

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0137  
Expires March 31, 2007

5. Lease Serial No.  
**SF 079043**

6. If Indian, Allottee or Tribe Name

1a. Type of work: ☒ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.  
**Northeast Blanco Unit**

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.  
**NEBU 336**

2. Name of Operator  
**Devon Energy Production Company, L.P.**

9. API Well No.  
**3004532799**

3a. Address **PO Box 6459  
Farmington, NM 87419**

3b. Phone No. (include area code)  
**505-632-0244**

10. Field and Pool, or Exploratory  
**Basin Dakota**

4. Location of Well (Report location clearly and in accordance with any State requirements.)\*  
At surface **SW SE, Unit O, 1,010' FSL & 1,775' FEL**  
At proposed prod. zone

11. Sec., T. R. M. or Blk. and Survey or Area  
**0 Sec. 28, T31N, R7W**

14. Distance in miles and direction from nearest town or post office\*  
**Approximately 18.1 miles**

12. County or Parish  
**San Juan**

13. State  
**NM**

15. Distance from proposed\*  
location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any) **1,010'**

16. No. of acres in lease  
**2,315**

17. Spacing Unit dedicated to this well  
**320 Acres E/2**

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft.

19. Proposed Depth  
**8,021'**

20. BLM/BIA Bond No. on file

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
**GR 6,394'**

22. Approximate date work will start\*  
**02/15/2005**

23. Estimated duration  
**Unknown**

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature **M.S. [Signature]**  
Title **Senior Operations Technician**

Name (Printed/Typed)  
**Melisa Zimmerman**

Date  
**12-15-04**

Approved by (Signature) **[Signature]**  
Title **AFM**

Name (Printed/Typed)

Date  
**4-4-05**

Office  
**FFO**

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

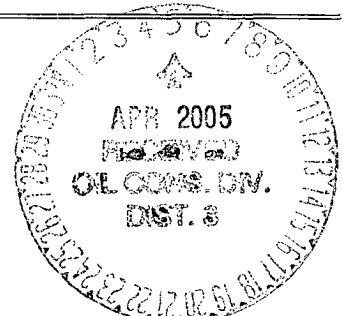
\*(Instructions on page 2)



OPERATOR

This action is subject to technical and  
procedural review pursuant to 43 CFR 3165.3  
and appeal pursuant to 43 CFR 3165.4

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS".





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

Form C-103

March 4, 2004

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

WELL API NO.

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 Number  
336

9. OGRID Number  
6137

10. Pool name or Wildcat  
Basin Dakota

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.)

1. Type of Well:

Oil Well ☐ Gas Well ☒ Other

2. Name of Operator

Devon Energy Production Company, L.P.

3. Address of Operator

PO Box 6459, Navajo Dam, NM 87419

4. Well Location

Unit Letter O : 1010' feet from the South line and 1775' feet from the East line

Section 28 Township 31N Range 7W NMPM County - SAN JUAN

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

GR 6,394'

Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)

Pit Location: UL O Sect 28 Twp 31N Rng 7W Pit type Drilling Depth to Groundwater >100' Distance from nearest fresh water well >1000'

Distance from nearest surface water >1000' Below-grade Tank Location UL  Sect  Twp  Rng  ;

feet from the  line and  feet from the  line

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 COMPLETION ☐

OTHER: **CONSTRUCT DRILLING PIT** ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐

CASING TEST AND CEMENT JOB ☐

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.

14. **DEVON ENERGY WILL BE CONSTRUCTING A LINED DRILLING PIT AND WE ANTICIPATE THE CLOSURE OF THE SAME PIT IN ACCORDANCE WITH OUR GENERAL PLAN SUBMITTED ON JUNE 4, 2004.**

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 ☐.

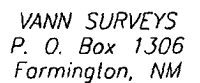
SIGNATURE M.S. Zimmerman TITLE Sr. Operations Technician DATE 12-15-04

Type or print name Melisa Zimmerman E-mail address: Melisa.zimmerman@dvn.com Telephone No. 405.552.7917

(This space for State use)

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 55 DATE APR - 5 2005  
Conditions of approval, if any:

Lat: 36°51'58"  
Long: 107°34'24"



**NEBU 336**  
**Unit O 28-31N-7W**  
**San Juan Co., NM**

**DRILLING PLAN**

**1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS & ANTICIPATED WATER, OIL, GAS OR MINERAL FORMATIONS:**

<b>Formation</b>	<b>TVD (ft)</b>	<b>Hydrocarbon/Water Bearing Zones</b>
San Jose	Surface	
Ojo Alamo	2249	Aquifer
Kirtland	2359	
Fruitland	2812	Gas
Pictured Cliffs Tongue	3217	Gas
Pictured Cliffs	3292	Gas
Lewis	3407	Gas
<b>Intermediate TD</b>	3507	
Mesaverde	4037	Gas
Chacra \ Otera	4415	Gas
Cliff House	5207	Gas
Menefee	5255	Gas
Point Lookout	5526	Gas
Mancos	5845	Gas
Gallup	6901	Gas
Greenhorn	7602	
Graneros	7643	Gas
Dakota	7764	Gas
Paguate	7776	
Cubero	7806	
Oak Canyon	7843	
Encinal Canyon	7862	

Lower Encinal Canyon	7910	
Burro Canyon	7950	
Morrison	7971	
TD	8021	

\*All shows of fresh water and minerals will be adequately protected and reported.

## **2. PRESSURE CONTROL EQUIPMENT:**

All well control equipment shall be in accordance with Onshore Order #2 for 2M systems.

The minimum specifications for pressure control equipment that will be provided are included on the attached schematic diagram, which shows the size, and pressure ratings.

2000# BOP With Pipe Rams and 2000# BOP With Blind Rams

Auxiliary equipment to be used:

- Upper kelly cock with handle available.

The manifold includes appropriate valves and adjustable chokes. The kill line will have one check valve. Ram type preventers will be pressure tested to full working pressure (utilizing a test plug) or 70% of the internal yield pressure (without a test plug) at:

- Initial installation
- Whenever any seal subject to test pressure is broken
- Following related repairs
- At 30 day intervals

Pipe and blind rams shall be activated each trip.

A BOPE pit level drill will be conducted weekly for each drilling crew.

All tests and drills will be recorded in the drilling log.

The accumulator will have sufficient capacity to close all rams and retain 200 psi above pre-charge pressure without the use of closing unit pumps.

Master controls will be at the accumulator. Anticipated bottom hole pressure is 3400 psi.

## **3. CASING & CEMENTING PROGRAM:**

A. The proposed casing program will be as follows:

TVD	Hole Size	Size	Grade	Weight	Thread	Condition
0-285	12-1/4"	9-5/8"	H-40	32#	STC	New
0-3507	8-3/4"	7"	K-55	23#	LTC	New
0- TD	6-1/4"	4-1/2"	J-55	11.6 #	LTC	New

The 9-5/8" surface pipe will be tested to 750 psi. All casing strings below the surface shoe shall be pressure tested to 0.22 psi/ft. of casing string length or 1500 psi, whichever is greater, but not to exceed 70% minimum internal yield.

**Surface:** The bottom three joints of the surface casing will have a minimum of one centralizer per joint and one centralizer every joint thereafter (Total 5 centralizers estimated)

**Intermediate:** The bottom three joints of the 7" casing will have a minimum of one centralizer per joint and one centralizer every fifth joint thereafter to above Ojo Alamo with turbolizers below and throughout the Ojo Alamo. (Total 12 centralizers, 3 turbolizers estimated).

**Production:** The bottom three joints will have a minimum of one centralizer per joint and one centralizer every fifth joint to 3400' (estimated 25 centralizers used). Centralizers will be open bow spring or basket bow spring type.

B. The proposed cementing program will be as follows:

**Surface String:** Cement will be circulated to surface.

**Lead:** 200 sx Class "B" with 100% Standard Cement, 2.00% CaCl<sub>2</sub>, .25 #/sx Flocele. Density: 15.6 lb/gal; Yield: 1.18 cuft/sx; Water: 5.24 gal/sx \*

\* **Minor variations possible due to existing conditions**

**Intermediate String:** Cement will be circulated to surface.

**Lead:** 500 sx Of 50/50/Std/ Poz, Yd-1.45, Water Gal/Sk 6.8, Mixed @ 13ppg Foamed W/ N2 Down To 9.0# Additives 2% Gel, 0.2% Versaset, 0.1% Diacel Lwl.

**Tail:** 75 sx 50/50 Poz with 94#/sx Standard Cement, 0.3% Halad-344, .25 #/sx Flocele. Density: 15.6 lb/gal; Yield: 1.18 cuft/sx; Water: 5.23 gal/sx \*

\* **Minor variations possible due to existing conditions**

**If hole conditions dictate an alternate cement design will be used:**

**Lead:** 575 sx 50/50 Poz with 50% Class B Cement, 50% San Juan Poz, .4% Halad-344, .1% CFR-3, 3% Bentonite, 5#/sx Gilsonite, .25#/sx Flocele. Density: 13.0 lb/gal; Yield: 1.46 cuft/sk; Water: 6.42 gal/sx \*

**Tail:** 75 sx 50/50 Poz, Yd-1.45, Water Gal/sx 6.8, Additives 2% Gel, 0.2% Versaset, 0.1% Diacel Lwl

\* **Minor variations possible due to existing conditions**

**Production String:** TOC designed to circulate 1000' into intermediate string, cement will tie into the intermediate casing as a minimum. Volumes may vary with actual well characteristics.

**Lead:** 250 sx 50/50 Poz with 2% Gel, 0.2% Halad, 0.1% CFR-3, 5 #/sx Gilsonite, 0.25 #/sx Flocele. Mixed at 13

ppg, 1.47 ft 3/sx foamed to 9 ppg, 2.18 ft 3/sx.

**Tail:** 450 sx 50/50 Poz with 50% Standard Cement, 50% San Juan Poz, 3% Bentonite, 1.40% Halad-9, .10% CFR-3, .10% HR-5, 5 #/sx Gilsonite, 0.25 #/sx Flocele. Density: 13.0 lb/gal; Yield: 1.47 cuft/sx; Water: 6.35 gal/sx \*

\* **Minor variations possible due to existing conditions**

**Actual volumes will be calculated and adjusted with caliper log prior to cementing.**

#### **4. DRILLING FLUIDS PROGRAM:**

<b>Interval</b>	<b>Type</b>	<b>Weight (ppg)</b>	<b>Viscosity</b>	<b>pH</b>	<b>Water Loss</b>	<b>Remarks</b>
0-3629'	Spud-foam	8.4-9.0	29-70	8.0	NC	FW gel, LSND or stiff foam
3507'-7764'	Air				NC	
7764' - TD	Air/N2 or Mud	8.5-9.0*	30-50	8.0-10.0	8-810cc @ TD	Low solids- non-dispersed. * min Wt. to control formation pressure

NC = no control

Sufficient quantities of mud material will be maintained on site or be readily accessible for the purpose of assuring well control. SPR will be recorded on daily drilling report after mudding up. Visual mud monitoring will be conducted during operations.

#### **5. EVALUATION PROGRAM:**

**Logs:** Density  
Neutron  
Induction

In the event open hole logs are not run in the well, a cased hole evaluation log will Be run from

**Survey:** Deviation surveys will be taken every 500' of the 8 3/4" hole, or first succeeding bit change. The hole will be air drilled from intermediate TD – well TD. The equipment used in this type of operation will not allow for single shot suveys without considerable operational delays. A survey will be taken at TD. Similar wells in this area have not shown significant deviation in this section of the hole.

**Cores:** None anticipated.

**DST's:** None anticipated.

#### **6. ABNORMAL CONDITIONS:**



The Fruitland Coal will be encountered within the 8 ¾" hole. Estimated formation pressure is 300 psi. No other abnormal pressures and/or temperatures are expected. No hydrogen sulfide should be present.

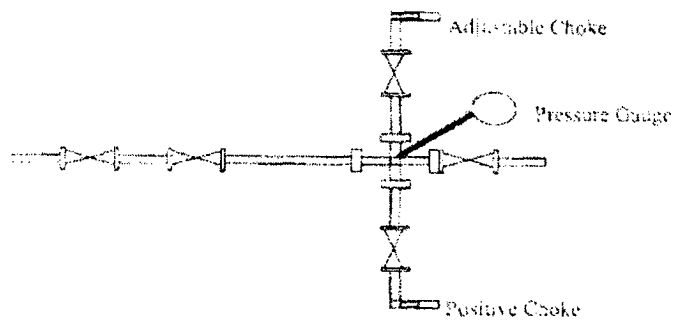
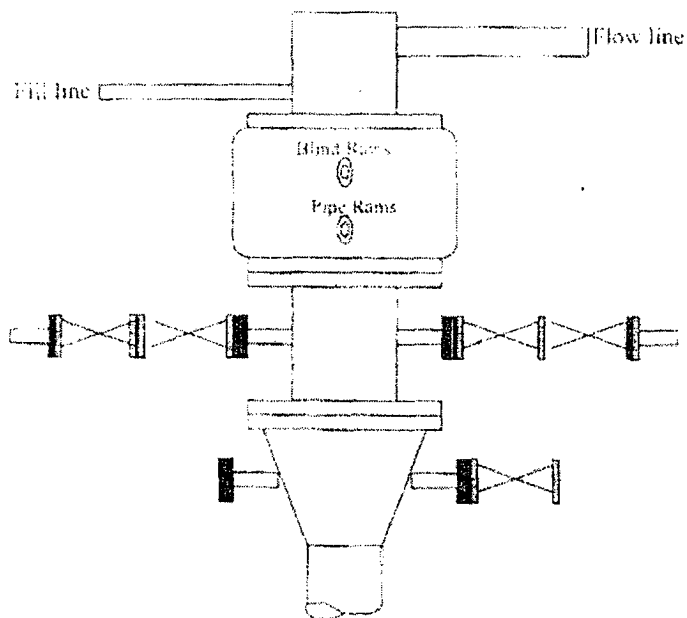
**7. OTHER INFORMATION:**

The anticipated starting date and duration of the operation will be as follows:

Starting Date:	Upon Approval
Duration:	20 days

If the well is completed as a dry hole or as a producer, Well Completion or Recompletion Report and Log (Form 3160-4) will be submitted within 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3160. Copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample descriptions, daily drilling reports, daily completion reports, and all other surveys or data obtained and compiled during the drilling, completion, and/or workover operations, will be submitted directly to the Authorized Officer or filed with Form 3160-4.

## Well Control Equipment 2,000 psi Configuration



All well control equipment designed to meet or exceed the Onshore Oil and Gas Order No. 2, BLM 43 CFR 160 requirements for 2M systems.