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

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-103
Revised March 25, 1999

WELL API NO.
30-045-31022

5. Indicate Type of Lease
STATE ☒ FEE ☐

6. State Oil & Gas Lease No.
SF-078988

SUNDRY NOTICES AND REPORTS ON WELLS
(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.)

7. Lease Name or Unit Agreement Name:
NORTHEAST BLANCO UNIT

1. Type of Well:
Oil Well ☐ Gas Well ☒ Other:

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

8. Well No.
322

Address of Operator:
Attn: Diane Busch
20 N. Broadway Oklahoma City, OK 73102

Pool name or Wildcat:
Basin-Dakota

3. Well Location

Unit Letter L: 1775 feet from the South line and 1305 feet from the West line.

Section: 18 Township 31N Range 6W NMPM County San Juan

10. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
6448' GL

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	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	PLUG AND ABANDONMENT	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPLETION	☐	CASING TEST AND CEMENT JOB	☐		
OTHER: Down hole commingle			☒	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.

OHC 973AZ

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 Technician DATE 10/31/02

Type or print name Diane Busch Telephone No. (405) 228-4362

(This space for State use)

Original Signed by CHARLIE PERRIN DEPUTY OIL & GAS INSPECTOR, DIST. #3 NOV - 1 2002

APPPROVED BY _____ TITLE _____ 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 #322
Location:	NW SW, Sec. 18, 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 7928'-8038'. Proposed perforations in the Blanco-Mesaverde are 4446'-5826'.

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:

- 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 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.

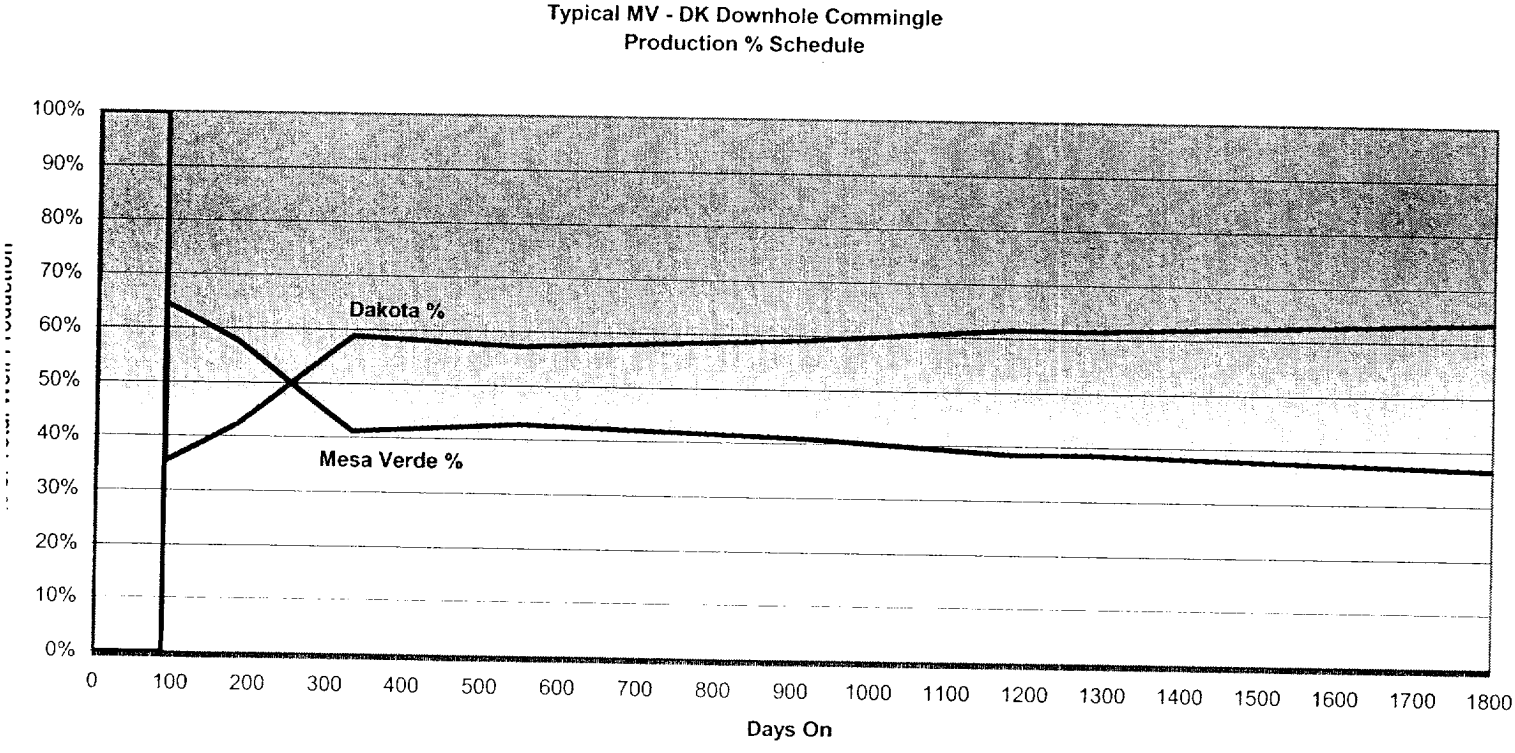

Figure 1

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.

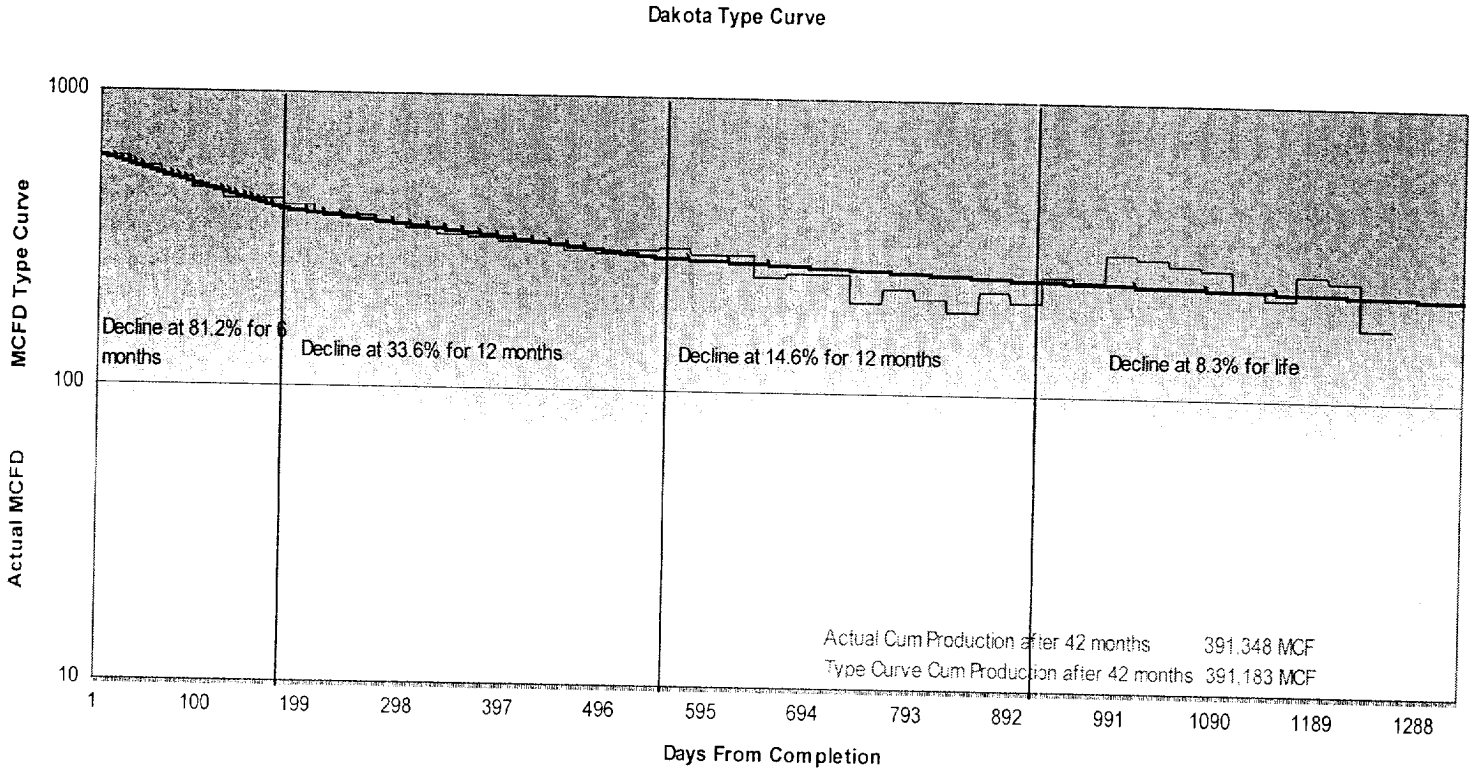

Figure 2

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.

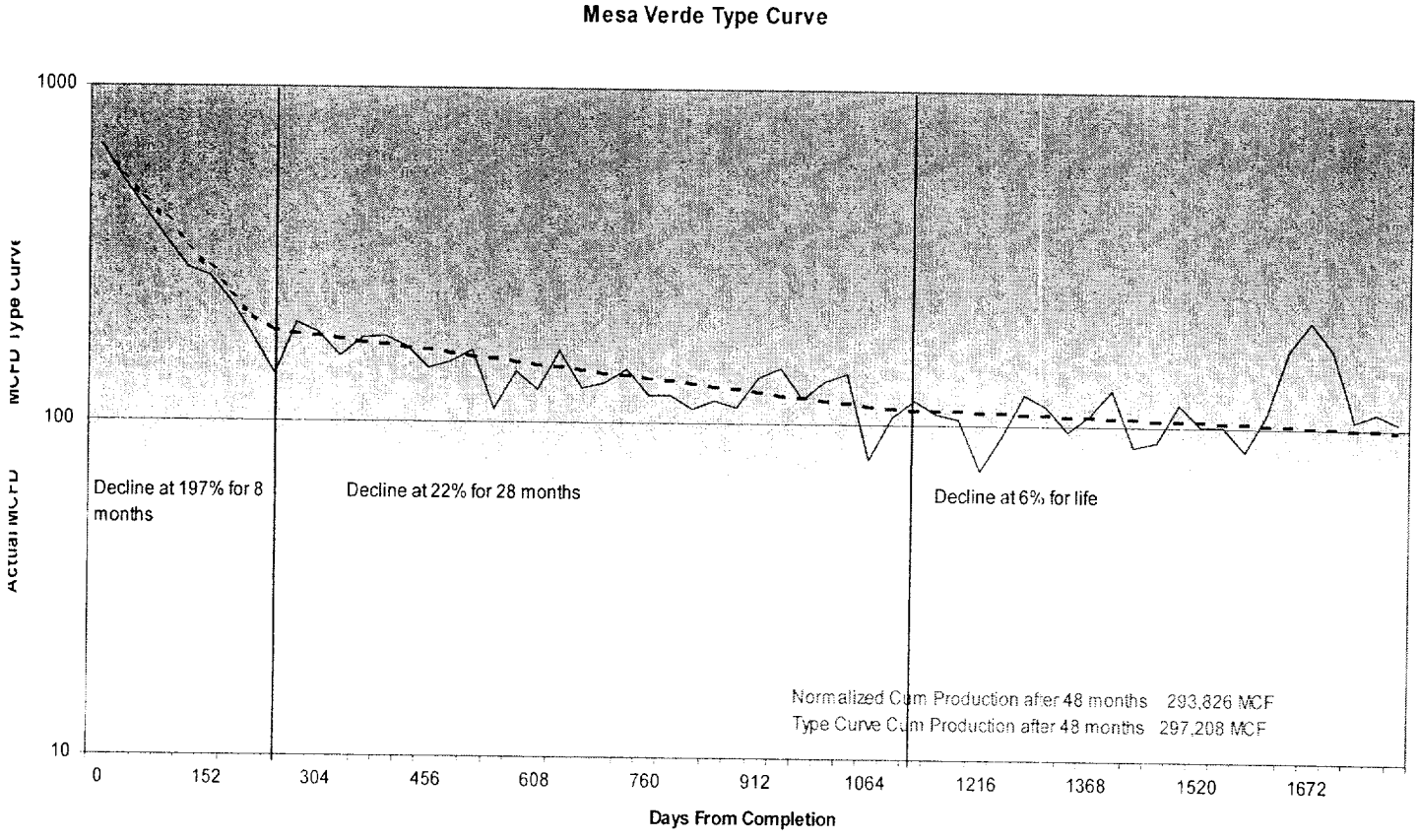

Figure 3