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 Hilo	orp Energ	gy Company		Lease	Name BRO	OKHAVEN CO	OM	Well No. 8A
Location of We	ell: Unit	Letter L	Sec	36	Twp 027N	N Rge	008W API	# 30-045-30225
	Name of Reservoir or Pool			Type of Prod			Method of Prod	Prod Medium
Upper Completion				Gas				Tubing
Lower Completion				Gas			cial Lift	Tubing
			Pre	-Flow S	Shut-In Pressı	ure Data		
Upper Completion 5/16/2019 Lower Completion 5/16/2019 Lower Completion 5/16/2019				Length of Time Shut-In			ess. PSIG	Stabilized?(Yes or No) Yes
				185		SI Pre	ess. PSIG 142	Stabilized?(Yes or No) Yes
				Flo	w Test No. 1			
Commenced	at:	5/20/2019	9	110		oducing (Uppe	er or Lower): LO	WER
Time (date/time)		Lapsed Time Since*	Uppe	PRES	SURE Lower zone	Prod Zone Temperature	Remarks	
5/20/2019 4:30 PM 16						upper zone stabilized at 10psi blew down to nothing in 25-30 seconds & did not build any pressure during test. lower zone stabilized at 142 psi and remained at 142 psi during 60 min		
							test. I closed upp back online after	er zone and put lower zone test
5/21/2019 3:58 PM		39		0	102		upper zone has n zone flowing	ot built any pressure, lower
5/22/2019 4:53 PM		64		0	133		took pressures during off cycle, upper zone has not built any pressure	
5/23/2019 5:06 PM 89			0 101			lower zone flowing, upper zone has not built a measureable amount of pressure		
Production rate	e during t	est						
Dil: BPOD Based on: Bbl			Bbls	s. In Hrs.			Grav.	GOR
Gas		MCFPD; Tes	t thru (Orifi	ce or M	eter)			
			Mid	-Test S	hut-In Pressu	ıre Data		
Upper Completion	pper Hour, Date, Shut-In			Length of Time Shut-In			ss. PSIG	Stabilized?(Yes or No)
Lower Hour, Date, Shut-In Completion							ss. PSIG	Stabilized?(Yes or No)
1				(Continue on reverse side)			- College In Assessment College In College I	NMOCD

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DISTRICT 111

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Northwest New Mexico Packer-Leakage Test

Flow Test No. 2

Commenced at:			Zone Pro	Zone Producing (Upper or Lower)							
Time	Lapsed Time	<u> </u>	SURE	Prod Zone		Damada					
(date/time)	Since*	Upper zone	Lower zone	Temperature	•	Remarks					
		,									
											
	-				-						
						· · · · · · · · · · · · · · · · · · ·					
				l		·					
Production rate duri	ng test										
Oil:BP0	BPOD Based on:		Bbls. InHrs.		Grav.	GOR					
Gas	MCFPD; Test thru (Orifice or Meter)										
			-								
Remarks:	duces on this well, and	is rupping a 1 5"	' nlunger uppe	r zone had 10) nei initially	and did not go up after shut in					
	duces on this well, and	is running a 1.5	plunger, uppe	a zone nau n	psi ii iidaliy	and did not go up after shut if					
I hereby certify that	the information herein of	contained is true	and complete	to the best of	my knowler	1 00					
	•				-	_					
Approved:	-MAY	20	_ Operat	or: Hilcorp	Energy Com	pany					
New Mexico Oil	Conservation Division		By:	Jeff Kirks							
By: ////	Tom		Title:	Title: Multi-Skilled Operator							
	eputy Oil & Gas I	nspector,									
Title:	District #3	3	_ Date: _	Date: Tuesday, May 28, 2019							

NORTHWEST NEWMEXICO 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.
- 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 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 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).