

Submit 3 Copies To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised March 25, 1999

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

WELL API NO.
30-045-29793

5. Indicate Type of Lease

STATE ☒ FEE ☐

6. State Oil & Gas Lease No.
SF-079043

7. Lease Name or Unit Agreement
Name:

NORTHEAST BLANCO UNIT

8. Well No.
310

Pool name or Wildcat:
Basin-Dakota

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPTEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:

Oil Well ☐ Gas Well ☒ Other:

2. Name of Operator: Devon Energy Production Co. L.P.

Address of Operator:

20 North Broadway, Suite 1500, Oklahoma City, OK 73102

3. Well Location

Unit Letter D: 1210 feet from the North line and 420 feet from the West line.

Section: 4

Township 30N

Range 7W

NMPM

County San Juan

10. Elevation (Show whether DR, RKB, RT, GR, etc.)
6131 GR

11. 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 COMPLETION ☐

OTHER: Down hole commingle ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐

CASING TEST AND 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.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Diana Booher TITLE Operations Engineer Associate DATE 4/26/02

Type or print name Diana Booher

Telephone No. (405) 552-4512

(This space for State use)

APPROVED BY

TITLE

DATE

Conditions of approval, if any:

DEPUTY OIL & GAS INSPECTOR, STATE OF NEW MEXICO
MAY - 2 2002

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 #310
Location: NWNW, Sec. 4, T30N, R7W
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 7598-7750'. Proposed perforations in the Blanco-Mesaverde are as follows: 4300-4378 (23 shots), 5085-5126 (8 shots), 5144-5358 (11 shots), and 5397-5721 (24 shots).
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.

Typical MV - DK Downhole Commingle
Production % Schedule

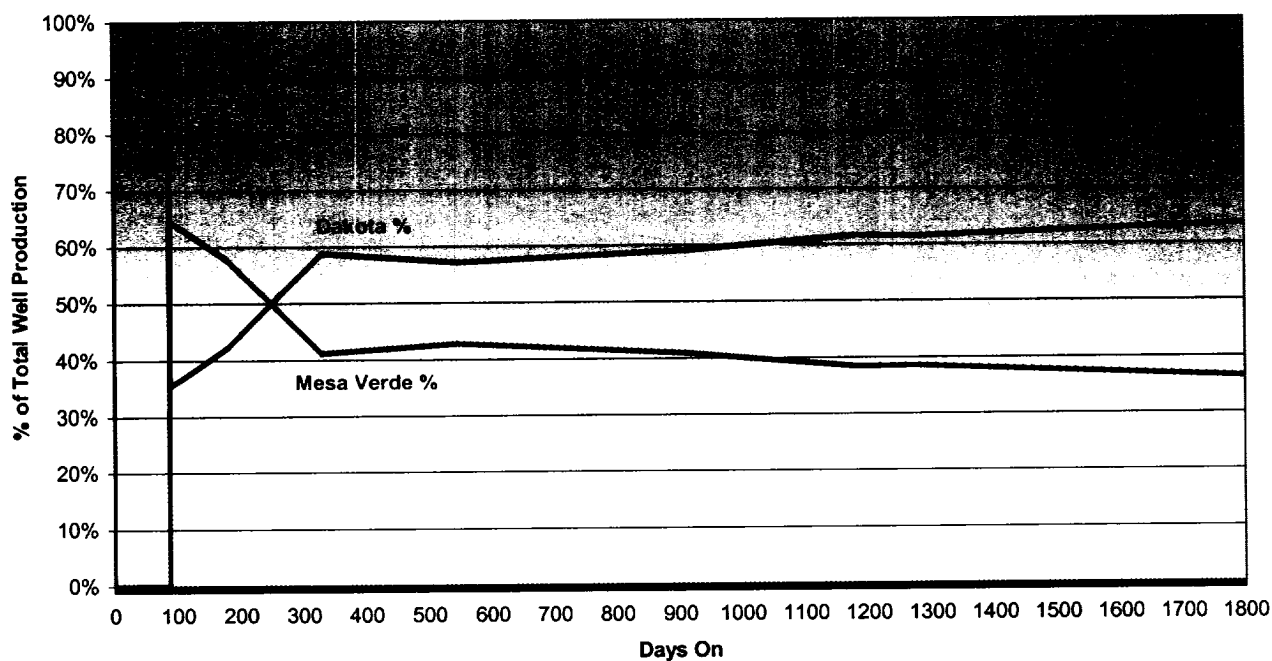


Figure 1

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.

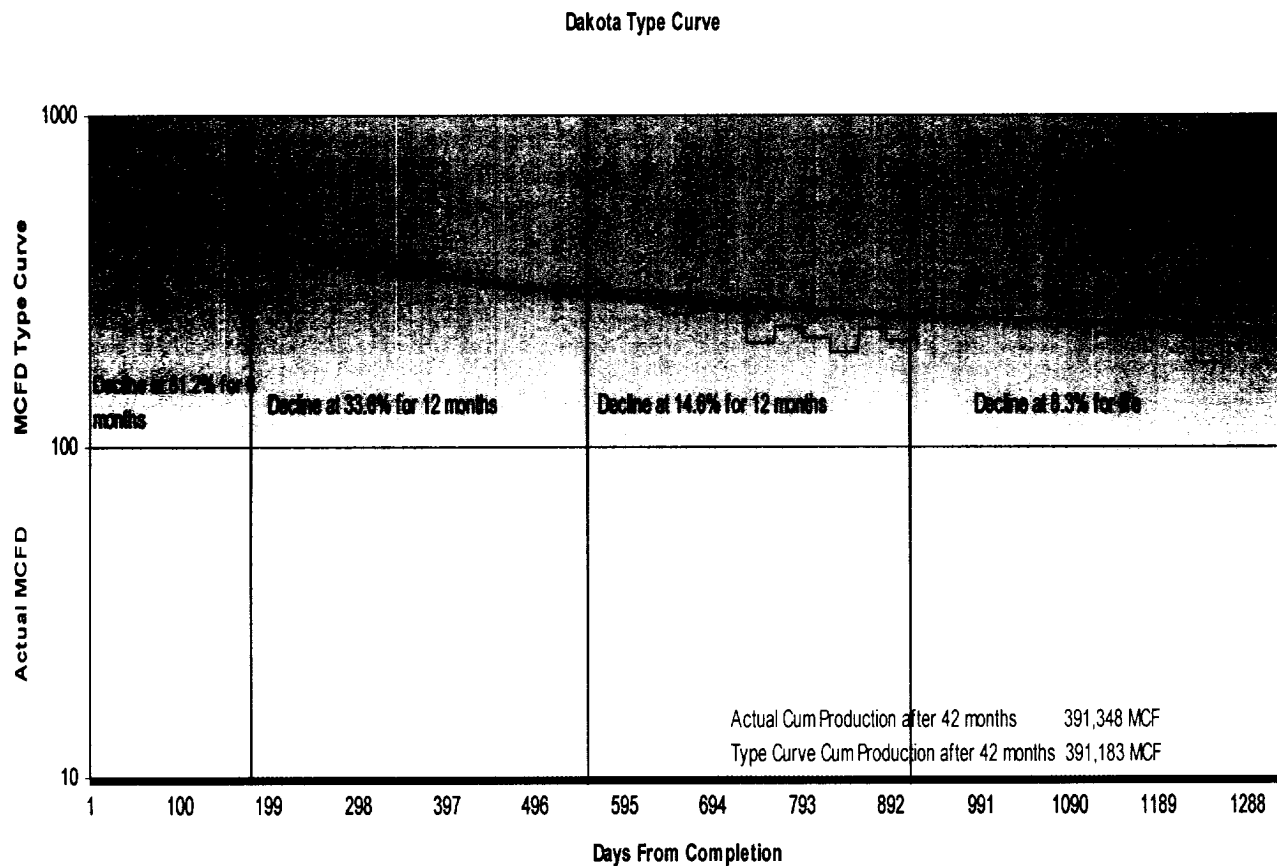


Figure 2

The Blanco – Mesa Verde type curve was generated from normalized production of 12 offsetting Blanco-Mesa Verde producers. 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 3) The curve covers a four year period with a variance in cumulative normalized production of only 3,382 MCF.

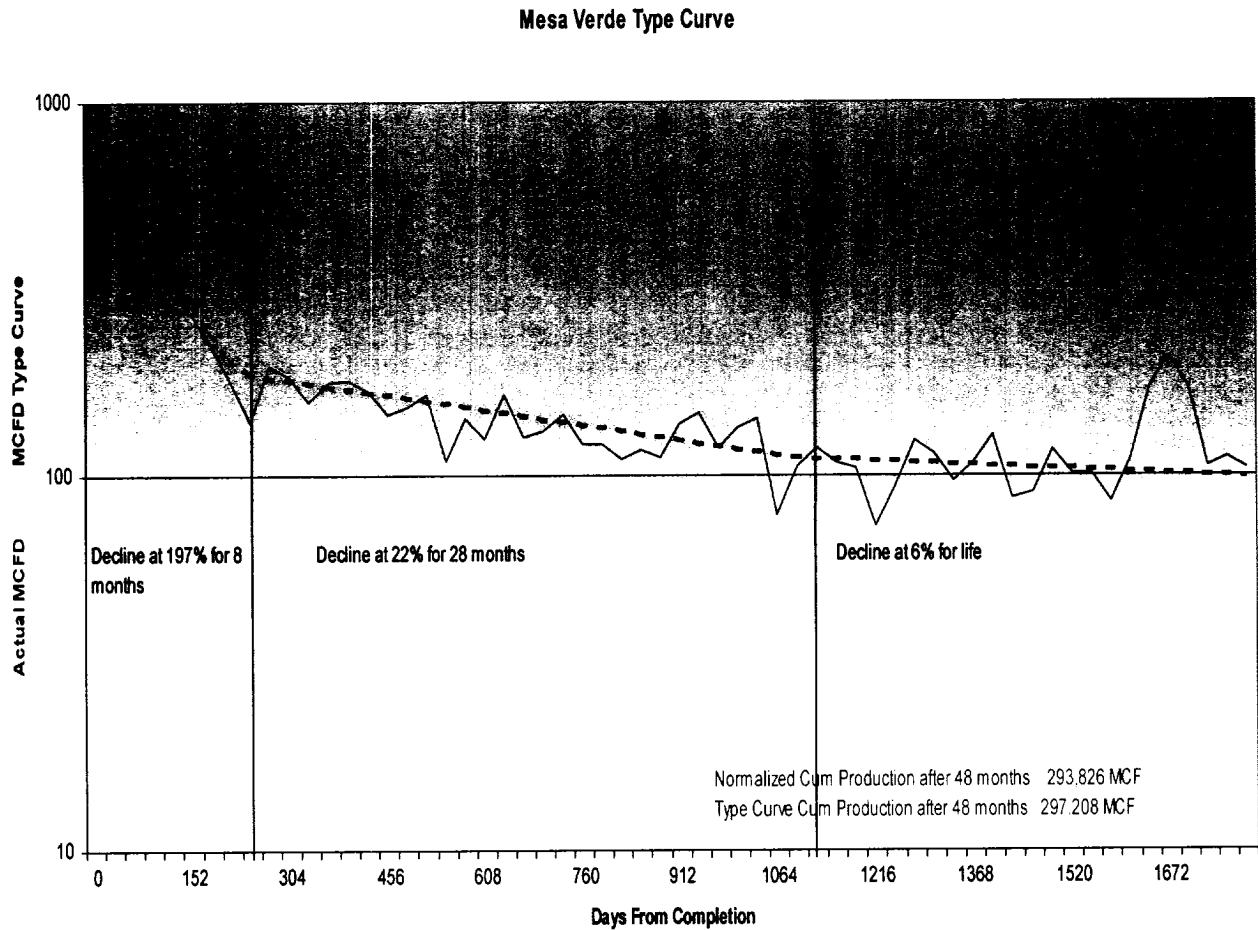


Figure 3

The Northeast Blanco Unit 310 has produced from the Dakota formation since December 2001. Production has followed the Dakota type curve schedule. Figure 4 is a plot of actual production and the established type curve schedule for the Dakota.

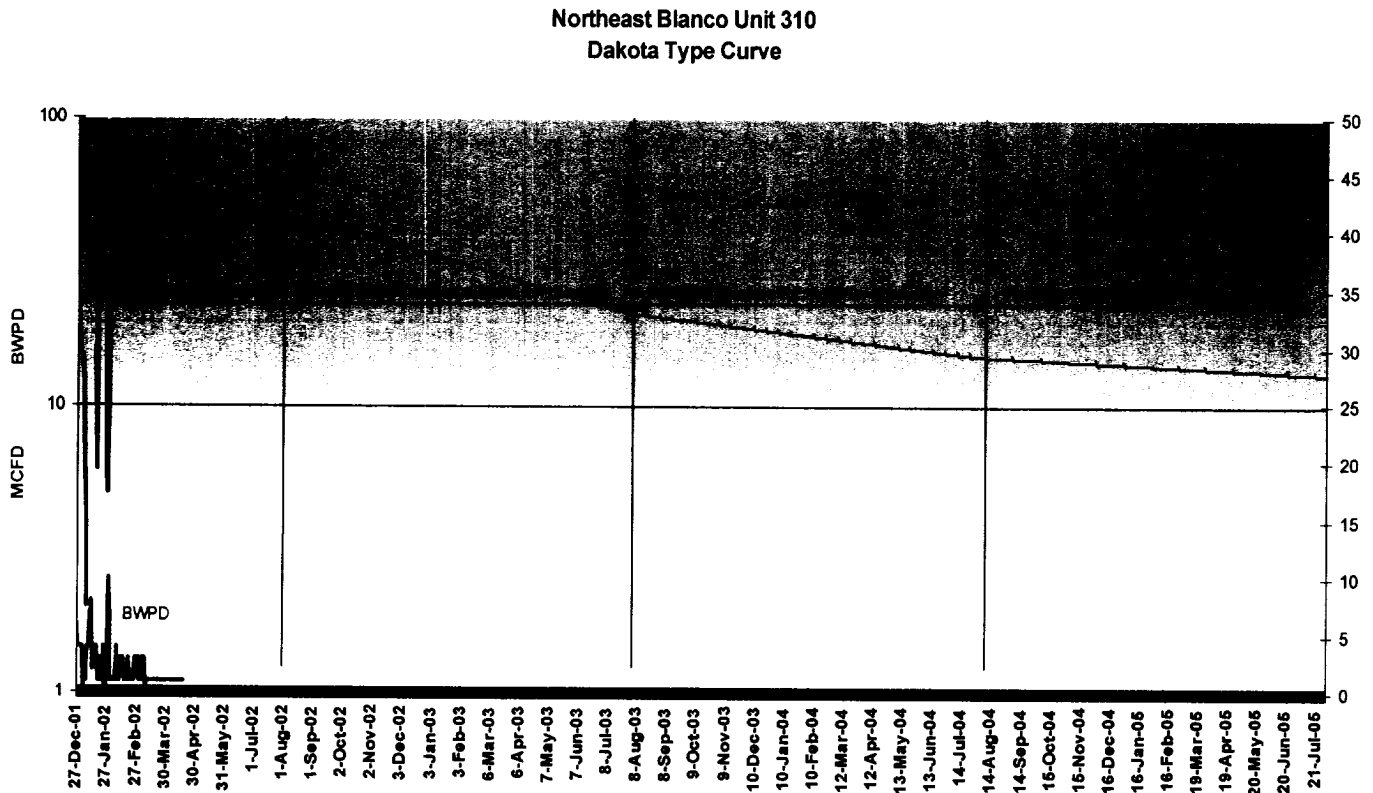


FIGURE 4

The 310 Mesa Verde schedule will be generated when a stabilized initial production rate has been established and input into the type curve schedule.



ENERGY PRODUCTION COMPANY, L.P.

20 North Broadway, Suite 1500
Oklahoma City, Oklahoma 73102-8260

Telephone: (405) 235-3611
Fax: (405) 552-4667

April 26, 2002

IN RE: Permit to Downhole Commingle
NEBU #310
San Juan County, New Mexico
CORRECTION:
API #30-045-29793
NWNW, 1210' FNL & 420' FWL
Sec. 4, T31N, R7W

VIA CERTIFIED MAIL

To all Working Interest Owners:

In accordance with Division Rule 303.C governing downhole commingling, you are hereby notified that Devon Energy Production Company, LP, as operator of the above-captioned well, intends to downhole commingle production from the Blanco-Mesaverde and Basin-Dakota Pools. These are two of the pre-approved pools for commingling by the State of New Mexico Oil Conservation Division of the Energy, Minerals, and Natural Resources Department. As such Devon Energy is required to submit application to the OCD on form C-103 (Sundry Notice) of our intent to commingle the two zones. **Please make a note of corrections in API number and location as captioned above.**

The Basin-Dakota has been producing in this well since 12/18/2001, during which time a production trend for this zone has been established. The production from the Blanco-Mesaverde and the Basin-Dakota will be allocated on a production trend based formula.

Please direct inquiries concerning this matter to Diana Booher at (405) 552-4512.

Sincerely,
DEVON ENERGY PRODUCTION COMPANY, LP

Diana Booher
Operations Engineer Associate

**NORTHEAST BLANCO UNIT #310 - MESAVERDE
WORKING INTEREST OWNERS**

Alan Alexander
Burlington Resources Oil & Gas Co.
P. O. Box 4289
Farmington, NM 87499-4289

Bryan Anderson
BP America Production Company
PO Box 3092
Houston, TX 77253-3092

Jim Ball
Phillips Petroleum Company
5525 Highway 64, NBU 3004
Farmington, NM 87401

Castle, Inc.
502 Keystone Drive
Warrendale, PA 15086

Eva G. Rodriguez
Conoco, Inc.
Lobo/San Juan Business Unit
600 N Dairy Ashford
Houston, TX 77079

T. H. McElvain Oil & Gas Ltd. Partnership
McElvain Oil & Gas Properties, Inc., GP
1050 17th Street, Suite 1800
Denver, CO 80265

NOJV Manager
Four Star Oil & Gas Company
P. O. Box 36366
Houston, TX 77236

Jane P. Ladouceur
109 Longsford
San Antonio, TX 78209

Charles E. Kelly, Ph.D.
895 Technology Blvd., Suite 201
Bozeman, MT 59718-6855

Robert E. Zimmerman, Jr.
P. O. Box 570174
Houston, TX 77257-0174

Charles W. Gay
c/o James M. Raymond, AIF
P. O. Box 291445
Kerrville, TX 78029-1445

Lorrayn Gay Hacker
c/o James M. Raymond, AIF
P. O. Box 291445
Kerrville, TX 78029-1445

James M. Raymond, Trustee
Maydell Miller Mast Trust
P. O. Box 291445
Kerrville, TX 78029-1445

James M. Raymond
P. O. Box 291445
Kerrville, TX 78029-1445

Suzanna Phillips Kelly
P. O. Box 147
Cameron, MT 59720

Suzanna P. Kelly Jr
8383 Chapman Road
Bozeman, MT 59715

Andrew B. Kelly, Jr.
2575 Sunset Drive
Atlanta, GA 30345

Gary Patterson
Wiser Oil Company
8115 Preston Road, Suite 400
Dallas, TX 75225

Darrell Gillen
Williams Production Company
One Williams Center
P. O. Box 3102 MS 37-4
Tulsa, OK 74101

McAfee Oil and Gas LLC
103 W. Boyd, Suite A
Norman, OK 73069

Kona, LTD
363 N. Sam Houston Pky East, Suite 1100
Houston, TX 77060

Bryan Basham
Diverse Energy Investments
1001 McKinney, Suite 520
Houston, TX 77002

**NORTHEAST BLANCO UNIT #310- DAKOTA
WORKING INTEREST OWNERS**

**Bryan Anderson
BP America Production Company
PO Box 3092
Houston, TX 77253-3092**

**Jim Ball
Phillips Petroleum Company
5525 Highway 64, NBU 3004
Farmington, NM 87401**

**Alan Alexander
Burlington Resources Oil & Gas Co.
P. O. Box 4289
Farmington, NM 87499-4289**

**Kona, LTD
363 N. Sam Houston Pky East, Suite 1100
Houston, TX 77060**

**Brian Basham
Diverse Energy Investments
1001 McKinney, Suite 520
Houston, TX 77002**

**Frank C. Davis III
3219 Bryn Mawr
Dallas, TX 75225**



ENERGY PRODUCTION COMPANY, L.P.

20 North Broadway, Suite 1500
Oklahoma City, Oklahoma 73102-8260

Telephone: (405) 235-3611
Fax: (405) 552-4667

Diana Booher, Operations Engineer Associate

April 24, 2002

IN RE: Permit to Downhole Commingle
NEBU #310, API #30-045-29793
NWNW, 1210' FNL & 420' FWL
Sec. 4, T31N, R7W
San Juan County, New Mexico

VIA CERTIFIED MAIL
Bureau of Land Management
1235 La Plata Highway
Farmington, NM 87401

Attn: Lee Otteni

Dear Mr. Otteni:

Devon Energy Production Company, L.P., in accordance with the New Mexico Oil Conservation Division Rule 303.C governing downhole commingling, wishes to notify your office of our intent to downhole commingle the Basin-Dakota and Blanco-Mesaverde pools in the above-captioned well.

To this end, please refer to the following attachments:

- Copy of NMOCD form C-103, with all attachments
- Copy of notification to working interest owners
- List of names and addresses of working interest owners in each pool

Please direct any inquiries regarding this matter to the undersigned at (405) 552-4512.

Sincerely,
DEVON ENERGY PRODUCTION COMPANY, L.P.

Diana Booher
Operations Engineer Associate

Attachments