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Submit 3 Copies To Appropriate District Office	State of New Mexico			Form C-103
<u>District I</u> 1625 N. French Dr , Hobbs, NM 88240	Energy, Minerals and Natu	ral Resources	WELL API NO. 30-045-33763	Revised June 10, 2003
District II 1301 W. Grand Ave , Artesia, NM 88210	ΟΠ. ΟΟΝΟΓΡΙΜΑΤΙΟΝ ΡΙΜΙΟΙΟΝΙ			-£1
District III 1220 South St Francis Dr.			5. Indicate Type STATE	FEE
1000 Rio Brazos Rd , Aztec, NM 87410 Santa Fe, NM 87505			6. State Oil & Ga	
1220 S. St Francis Dr , Santa Fe, NM 87505			SF 079045	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A			7. Lease Name or	r Unit Agreement Name
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH			Northeast Blanco	Unit
PROPOSALS) 1. Type of Well:			8. Well Number	
Oil Well 🔲 Gas Well 🛛 Other			51M	
2. Name of Operator Devon Energy Production Company, L.P.			9. OGRID Number 6137	
3. Address of Operator			10. Pool name or Wildcat	
20 N. Broadway, Oklahoma City, OK 73102			Basin Dakota / Bl	anco Mesaverde
4. Well Location				
Unit LetterK:_1,840_	_feet from theSouth line a	and1,495fee	t from theWest_	line
Section 29 Township	31N Range 7W N	MPM Co	ounty San Juan	
	1. Elevation (Show whether DR			
	R 6,218' ropriate Box to Indicate N	ature of Notice	Report or Other	Data
NOTICE OF INTE			SEQUENT RE	
		REMEDIAL WOR		
TEMPORARILY ABANDON	HANGE PLANS	COMMENCE DRI	LLING OPNS.	PLUG AND
		CASING TEST AN CEMENT JOB	ND 🗌	
OTHER: Down-hole Commingle	\boxtimes	OTHER:		
13. Describe proposed or complete				
of starting any proposed work). or recompletion.	SEE RULE 1103. For Multip	le Completions: At	tach wellbore diagr	am of proposed completion
or recompletion.				
Approval is requested to down-hole	commingle production from t	he Blanco Mesave	erde and Basin Da	akota zones at an
unspecified future date. Please refe				
			R	CVD AUG 10 '07
			1	DIL CONS. DIV.
			•	DIST. 3
		DAC2	1. CA 1-	
I hereby certify that the information abo				
(AAA	-			
SIGNATURE MU	TITLE	Sr. Staff Operation	s Tech DA	TE <u>8-3-07</u>
Type or print name: Melisa Castro E-	mail address: Melisa.castro@d	vn.com Telepho	one No.: (405)552-7	7917
(This space for State use)			Inoncotor	A110
APPPROVED BY	Dep TITLE	uty Oil & Gas District #	inspector, 3	AUG 1 5 2007
Conditions of approval, if any:				
V		P.	\$	

ATTACHMENTS TO APPLICATION TO DOWNHOLE COMMINGLE

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

Well:	NEBU 51M
Location:	NE SW, Sec. 29, T31N, R7W
	San Juan County, New Mexico

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- 1. Case # 12346, Order # R-11363 establishes the two subject pools as pre-approved for commingling.
- 2. The pools to be commingled are the Blanco-Mesaverde (72319) and the Basin Dakota (71599).
- The subject well is presently completed in both zones flowing and measured separately. The perforated interval in the Basin-Dakota pool being 7,615'-7,781'. The perforated interval in the Blanco-Mesaverde pool being 4,147'-5,708'.
- 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 tubules, or of precipitate fill in the well bore. 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 down hole commingle production. A copy of this notice and a list of all working interest owners are attached.
- 6. A copy of this notice of intent to down hole 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:

- The Mesaverde and Basin-Dakota formations will be completed simultaneously.
- A single 2-3/8" tubing string will be run in the well, with a packer isolating the two horizons.
- The Dakota completion will be produced up the tubing string.
- The Mesaverde completion will be produced up the 2-3/8" x 4-1/2" annulus.
- Production from each zone will be measured separately using a 3 phase metering device prior to flowing through a mutual production separator. Total well stream gas will be measured using a conventional orifice plate meter tube located downstream of the production separator.
- The completions will be flow tested separately for approximately 90 days to establish a stabilized rate and trend.
- Following the testing period the packer will be removed and 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.
- 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 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.



Typical MV - DK Downhole Commingle Production % Schedule