

Submit 3 Copies To Appropriate District Office  
District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Ave., Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-103  
May 27, 2004

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-045-32144
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <input type="checkbox"/>		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator Devon Energy Production Co. L.P.		6. State Oil & Gas Lease No. SF-079010
3. Address of Operator PO Box 6459, Navajo Dam, NM 87419		7. Lease Name or Unit Agreement Name Northeast Blanco Unit
4. Well Location Unit Letter <u>E</u> : <u>1710'</u> feet from the <u>North</u> line and <u>690'</u> feet from the <u>West</u> line Section <u>24</u> Township <u>31N</u> Range <u>7W</u> NMPM County <u>San Juan</u>		8. Well Number <u>307N</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.)		9. OGRID Number 6137
Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/>		10. Pool name or Wildcat Blanco Mesaverde / Basin Dakota
Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____		
Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____		

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

**NOTICE OF INTENTION TO:**  
PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

**SUBSEQUENT REPORT OF:**  
REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ P AND A ☐  
CASING/CEMENT JOB ☐

OTHER: ☒ OTHER: ☐

13. 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 recompletion.

Approval is requested to down-hole commingle production from the Blanco Mesaverde and Basin Dakota zones. Please refer to attached exhibits.

DHC 1688 AZ

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☒ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE M.S. Zimmerman TITLE Senior Operations Technician DATE 10/29/04

Type or print name Melisa Zimmerman E-mail address: Melisa.zimmerman@dvn.com Telephone No. (405) 552-7917

**For State Use Only**

APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS DISTRICT, DIST. IV DATE NOV - 1 2004

## **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 307N  
Location: SW NW, Sec. 24, T31N, R7W  
San Juan County, New Mexico

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).
3. The subject well is presently completed in both zones flowing and measured separately. The perforated interval in the Basin-Dakota pool being 7842' - 7908'. The perforated interval in the Blanco-Mesaverde pool being 4394' - 5876'.
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

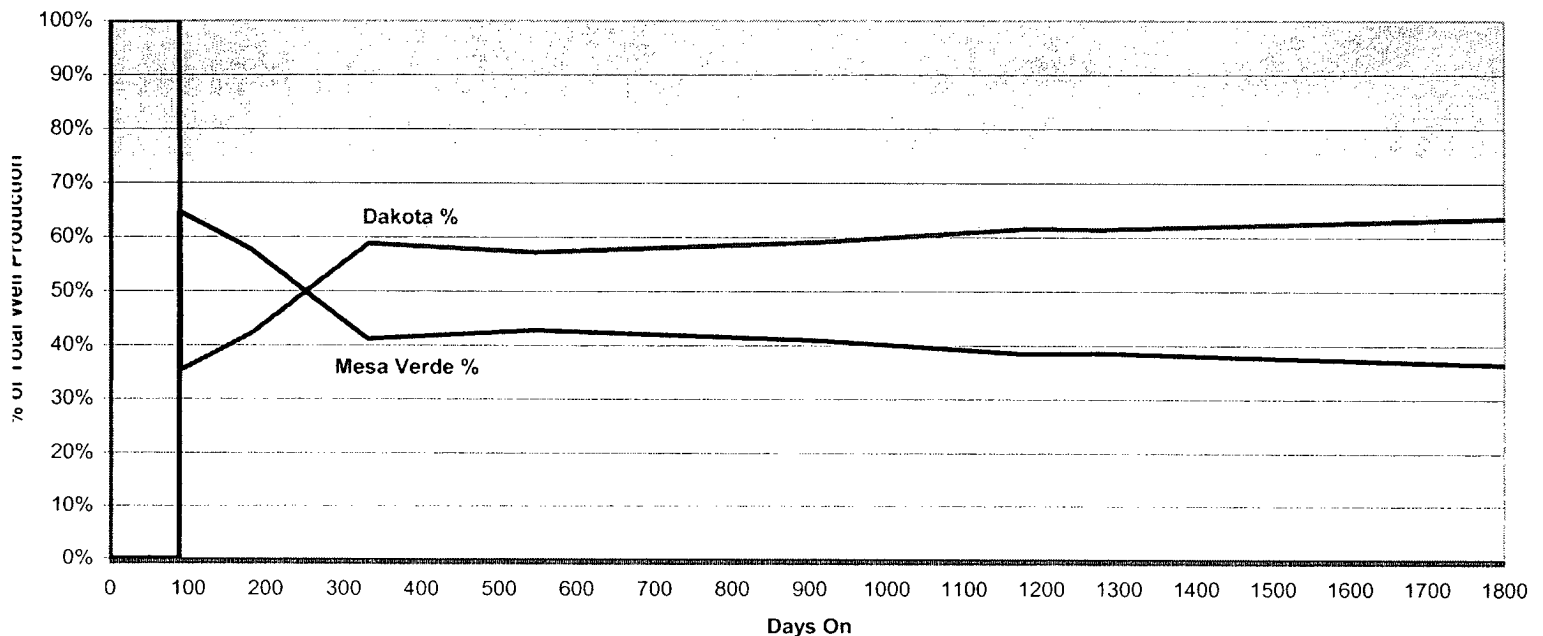


Figure 1

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

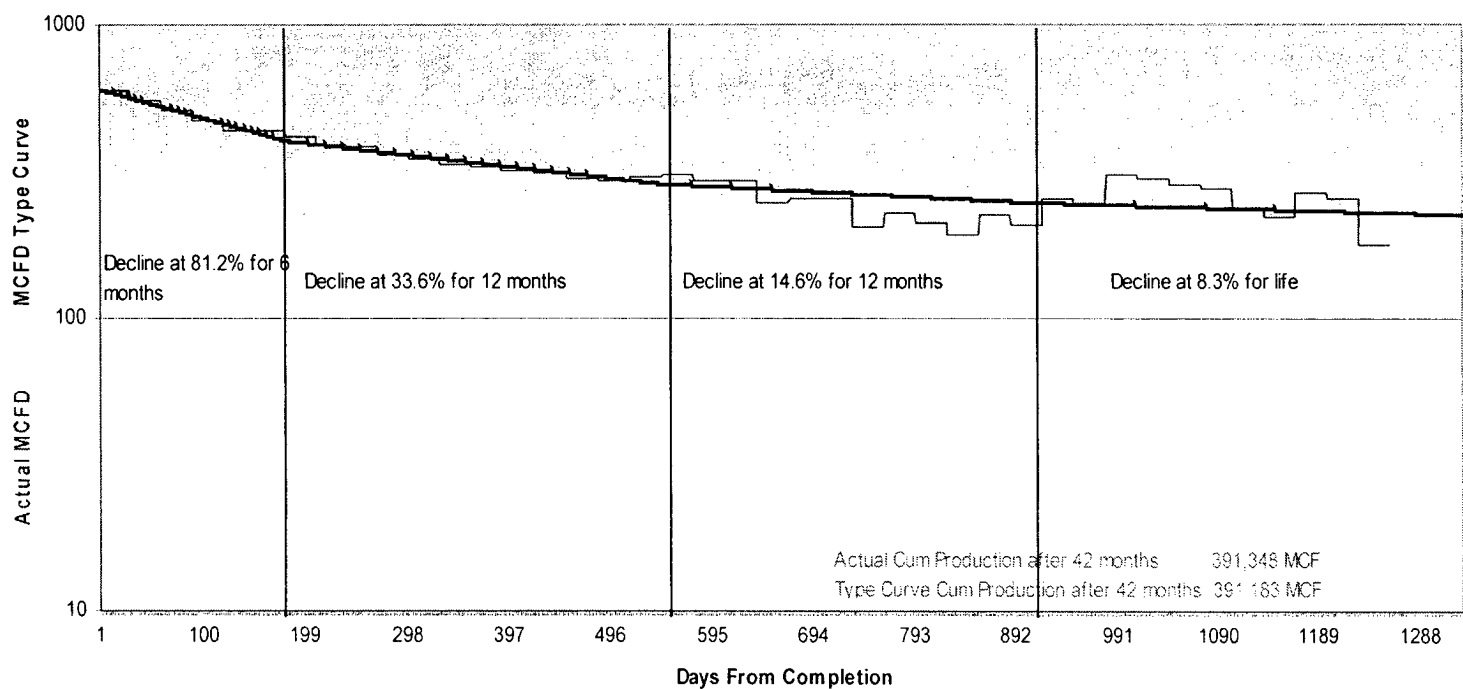


Figure 2