STATE OF NEW MEXICO ENERGY and MINERALS DEPARTMENT

### OIL CONSERVATION DIVISION

Page 1 Revised 10/01/78

This form is not to be used for reporting packer leakage tests in Southeast New Mexico

5331901

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### NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Well Operator BURLINGTON RESOURCES OIL & GAS CO. Lease SAN JUAN 27-4 UNIT 35 No. Location of Well: Unit 26 027N 004W Twp. **RIO ARRIBA** Sect Rge. County NAME OF RESERVOIR OR POOL TYPE OF PROD. METHOD OF PROD. PROD. MEDIUM (Oil or Gas) (Flow or Art. Lift) (Tbg. or Csg.) Upper PICTURED CLIFFS Gas Flow Tubing Completion Lower **MESAVERDE** Gas Flow Tubing Completion PRE-FLOW SHUT-IN PRESSURE DATA Upper Hour, date shut-in Length of time shut-in SI press. psig Stabilized? (Yes or No) Completion 05/11/2001 120 Hours 288 Lower Completion 05/11/2001 72 Hours 763 FLOW TEST NO. 1 Commenced at (hour,date)\* 05/14/2001 Zone producing (Upper or Lower) **LOWER** TIME LAPSED TIME PRESSURE PROD. ZONE (hour.date) SINCE\* TEMP **Upper Completion** Lower Completion REMARKS 05/15/2001 96 Hours 289 165 05/16/2001 120 Hours 289 Production rate during test Oil BOPD based on Bbls. in Hours Grav GOR Gas MCFPD: Tested thru (Orifice or Meter): MID-TEST SHUT-IN PRESSURE DATA Upper Hour. date shut-in Length of time shut-in SI press. psig Stabilized? (Yes or No) Completion Lower Hour, date shut-in Length of time shut-in SI press. psig Stabilized? (Yes or No) Completion

(Continue on reverse side)

### FLOW TEST NO. 2

ommenced at (hour, d	ate)**		z	Zone producing (Upper or Lower):				
TIME (hour, date)	LAPSED TIME SINCE **	PRES	SSURE	PROD. ZONE	REMARKS			
(nour, date)	SINCE	Upper Completion	Lower Completion	TEMP.	NEWAKKS			
		<del>                                     </del>						
Dun dun stinn met n. d.				<u> </u>				
Production rate du	iring test							
Oil:	B	OPD based on	Bbls. in	Hours	Grav. GOR			
Jas		MCFP	D: Tested thru (Orific	ce or Meter):				
Remarks:								
			-					
hereby certify th	at the information he	erein contained is true	e and complete to the	best of my knowledge				
		1 2001	9	Operator Burlingto	n Resources			
	Oil Conservation Div		г	Moro l	Page 0			
<b>Ora</b>	anal signed by (	CHAPILLE T. PERMIN		· AMOUNT	<del>27</del> :			
Ву				itle Operations As	sociate			
Tio. 1.	ETUTY OIL & GAS	INSPECTOR, DIST.	ER .					
Title				Date Friday, July 20, 2001				

### 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.
- 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.
- 5 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
- 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)

submitted in lieu of Form 3160-5

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DEPARTME	TNE	OF	THE	INTERI	OR				
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Sundry Notices and Reports on Wells		
1. Type of Well GAS	5.	Lease Number NMSF-079527 If Indian, All. or Tribe Name
2. Name of Operator  BURLINGTON  BESOURCES	7.	Unit Agreement Name
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. 9.	San Juan 27-4 Unit Well Name & Number San Juan 27-4 U #35 API Well No. 30-039-06883
4. Location of Well, Footage, Sec., T, R, M 1090'FSL, 1550'FWL, Sec.26, T-27-N, R-4-W, NMPM		Field and Pool Tapacito Pict Cliff Blanco Mesaverde County and State Rio Arriba Co, NM
Casing Repair Water Sh	f Platructine in	ans tion Fracturing
13. Describe Proposed or Completed Operations  It is intended to commingle the subject well according to t  A down hole commingle application will be submitted		ttached procedure.
14. Thereby certify that the foregoing is true and correct.  Signed (MR9) Title Regulatory Supervisor	or	
no (This space for Federal or State Office use) APPROVED BY Jim Lovato Title Date CONDITION OF APPROVAL, if any:	te _	JUN - 3 2001

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

# San Juan 27-4 Unit 35 Mesa Verde/Pictured Cliffs AIN: 5331901 and 5331902

1090' FSL & 1550' FWL Unit N, Sec. 26, T27N, R04W

Latitude / Longitude: 36° 32.3886'/ 107° 13.4196'

### Recommended Commingle Procedure

Project Summary: The San Juan 27-4 Unit 35 is a dual Mesa Verde/Pictured Cliffs well drilled in 1964. The Mesa Verde is producing 8 MCFD and has a cumulative production of 429 MMCF. The Pictured Cliffs is producing 21 MCFD and has a cumulative production of 614 MMCF. We plan to commingle this well, replace the tubing with 2-3/8" tubing, install production equipment and install a plunger lift in order to keep the well unloaded. This well has not been pulled since originally drilled. Estimated uplift is 50 MCFD for the Mesa Verde and 75 MCFD for the Pictured Cliffs.

- 1. Comply with all NMOCD, BLM and Burlington safety and environmental regulations. Test rig anchors and build blow pit prior to moving in rig. Notify BROG Regulatory (Peggy Bradfield 326-9727) and the appropriate Regulatory Agency prior to pumping any cement job. If an unplanned cement job is required, approval is required before the job can be pumped. If verbal approval is obtained, document approval in DIMS. Allow as much time as possible prior to pump time in case the Agency decides to witness the cement job.
- 2. MOL and RU workover rig. Conduct safety meeting for all personnel on location. NU relief line. Blow down well and kill with 2% KCl water as necessary. ND wellhead and NU BOP. Test and record operation of BOP rams. Have wellhead and valves serviced at machine shop to convert to a single string wellhead (2-3/8"). Test secondary seal and replace/install as necessary.
- 3. Set a plug with wireline in the SN (6308') on the Mesa Verde tubing. Pick up 1-1/4" tubing and RIH to the top of the Model D packer to determine if any fill is present. If fill is present, TOH w/tubing, laying down perf'd jt with bullplug. TIH w/ 1-1/4" tubing and circulate any fill off the packer. TOOH laying down the 1-1/4", 2.3#, J-55 Pictured Cliffs tubing (set at 4091').
- 4. Release seal assembly from the Model D Packer with straight pickup (no rotation required). If seal assembly will not come free, then cut 1-1/2" tubing above the packer and fish with overshot and jars. TOOH with 1-1/2", 2.9#, J-55 Mesa Verde tubing (set at 6344").
- 5. PU new or yellow banded 2-3/8", 4.7#, J-55 tubing and TIH with Model CK packer retrieval spear (PRS, with holes drilled near rotary shoe), rotary shoe, drain sub, top bushing, bumper sub, jars, and 4-6 drill collars. Mill out Model D packer at 4250' with air/mist. Note: when using air/mist, the minimum mist rate is 12 bph. Try to maintain air rate at 1,400 cfm. A hydrocarbon stable foamer should be utilized since this well makes significant amounts of condensate. After milling over the packer slips, POOH with tools and packer body.
- 6. TIH with 3-7/8" bit and watermelon mill on 2-3/8" tubing. Cleanout to PBTD at +/- 6434' with air/mist. PU above the perforations and flow the well naturally, making short trips for clean up when necessary. TOOH with tubing.

- 7. TIH with an expendable check, a seating nipple, 1 jt 2-3/8", a 2' x 2-3/8" sub and ½ of the 2-3/8" production string. Run a broach on sandline to insure that the tubing is clear. TIH with remaining tubing and broach this tubing. Replace any bad joints. Land tubing at approximately 6280'. ND BOP and NU WH. Pump off expendable check. Connect to casing and circulate air to assure the expendable check has pumped off. Obtain pitot gauge up the tubing. If well will not flow on its own, make swab run to SN. During cleanout operations the reservoir may be charge with air. As a result of excess oxygen levels that may be in the reservoir and/or wellbore, contact the Lease Operator to discuss the need for determining oxygen levels prior to returning the well to production. RD and MOL. Return well to production.
- 8. Production Operations will install plunger lift.

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Recomm	enc	led∙
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Operations Engineer

Approval:

Drilling Manager /

Contacts:

Operations Engineer

Matt Roberts

Sundry Required YES NO

599-4098 (Office)

320-2739 (Cell)

proved Signy Cale 5-29-02

**Production Foreman** 

Ward Arnold

326-9846 (Office)

326-8303 (Pager)

MBR/slm

STATE OF NEW MEXICO ENERGY and MINERALS DEPARTMENT

# **OIL CONSERVATION DIVISION**

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# NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator B	URLIN	GTON R	ESOURCI	ES OIL & G	AS CO.		Lease	SAN JUAN 27-	4 UNIT		Well No.	35
Location	** *.		<b>6</b>	00	Tr.	0071	D	00.4147	<b>C</b> : 1	DIO ADDIDA		
of Well:	Unit	N	Sect NAME OF	26 RESERVOI	Twp.	027N	Rge.	YPE OF PROD.	County	RIO ARRIBA	PRO	DD. MEDIUM
			147 LIVIL OI	RESERVOI	K OK 1 OO	L	1	(Oil or Gas)		w or Art. Lift)		Tbg. or Csg.)
Upper Completion	PICTURED CLIFFS							Gas		Flow		Tubing
Lower Completion	MESAVERDE							Gas		Flow		Tubing
						FLOW SHUT-IN		<del> </del>				
Upper Completion	Hour	, date shi 06/13/2		Length of time shut-in 192 Hours			SI press. psig 342			Stabilized? (Yes		
Lower Completion		06/13/2	002		144 Ho	ours		514				
						FLOW TE	ST NO.	1				
Commenced	at (hou	r,date)*		0	6/19/2002			Zone producing (Upper or Lower) LOWER				
TIME	LAPSED TIME			PRESSURE			PROD. ZONE					
(hour,date)		SINC	3*	Upper Co	mpletion	Lower Comp	letion	TEMP		REMARKS		
06/20/2002		168 H	ours	34	2	514						
06/21/2002 192 Hours		ours	34	12	196			lower	lower zone on @ 10:42a.m.			
									upper	zone on @ 1:0	0 p.m.	
			,									
Production rate	e during	test										
Oil		BOPD	based on _		Bbls. i	n	Hours		Grav		GOR	
Gas:				MCFPD; 1	ested thru	(Orifice or Mete	r):					
					MID	TECT CHUT P	i <b>DD</b> Dee	TIDE DATA				
Upper Completion	Hou	r, date sh	ut-in	MID-TEST SHUT-I						Stabilized? (Y	(Yes or No)	
Lower Completion	Hou	r, date sh	shut-in Length of time shut-in		Sl press. psig Stabilized			Stabilized? (Y	es or No	)		

5331902 302

(Continue on reverse side)

FLOW TEST NO. 2

Commenced at (hour, da	ate)**	-	Zone producing (Upper or Lower):				
TIME	LAPSED TIME	PRES	SURE	PROD. ZONE	GCHAPICS		
(hour, date)	SINCE **	Upper Completion	Lower Completion	on TEMP.	REMARKS		
Production rate dur	ring test						
Oil:	BC	OPD based on	Bbls. in	Hours	Grav GOR		
Gas:		MCFPI	D: Tested thru (C	Orifice or Meter):			
Remarks:							
·		· · · · · · · · · · · · · · · · · · ·					
I hereby certify that	t the information he	di 10 2 ntained is true	and complete to	the best of my knowled	ge.		
Approved		19			ton Resources		
New Mexico Oi	1 Conservation Divis	sion		By Wine	age		
By Charle	u / terr	error and		Title Operations A	Associate		
Title	T WALL & WAS INSTITUTED.	ation, edit. Si	Date Monday, July 01, 2002				

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