Completion 3:00 p.m. 9/8/2002

OIL CONSERVATION DIVISION

2002

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

yes

Operator	CORDILLERA EN	NERGY, INC.	Lease WILLIAMS Well No. 10						
ocation of Well	Unit <u>E</u>		24	Twp.	31N	Rge	13W	API# <u>3</u>	0-045-31070
	NAME OF RESERVOIR	OR POOL		TYPE OF PR			METHOD (1	PROD. ME DIUM (Tbg. or Csg.)
Upper	BLANCO MESAVERDE			GAS			FLOW		CSG
Completion Lower Completion	BASIN DAKOTA			GAS			FLOW		TBG
Completion			DDE	-FLOW SHUT-IN	DRESSII	RF D	ΔΤΔ		
			PRE	Length of time shut-in	FILLUUG	112 07	SI press. psig		Stabilized? (Yes or No)
Upper	Hour, date shut-in			_ ·		1	1050		yes
Completion	2:00 p.m. 9/1/20	002			7 days				Stabilized? (Yes or No)
Lower	Hour, date shut-in			Length of time shut-in			SI press. psig 785		yes
Completion	2:00 p.m. 9/1/20	002		7 days			700		,,,,,,
				FLOV	V TEST N	0.1			
0	d at (hour, date) *	12:00 noon	9/8/02		Zone prod	ucing (l	Jpper or Lowe	r):	Lower
			RESSURE		PROD. ZONE				
TIME	LAPSED TIME				TEMP.	İ		S	
(nour, date)	Since *	Upper Completio		Lower Completion	, , , , , , , , , , , , , , , , , , ,				
12:30	30 minutes	csg 1050	tbg	345		Flow	Dk through	test separa	ator w/.750 orifice.
	1.0 hour	1050		120		Avg.	23# on orif	ice. 56 mcf	vented in 3 hour
1:30	1.5 hours	1050		85		test.			
2:00) 2.0 hours	1050		65					
2:30	2.5 hours	1050		42	<u> </u>				
3:00	3.0 hours	1050		24		<u> </u>			
	on rate during test			District	-0-	Hour	s 3	Grav.	GOR
Oil:	-0- BOPT	D based on		Bbls. in		Hour	<u> </u>	Ciav.	
Gas:	449 mcf/d			MCFPD: Tested thru (Orifice or Meter): Orifice					
			MID	TEST SHUT-IN	PRESSUF	RE DA	TA		
				Length of time shut-in					Stabilized? (Yes or No)
upper	Hour, date shut-in			10 Days	1 -				yes
Completion	2:00 p.m. 9/1/2002							1050# ye SI press. psig Stabilized? (Ye	
Lower	Hour, date shut-in			Length of time shut-		or press, par	1		

3 Days

735#

FLOW TEST NO. 2

Commenced at (hour, date) ** 11:30 a.m. 9/11/2002				Zone Producing (Upper or Lower): Upper			
Time	LAPSED TIME		SURE	PROD. ZONE			
(hour, date)	SINCE **	Upper Completion	Lower Completion	TEMP.	REMARKS		
12:00 a.m.	30 minutes	760	735		Flow MV up csg through test		
12:30 a.m.	1.0 hour	540	735		separator w/ 1.250 orifice.		
1:00 p.m.	1.5 hours	528	735		Averaged 35# on flow chart for		
1:30 p.m.	2.0 hours	499	735	l .	3 hours.		
2:00 p.m.	2.5 hours	485	735				
2:30 p.m.	3.0 hours	482	735		217 mcf in 3 hours.		

Production rate during test

Oil: <u>-0-</u>	BOPD based on0	Bbls. in	3 Hrs	Grav	GOR
Gas:	1,737 MCFPD: 1	Tested thru (Orifice o	r Meter):	Orifice	
Remarks:					
		 			
I hereby certif	fy that the information herein contain	ned is true and comp	olete to the be	st of my knowledge	
Approved	_ SEP 1 6 2002			_	
		,2002	Operator	CORDILLERA ENE	RGY, INCORPORATED
IVEM INIEXIC	o Oil Conservation Division			11 X61-	1-
	IAL DIELES OF THIRE T. PER	rin	Ву	Caysches	les
Ву			Title	PRODUCTION TEC	CHNICIAN
Title	THIN ME & SAS IMPOSTOR	Per 🎉	Date	09/12/02	

NORTHWEST NEW MEXICO 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 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.
- 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 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)