Submit 3 Copies To Appropriate District Office State of New		Form C-103
<u>District 1</u> Energy, Minerals and N	atural Resources	Revised March 25, 1999 WELL API NO.
District II		30-045-31023
811 South First, Artesia, NM 88210 OIL CONSERVATION	ON DIVISION	
District III 2040 South P	acheco	5. Indicate Type of Lease  STATE   FEE
1000 Rio Brazos Rd., Aztec, NM 87410 <u>District IV</u> Santa Fe, NM	87505	6. State Oil & Gas Lease No.
		NMSF-078988
SUNDRY NOTICES AND REPORTS ON WELLS  7. Lease Name or Unit Agreement (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A Name:		
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		
1. Type of Well:	S not 2002	NORTHEAST BLANCO UNIT
Oil Well Gas Well Other:	C)	
2. Name of Operator: Devon Energy Production Co. L.P.		8. Well No. 323
Address of Operator:		Pool name or Wildcat:
20 North Broadway, Oklahoma City, OK 73102 Basin-Dakota		
Attn: Diane Busch		
3. Well Location		
Unit Letter Ø: 1777 feet from the North line and 1375 feet from the West line.		
Out better 20. 1777 feet from the North line and 1373 feet from the West line.		
Section: 19 Township 31N Range		
10. Elevation (Show whether DR, RKB, RT, GR, etc.) 6397' GR		
11. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data		
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:		
PERFORM REMEDIAL WORK  PLUG AND ABANDON	REMEDIAL WORK	K ☐ ALTERING CASING☐
TEMPORARILY ABANDON   CHANGE PLANS	COMMENCE DRII	LLING OPNS.  PLUG AND ABANDONMENT
	CASING TEST AN	
COMPLETION	CEMENT JOB	
	OTHER:	
12. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompilation.		
Approval is requested to isolate the Basin-Dakota pool, perforate, frac, and test the Blanco-Mesaverde pool, then downhole commingle production from both zones. Please refer to attached exhibits.		
commingre production from both zones. Trease refer to attached exhibits.		
DHC 929AZ		
I hereby certify that the information above is true and complete to the best of my knowledge and belief.		
SIGNATURE TITLE Sr. Operations Technician DATE 10/11/02		
Type or print name Diane Busch	Telephone No. (405)	228-4362
(This space for State use)	DEPEND on	0071
APPPROVED BY STATE DATE DATE		
Conditions of approval, if any:		

## ATTACHMENTS TO APPLICATION TO DOWNHOLE COMMINGLE

The following information is being provided as supporting data for application to downhole commingle production from the following well:

Well: NEBU #323

Location: SE NW, Sec. 19, T31N, R6W San Juan County, New Mexico

- 1. The Division order that establishes the two subject pools as pre-approved pools for commingling is Case No. 12346, Order No. R-11363.
- 2. The pools to be commingled are the Blanco-Mesaverde (72319) and the Basin-Dakota (71599).
- 3. The subject well is presently completed in the Basin-Dakota pool, the perforated interval being 7844'-7892'. Proposed perforations in the Blanco-Mesaverde are as follows: Point Lookout Ss: 5883'-5604', Menefee Fm: 5492'-5368', Cliff House Ss: 5352'-5308', Lewis Sh, Otero member: 4594'-4526', Lewis Sh, Navajo City member: 4400'-4380'.
- 4. Commingling will not reduce the value of the total remaining production in this well. Produced waters from both the Basin-Dakota and the Blanco-Mesaverde have been found to be compatible, with no evidence of scaling problems on tubulars, or of precipitate fill in the wellbore. The increased volume of gas flowing up the tubing will facilitate the well's ability to unload itself, thus increasing production and reducing potential operational problems.
- 5. Notice has been sent to all interest owners in the spacing unit by certified mail (return receipt) of Devon Energy's intent to downhole commingle production. A copy of this notice and a list of all interest owners is attached.
- 6. A copy of this notice of intent to downhole commingle has been sent to the Bureau of Land Management.

## **Method of Allocation**

Devon Energy recommends the following procedure to allocate downhole commingled production between the Basin-Dakota and the Blanco-Mesaverde pools within the Northeast Blanco Unit:

- 1. The Basin-Dakota formation will be completed and flow tested for 30 -90 days to establish a stabilized rate and trend.
- 2. The Blanco-Mesaverde formation will be completed following the Dakota flow test and flow tested for 5 10 days to establish the initial production rate.
- 3. The two pools will be downhole commingled. Total well production will flow through common surface facilities and total produced gas will be measured using a conventional orifice plate meter tube.
- 4. Production will be allocated between the Mesa Verde and Dakota intervals by applying the variable percentage schedule to the daily total well production.

The Variable Percentage Schedule was derived using Mesa Verde and Dakota production type curves. These type curves were generated by normalizing production data from surrounding wells. The variable percentage schedule is required due to the dissimilar nature of the decline trends exhibited by the Mesa Verde and Dakota. Figure 1 depicts a typical Mesa Verde – Dakota production allocation. The actual percentages will vary from well to well, depending on well productivity.

100% 90% 80% I OTAL WHIL PROUDCHOL 70% 60% 50% 40% Mesa Verde % 5 30% 20% 10% 0% 0 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 Days On

Typical MV - DK Downhole Commingle Production % Schedule

Figure 1

The Basin-Dakota type curve was generated from normalized production of 40 offsetting Basin-Dakota producers. The Basin-Dakota type curve clearly defines the decline rate for the life of a well. Comparison of this type curve with the production schedule obtained by using flow test data demonstrates the reliability of this method for projecting production. (See Figure 2) The curve covers a three and one half year period with a variance in cumulative normalized production of only 165 MCF.

## Dakota Type Curve

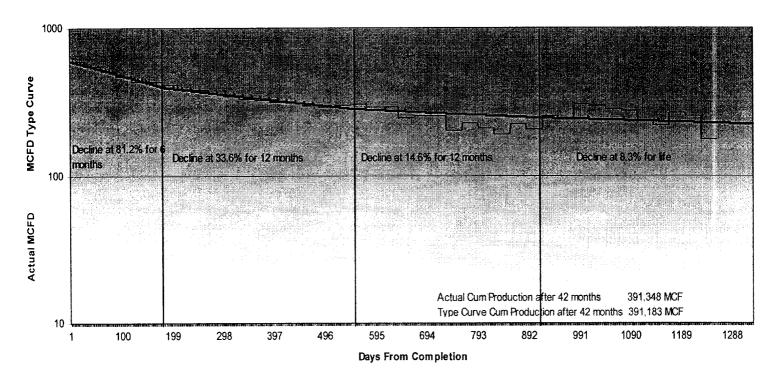


Figure 2