OIL CONSERVATION DIVISION

2002

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator	CORDILLERA EN	ERGY, INC.		_ Lease	e DUKE		Wel	II No.	1 B
Location of Well	Unit O	Sec.	13	-	-		13W		
	NAME OF RESERVOIR OF	₹POOL	TYPE OF PROD. (Oil or Gas)			METHOD OF PRO		PROD. MEDIUM (Tbg. or Csg.)	
Upper Completion Lower	BLANCO MESAVE	ERDE	GAS			FLOW		CSG	
Completion	BASIN DAKOTA			GAS	3		FLOW		TBG
			PRE	-FLOW SHUT-II	N PRESSI	URE C	DATA		
Upper	Hour, date shut-in		_	Length of time shut-in	Length of time shut-in				Stabilized? (Yes or No)
Completion	12:15 a.m. 9/6/0	2		7 days			890		yes
Lower	Hour, date shut-in	•		Length of time shut-in			SI press. psig		Stabilized? (Yes or No)
Completion	12:15 a.m. 9/6/0	2		7 days			720		yes
				FLO	W TEST N	10.1			
Commenced	at (hour, date) *	8:00 a.m.	9/13/02	2	Zone prod	lucing (l	Upper or Lower):		Lower
TIME	LAPSED TIME		PRESSURE		PROD. ZONE	·			
(hour, date)	Since *	Upper Completio	n	Lower Completion	TEMP.		REI	MARK	S
		csg	tbg	tbg					
8:30	30 minutes	890	n/a	420	45 F	Lowe	er zone flow tester	d throu	igh test separator
					1		JI Zono non tocto	4 1111.00	igit toot ocparator
9:00	1 hour	890	n/a	393	50 F	with	750 orifice One.	half h	arrel water. Avg. 24#
	1 11001	1-000	17/4		1001	AAIRI .	.730 Utilice. Otie-	·lian be	arrei water. Avg. 247
0.00									
9:30	1.5 hours	890	n/a	222	58 F	on or	rifice chart. Vente	<u>:d 55 n</u>	ncf in 3 hours.
10.00	2 hours	890	2/2	1.45	60 E				
10.00	Z flouis	1 090	n/a	145	60 F	 			
10:30	2.5 hours	890	n/a	127	60 F	ļ	·	·	
11:00	3 hours	890	n/a	122	60 F				
Draduation	s sata durina taat		_						····
	n rate during test		_						
Oil:	-0- BOPD ba	sed on	<u>-0-</u>	Bbls. in	3	Hours	Grav	<u>/. </u>	GOR
Gas:	442	·		MCFPD: Tested th	ıru (Orifice oı	r Meter)): Orif	fice	
			MID-T	TEST SHUT-IN F	DRESSIIR	»⊏ DV.	TA		
Upper	Hour, date shut-in		11110 .	Length of time shut-in	KLOOOK	LUA	T		Ta
Completion	12:15 p.m. 9/6/02			10 days			SI press, psig		Stabilized? (Yes or No)
Lower	Hour, date shut-in			Length of time shu			890		Yes
	11:00 a.m. 9/13/02			1	t-in		SI press, psig		Stabilized? (Yes or No)
Completion	[11.00 a.m. 9/13/02			13 days			705		Yes

(Continue on reverse side)

FLOW TEST NO. 2

Commenced at (hour, date) ** 12			01 p.m. 9/16/02		Zone Producing (Upper or Lower): Upper		
Time LAPSED TIME			PRESSURE		PROD. ZONE		
(hour, date)	SINCE **	Up	er Completion	Lower Completion	TEMP.	REMARKS	
12:30	30 minutes		80	705	60 F	Upper zone flow tested through test	
1:00	1 hour	6	23	705	60 F	separator with 1.250 orifice. Avg.	
1:30	1.5 hours	5	42	705	60 F	flow pr @ orifice - 32 psig.	
2:00	2 hours	4	10	705	60 F	3/4 bbl water.	
2:30	2.5 hours	14	08	705	60 F		
3:05	3 hours	4	06	705	60 F		

3:05	3 hours	406	705	60	F	
Production	n rate during test					
Oil: -0-	BOPD bas	sed on(O- Bbls. in	3 Hrs.	s Grav GOR	
Gas:	1,695	MOFPD:	Tested thru (Orifice or	Meter): Ori	rifice	
Remarks:	Vented 212 mcf in	3 hours.				
I hereby cert	ify that the information his SEP $m{200}$		ained is true and comp	lete to the be		
• •	co Oil Conservation			Operator	// O O O	_
	OFFICE SIGNED E	Ì		By	PRODUCTION TECHNICIAN	
Title DE	STY DE R DE YTE	2	FIL TO	Date	09/18/02	

NORTHWEST NEW MEXICO PACKER LEAKAGE TEST INSTRUCTIONS

- 1. A packer leakage test shall be commenced of 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.
- 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 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.
- 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)