	or,	_							
Title:			Date: _	Date: Monday, June 18, 2012						

NORTHWEST NEWMEXICO PACKER LEAKAGE TEST INSTRUCTIONS

- 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.
- 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.
- 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.
- 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 lack of a pipeline connection the flow period shall be three hours.

- 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 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.

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)

Following completion of Flow Test No. 1, the well shall again be shut-in, in accordance with Paragraph 3 above