STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

Page 1

2002 NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

	Lease SOUTHERN UNION Well No.						
				. <u>1B</u>			
19	Twn 31N	Pao	1014/				
	1WP. <u>3114</u>	_ rge.	12VV API	# 30-045-31129			
 -				·			
			METHOD OF PROD.	PROD. MEDIUM			
	Oll of Gas)		(Flow or Art. Lift)	(Tbg. or Csg.)			
	GAS		EL OW				
			TLOW .	CSG			
	GAS		FLOW	TBG			
	 			100			
PRE-FLO	W SHUT-IN PR	RESSU	RE DATA				
Length of time	shut-in			Stabilized? (Yes or No)			
7 days		1	· •	yes			
ľ	shut-in			Stabilized? (Yes or No)			
7 days			838	ves			
		-					
7-2-2	FLOW TEST	NO. 1					
-15-02	Zone produ	ucing (Up	per or Lower):	Lower			
RESSURE	PROD. ZONE						
	etion TEMP.		REMARK	(S			
bg tbg							
/a 744	60 F	Vent w	ent well through test senarator with 750				
				ator with .750			
/a 397	60 F	orifice	Ava Pressure on or	ifion 04 main			
		3150.	, wg. r ressure on or	ince 21 psig.			
/a 210	60 E	E0 0	-6				
210		ou.o m	ct vented in 3 hours.	1/2 bbl water.			
/a 133	60 F						
							
/2 72	60 5						
12	100 F		· · · · · · · · · · · · · · · · · · ·				
a 45	[60 F						
Dhla in							
BUIS. IN	3 1	Hours	Grav.	GOR			
5 MCEPD: Tes	lad they (Orifor an		-i£				
MOIFD. 188	ted third (Office of	meter O	rilice	· _			
				· _			
MID_TEST SI	IIIT IN DOCA	\					
1	<u>IUT-IN PRESS</u>	URE D	ATA				
MID-TEST SI				Stabilized? (Yes or No.)			
1			press. psig	Stabilized? (Yes or No)			
Length of tir	ne shut-in	SI	press. psig 720	Stabilized? (Yes or No) yes Stabilized? (Yes or No)			
	PRE-FLOY	TYPE OF PROD. (Oil or Gas) GAS GAS PRE-FLOW SHUT-IN PF Length of time shut-in 7 days Length of time shut-in 7 days FLOW TEST 0-15-02 RESSURE PROD. ZONE PROD. ZONE TEMP. bg tbg 1/a 744 60 F 1/a 397 60 F 1/a 210 60 F 1/a 133 60 F 1/a 72 60 F 1/a 72 60 F 1/a 45 60 F	Type of PROD. (Oil or Gas) GAS GAS PRE-FLOW SHUT-IN PRESSUR Length of time shut-in 7 days Length of time shut-in 7 days FLOW TEST NO. 1 2-15-02 Zone producing (Up) RESSURE PROD. ZONE TEMP. bg tbg 1/a 744 60 F Vent w 1/a 397 60 F oriffice. 1/a 210 60 F 1/a 133 60 F 1/a 72 60 F 1/a 72 60 F 1/a 72 60 F 1/a 145 60 F	TYPE OF PROD. (Oil or Gas) GAS FLOW GAS FLOW PRE-FLOW SHUT-IN PRESSURE DATA Length of time shut-in 7 days FLOW TEST NO. 1 P-15-02 Zone producing (Upper or Lower): PRESSURE PROD. ZONE TEMP. PRESSURE PROD. ZONE TEMP. PREMARM 133 60 F 74 75 76 76 76 76 76 76 76 76 76			

NORTHWEST NEW MEXICO PACKER-LEAKAGE

FLOW TEST NO. 2

			FLOW 1EST NO		
	at (hour, date) **	2:30 p.m.	09/18/02	Zone Producing (Upper or Lower): Upper
Time	LAPSED TIME		SURE	PROD. ZONE	
(hour, date)	SINCE **	Upper Completion	Lower Completion	TEMP.	REMARKS
		602	643	60 F	Vented well through test separator
3:00 p.m.	30 minutes		643	60 F	with 1.250 orifice. Average pressure
3:30 p.m.	1 hour	515			on orifice 33 psig. 216 mcf vented in
4:00 p.m.	1.5 hours	491	643	60 F	
	2 hours	453	643	60 F	3 hours25 bbl water.
1.00 p		422	643	60 F	
5:00 p.m.	2.5 hours	422		60 F	
5:30 p.m.	3 hours	422	643	00 F	

Production rate during test

Oil:	-0E	OPD based on	0Bbls. in	3_Hrs	Grav	GOR _	
Gas:	1,729	MCFPD:	Tested thru (Orifice or	Meter):	Orifice		
Remark	(s:			<u> </u>			
I hereby	certify that the info	ormation herein con	tained is true and comp	lete to the bes	at of my knowledge.		
Approv	CEI	23 2002	,2002	_Operator		ENERGY, INCOR	PORATED
New M	exico Oil Cons	ervation Division		By _	Kay S. Co	hsteir	
By	ORIESHAL SKAM	TO BY CHAPAGE T.	P. (1997)	 Title	RODUCTIO	N TECHNICIAN	
	DEPUTY ON E	EAS IMPRICION !	₩8T. 8 3	Date	09/20/02		

NORTHWEST NEW MEXICO 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 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.
- 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 lifteen-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)

<u>District-!</u> 1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Ave., Artesia, NM 88210

District III

State of New Mexico

Form C-104 Reformatted July 20, 2001

Energy, Minerals & Natural Resourced Department

Oil Conservation Division

Submit to Appropriate District Office

5 copies

1000 Rio Brazos Rd., Aztec, NM 87410 1220 South St. Fran														,
District IV Santa Fe, NM 875								505					AI	MENDED REPORT
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				ame and Address			1	<u> </u>		Ť		2 OG	RID Number	r
	CORDILLE	ERA ENEF	RGY, INC.						,		· ·		73252	
	5802 High	way 64					3 Reason for Filing Code						Code	
	Farmingto	on, NM 87	401										NW	
	4 API Number			5 Pool Name			_	-	9 5		, , _	6 Pc	ool Code	
	30-045-311				IN DAI	KOTA		``.	and a grade of the con-			71599		
	7 Property C	ode	1	8 Property Name	TUED	······································					1	9 Well Number		
11	024076	- Comf			INEN	RN UNION	—						1B	
<u>11.</u>		1	ace Location		<u> </u>								Γ.	T
UL or lot		Section	Township	Range	Lot idn	1	i	t from the 1975'	N/S Line S	Feet from the		E/W Line W	County	
	K	19	31N	12W			Щ	1975' S 2315' W SAN				SAN JUAN		
		T	om Hole Loc		Γ				Γ	\neg			Γ,	T
UL or lot SAME		Section	Township	Range	Lot Idn		Feet	t from the	N/S Line		Feet from the		E/W Line	County
		42 Brode	:=!== Mothod	14 Gas Connection	1.5 C.	129 Permit Numi	har		16 C-129 Ef		Deta		17 0 120	
12	Lse Code	l .	icing Method	Date 9/19/2002	15 0-	129 Feilin Hunn	Des	1	10 C-159 FI	Tecuv	e Date	17 C-129 Expiration Date		
***		Code		Date at 12/2002	<u> </u>		—		L	—		<u>,</u>	L	
III.	Oil and Ga													
18	Transporte	<i>s</i>	1 .	porter Name				35 BAB				22		STR Location
	OGRID			Address FIELD SERVICE			\rightarrow	20 POD		21 (D/G		and descr	iption
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<u>IV.</u>	Produced		- 124 8	COLUMNIA CARRIAGO	n- serinti									
23	*2 *832	2997	2 24 PC	OD ULSTR Location and D SAME)escripia	on								
v .	Well Comp	-letion Ds		OFMETE								·		
	Spud Date	Jieuon Da		Ready Date		27 TD	7	28 PBTD 29 Perforations 30 DHC, MC					AC:	
25	08/07/02	1		/2002	6940' KB		-			6762' - 6857'		MC		
	31 Hole Siz	7 A	6	T	Casin	g & Tubing Size			•	Depth Set		34 Sacks Cement		
	12-1/4"	16		9-5/8				284'			-	245 SX (52 BBL)		
	8-3/4"			7"				4220'				920 SX (313 BBL)		
	6-3/4			4-1/2	,н			6938'				340 SX (87 BBL)		
	0-1/4			2-3/8					6818					
1/1				£-0,0			—							
VI. 35	Well Test I	Jata	36 Gas Delivery Date 37 Test Date 9/15/2002				П	38 3 hours	7 1			og. Pressure 40 Csg. Pressure 5# 720#		
41	Choke Size		42 Oil 43 Water .50									AOF 46 Test Method F		
47	I hereby certify	v that the rule:	s of the Oil Cons	servation Division have bee	an comp									
with and	that the informa	ation given ab	ove is true and c	complete to the best of my		'					ONSERVA		IVISION	
	ge and belief.	//	86.11	1.1.			1.		GA:	IGIN	ML POR	av de e	Same ag	T SPECIMEN
Signa	Signature: / Carlo Celhellen						pproved	ı by:				ज्ञास्तर अर्थ		
Printe	Printed Name: KAY S. ECKSTEIN					Title:								

Approval Date:

PRODUCTION TECHNICIAN

Phone:

(505) 632-8056

Title:

Date: 09/20/02