

District I
1625 N. French Drive, Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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JUL 01 2003

OIL CONSERVATION
DIVISION

State of New Mexico
Energy, Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-107A
Revised June 10, 2003

APPLICATION TYPE
☒ Single Well
Establish Pre-Approved Pools
EXISTING WELLBORE
☒ Yes ☐ No

APPLICATION FOR DOWNHOLE COMMINGLING

Operator Devon Energy Prod. Co., L.P. Address 20 N. Broadway OKla. City, OK 73102
Lease Northeast Blanco Unit 319 Well No. N. Sec. 7-31N-6W County San Juan, NM
OGRID No. 6137 Property Code 19641 API No. 30-045-31089 Lease Type: ☒ Federal ☐ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	W.C. Basin Mancos		Basin Dakota
Pool Code	97232		71599
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	7239'-7260'		Perfs: 7977'-8083'
Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)	NR		NR
Oil Gravity or Gas BTU (Degree API or Gas BTU)			
Producing, Shut-In or New Zone	Producing		Shut-In CIBP @ 7400'
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Date: 6/22/03 Rates: 1023 MCFD, 5 BWPD	Date: Rates:	Date: 11/7/02 Rates: 270 MCFD, 0 BWPD
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.) *** ATTACHED	Oil Gas % %	Oil Gas % %	Oil Gas % %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones?
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?

Yes ☐ No ☒
Yes ☒ No ☐

Are all produced fluids from all commingled zones compatible with each other?

Yes ☒ No ☐

Will commingling decrease the value of production?

Yes ☐ No ☒

If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands
or the United States Bureau of Land Management been notified in writing of this application?

Yes ☒ No ☐

NMOCD Reference Case No. applicable to this well: _____

Attachments:

- C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- Production curve for each zone for at least one year. (If not available, attach explanation.)
- For zones with no production history, estimated production rates and supporting data.
- Data to support allocation method or formula.
- Notification list of working, royalty and overriding royalty interests for uncommon interest cases.
- Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

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

SIGNATURE Diane Busch TITLE SR Operations Tech DATE 6-26-03
TYPE OR PRINT NAME DIANE BUSCH TELEPHONE NO. (405) 228-7729
E-MAIL ADDRESS Diane.Busch@devn.com

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000

DISTRICT II
811 South First, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-31089	*Pool Code 72319/71599	*Pool Name Blanco Mesaverde/Basin Dakota
*Property Code 019641	*Property Name NEBU	*Well Number 319
*OGRID No. 006137	*Operator Name DEVON ENERGY Production Company, L.P.	*Elevation 6512

¹⁰ Surface Location

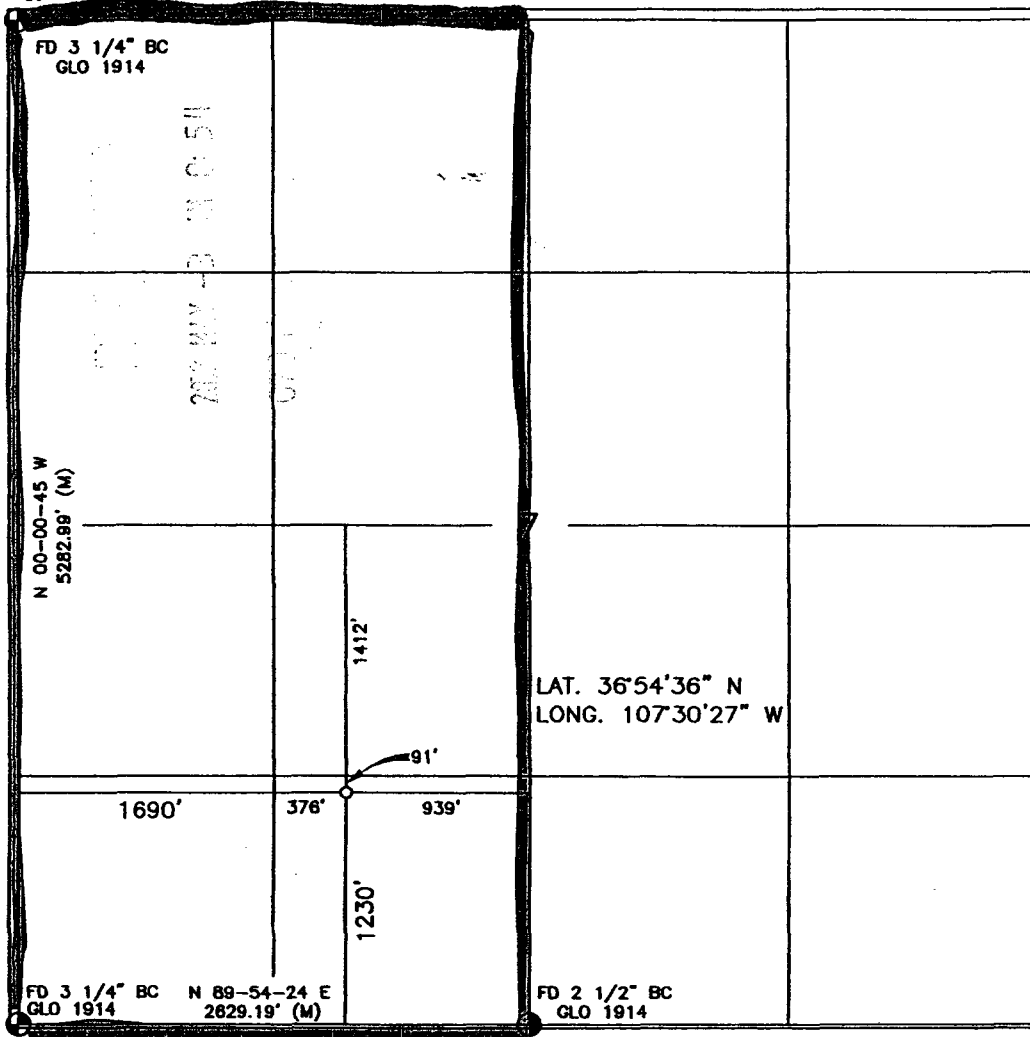
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	7	31-N	6-W		1230	SOUTH	1690	WEST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
*Dedicated Acres MV-W/320 DK-W/320			*Joint or Infill		*Consolidation Code		*Order No.		

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16



17 OPERATOR CERTIFICATION

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

Kim Walker

Signature
Kim Walker

Printed Name
Regulatory Technician

Title
4/30/02

Date

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

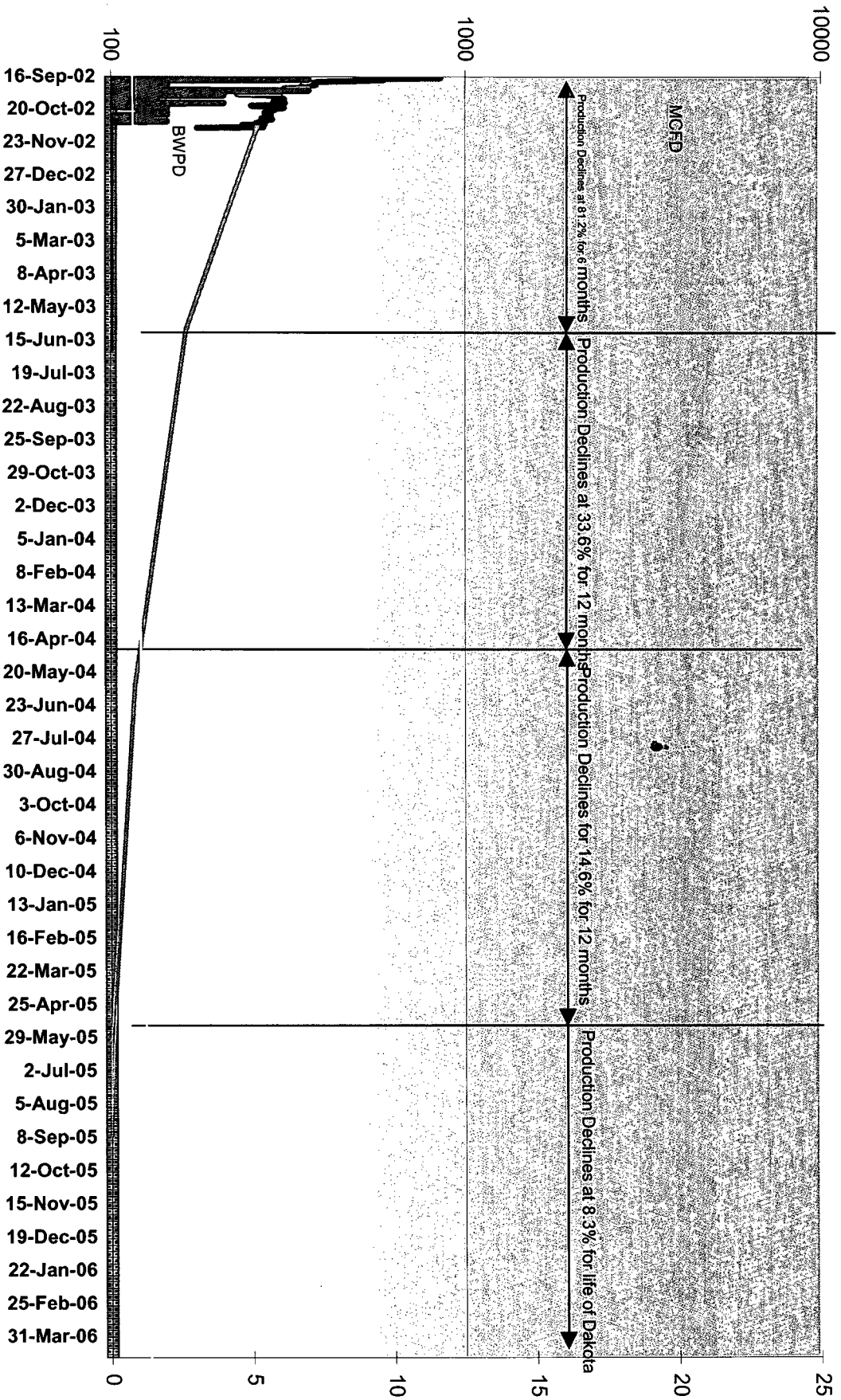
11/20/01

Date of Survey

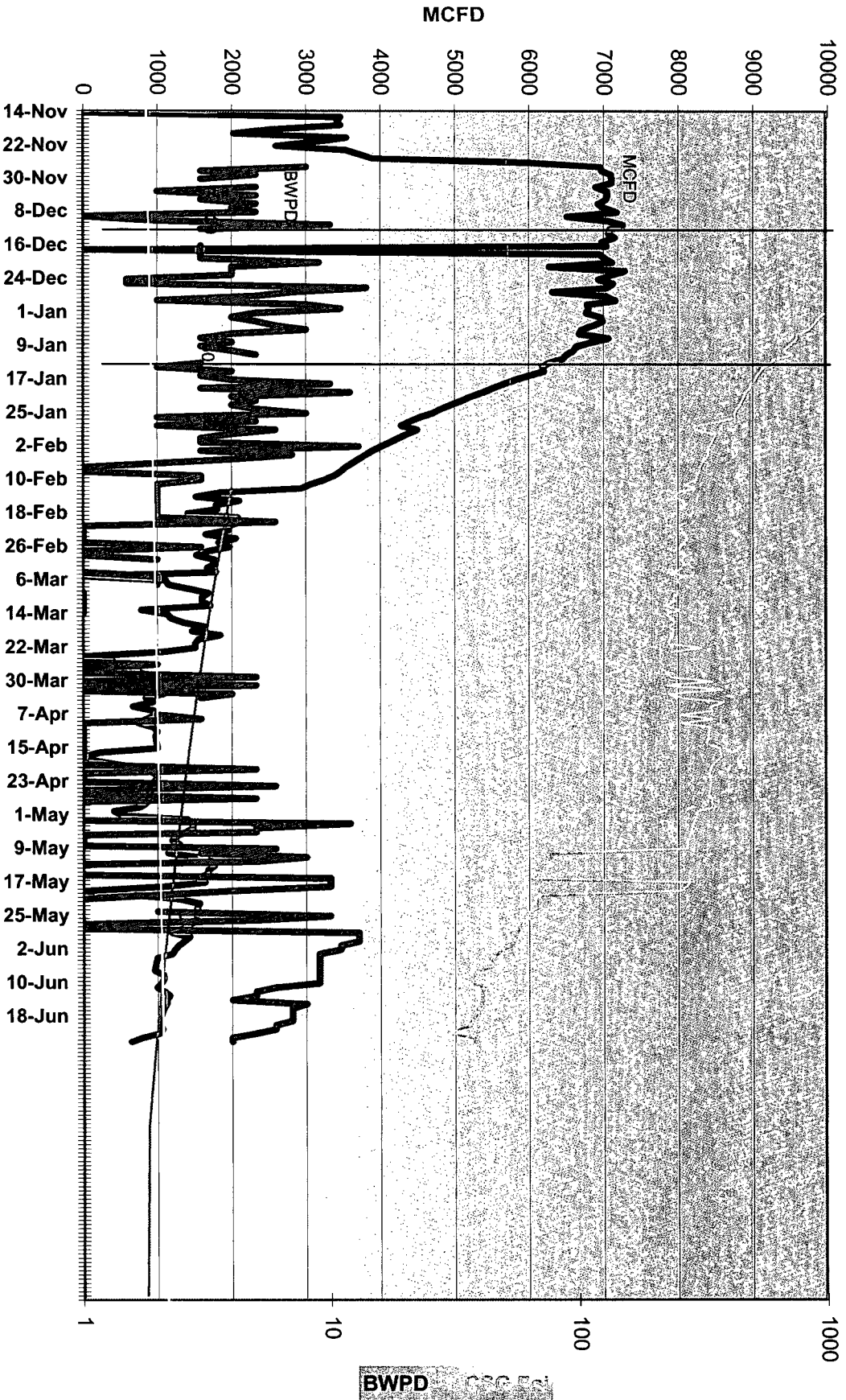
Signature of Professional Surveyor:



**Northeast Blanco Unit 319
Basin Dakota Type Curve**



NEBU 319
W.C. Basin Mancos



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 #319
Location: SE SW, Sec. 7, T31N, R6W
San Juan County, New Mexico

1. The pools to be commingled are the W.C. Basin Mancos (97232) and the Basin-Dakota (71599).
2. The subject well is presently completed in the Basin-Dakota pool, the perforated interval being 7977'-8083' and the W.C. Basin Mancos being 7257'-7260'. The Basin-Dakota is currently isolated under a CIBP at 7400'.
3. Commingling will not reduce the value of the total remaining production in this well. Produced waters from both the Basin-Dakota and the W.C. Basin Mancos 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.
4. 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.
5. A copy of this notice of intent to downhole commingle has been sent to the Bureau of Land Management.
6. Production curves attached. The Basin Dakota was completed on 9/6/02 and produced for 54 days. A CIBP was set @ 7400' and the W.C. Basin Mancos was completed on 11/11/02 and has produced for 223 days.

Method of Allocation

Devon Energy recommends the following procedure to allocate downhole commingled production between the Basin-Dakota and the W.C. Basin Mancos production from the Northeast Blanco Unit well 319:

- 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 Mancos 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 90-180 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 to the Dakota completion based on a type curve rate. The Mancos production will be obtained by subtracting the type trend Dakota production value from the total well stream production value.

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

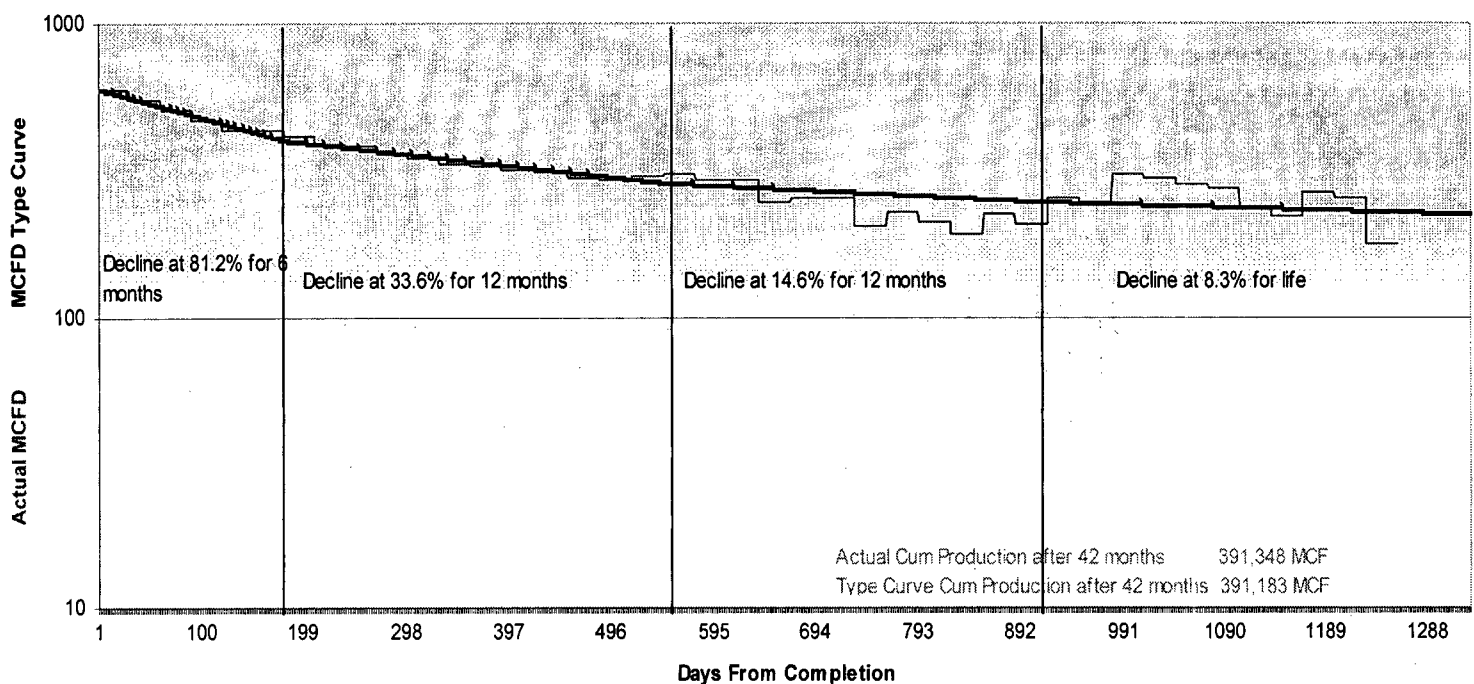


Figure 2



ENERGY PRODUCTION COMPANY, L.P.

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

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

May 16th, 2003

IN RE: Permit to Downhole Commingle Mancos/Dakota
NEBU #319, API #30-045-31089
SE SW, 1230' FSL & 1690' FWL
Sec. 7, T31N, R6W
San Juan County, New Mexico

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 W.C. Basin Mancos and Basin-Dakota pools. 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.

The Basin-Dakota and the W.C. Basin Mancos will be commingled following approval. The production from the W.C. Basin Mancos and the Basin-Dakota will be allocated on a production trend based formula.

Please direct inquiries concerning this matter to Diane Busch at (405) 228-4362.

Sincerely,
DEVON ENERGY PRODUCTION COMPANY, LP

Diane Busch
Sr. Operations Technician

**NORTHEAST BLANCO UNIT – NEBU 319 W.C. BASIN MANCOS
WORKING INTEREST OWNERS**

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

**Jim Ball
3 WL, Room WL 4054
ConocoPhillips Company
P O Box 2197
Houston, TX 77252-2197**

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

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

**BN Non-Coal LLC
B & N Co.
Devon Energy Production Company, L. P.**

**NORTHEAST BLANCO UNIT – DAKOTA
NEBU 319
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**

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

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