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 Hilcorp Energy Company				Lease Name LUDWICK LS					Well No.	13		
Location of Well	l: Unit l	_etter	G S	Sec	05	Twp	029N	R	ge	010W API	# 30-045-0878	31
	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	Shut-In F	Pressu	ıre Data	3		l.	
	Hour, Da	te, Shut-Ir	1						SI Pres	s. PSIG	Stabilized?(Yes or	No)
Completion	5/25/2021			Length of Time Shut-In				246	Yes			
Lower	Hour, Date, Shut-In			176				SI Press. PSIG		Stabilized?(Yes or No)		
Completion	5/25/2021									145.6	Yes	
					Flo	w Test	No 1					
Commenced at	t: 6/1/	2021						oducing	(Upper	or Lower): UF	PPER	
Time Lapsed Time				PRESSURE Prod			Prod	Zone	one			
(date/time) Since*		Uppe	Upper zone		zone	Tempe	erature	Remarks				
6/1/2021 8:06	AM		0		246	145	5.6					
6/1/2021 8:25 AM 0				116	145	5.6		Took 18 minute:		to reach 20% crosso	ver	
6/1/2021 8:57 AM 0			104	145	5.6		PSI after 30 minutes.					
Production rate	during t	est										
Oil: BPOD Based on: Bbls				ols. InHrs			Grav. GOR		GOR			
Gas		MCI	FPD; Test t	thru (Orif	ice or M	leter)						
				Mic	I_Toet S	Shut-In F	Procei	ıro Data				
Upper Completion	Upper Hour, Date, Shut-In			d-Test Shut-In Pressure Data Length of Time Shut-In		Date	SI Press. PSIG		Stabilized?(Yes or	No)		
Lower Completion							SI Press. PSIG		Stabilized?(Yes or	No)		
					(Continu	ue on re	verse s	side)	<u> </u>		1	

Northwest New Mexico Packer-Leakage Test

Flow Test No. 2

Commenced at:			Zone Pro	oducing (Uppe	r or Lower)		
Time	Lapsed Time		SURE	Prod Zone	Danie sales		
(date/time)	Since*	Upper zone	Lower zone	Temperature		Remarks	
Production rate during							
Oil:BPOD	Based on:	Bbls. In	Hrs.		Grav.	GOR	
Gas MCFPD; Test thru (Orifice or Meter)							
Remarks:							
I hereby certify that the information herein contained is true and complete to the best of my knowledge.							
Approved: 20				or: Hilcorp E	nergy Company		
New Mexico Oil Co	nservation Division		Ву:	By: Duane Graham			
Ву:			Title:	Title: Multi-Skilled Operator			
Title:				Date: Tuesday, June 1, 2021			

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.
- 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 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

- $6. \quad Flow \ Test \ No. \ 2 \ shall \ be \ conducted \ even \ though \ no \ leak \ was \ indicated \ during \ Flow \ Test \ No. \ 1. \ Procedure \ for \ Flow \ Test \ No. \ 2 \ is to \ be \ the \ same \ as \ for \ Flow \ Test \ No. \ 1 \ except \ that \ the \ previously \ produced \ zone \ shall \ remain \ shut-in \ while \ the \ zone \ which \ was \ previously \ shut-in \ is \ produced.$
- 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).

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

COMMENTS

Action 30024

COMMENTS

Operator:	OGRID:		
HILCORP ENERGY COMPANY	372171		
1111 Travis Street	Action Number:		
Houston, TX 77002	30024		
	Action Type:		
	[UF-PLT] Packer Leakage Test (NW) (PACKER LEAKAGE TEST (NW))		

COMMENTS

Created By	Comment	Comment Date
kpickford	Adhere to previous NMOCD Conditions of Approval	6/2/2021

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CONDITIONS

Created By	Condition	Condition Date
kpickford	None	6/2/2021