

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

**CONFIDENTIAL**

1a. Type of Work: ☒ DRILL ☐ REENTER

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

2. Name of Operator  
DEVON ENERGY CORP.

Contact: CHARLES MUZZY  
E-Mail: charles.muzzy@dmn.com

3a. Address  
20 NORTH BOARDWAY  
OKLAHOMA CITY, OK 73102

3b. Phone No. (include area code)  
Ph: 405.552.7955  
Fx: 405.552.4553

4. Location of Well (Report location clearly and in accordance with any State requirements.)\*

At surface SWNW Lot E 1750FNL 1290FWL  
At proposed prod. zone NWNW Lot D 1300FNL 1290FWL

14. Distance in miles and direction from nearest town or post office\*  
APPROXIMATELY 26 MILES SOUTH OF IGNACIO CO.

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

16. No. of Acres in Lease  
2560.00

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

19. Proposed Depth  
3390 MD  
3347 TVD

21. Elevations (Show whether DF, KB, RT, GL, etc.)  
6396 GL

22. Approximate date work will start  
07/17/2004

5. Lease Serial No.  
SF 078988

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.  
NEBU 436A

9. API Well No.

10. Field and Pool, or Exploratory  
BASIN FRUITLAND COAL

11. Sec., T., R., M., or Blk. and Survey or Area

Sec 19 T31N R6W Mer NMP  
SME: BLM

12. County or Parish  
SAN JUAN

13. State  
NM

17. Spacing Unit dedicated to this well

320.00 N/2

20. BLM/BIA Bond No. on file

23. Estimated duration  
20 DAYS

24. Attachments

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

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).

- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature  
(Electronic Submission)

Name (Printed/Typed)  
CHARLES MUZZY

Date  
04/20/2004

Title  
SR. STAFF OPERATIONS TECH

Approved by (Signature)

Name (Printed/Typed)

Date  
4/22/04

Title  
Acting Field Manager - Minerals

Office

Application approval does not warrant or certify 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. *High priority due to proximity to the Navajo Reservoir.*

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.

Additional Operator Remarks (see next page)

Electronic Submission #29761 verified by the BLM Well Information System  
For DEVON ENERGY CORP., sent to the Farmington

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

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

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

FOR Directional Survey NMCCD FARMINGTON

District I  
PO Box 1980, Hobbs NM 88241-1980  
District II  
PO Drawer KK, Azusa, NM 87211-0719  
District III  
1000 Rio Pecos Rd., Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-102  
Revised February 21, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

5F-078988

WELL LOCATION AND ACREAGE DEDICATION PLAT

* Well Number 30-045-32321		* Field Code 71629	* Pool Name Basin Fruitland Coal
* Pumping Code 19641	* Property Name NEBU		* Well Number # 436A
* ORSD No. 6137	* Operator Name Devon Energy Production Company, L.P.		* Elevation 6396

Surface Location

UL or Lot No.	Section	Township	Range	Lot No.	Feet from the	North/South line	Feet from the	East/West line	County
E	19	31 N	6 W		1750	NORTH	1290	WEST	SAN JUAN

Bottom Hole Location If Different From Surface

UL or Lot No.	Section	Township	Range	Lot No.	Feet from the	North/South line	Feet from the	East/West line	County
D	19	31 N	6 W		1300	NORTH	1290	WEST	SAN JUAN

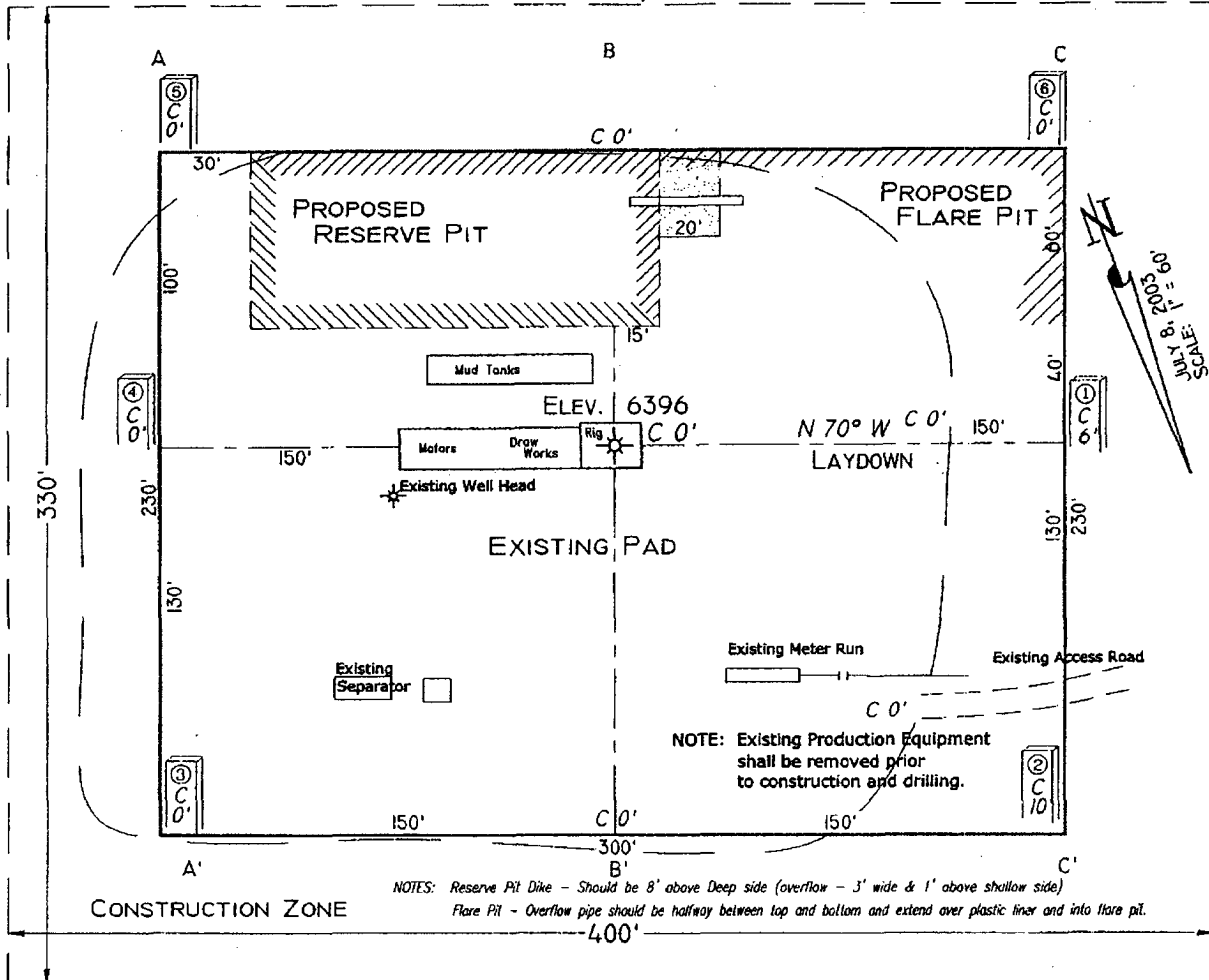
* Dedicated Acres 320	* Point of Entry	* Consolidation Code	* Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>Bottom Hole Location 1300' F/W, 1290' F/W</p> <p>Azimuth - 0° 45'</p> <p>1290'</p> <p>1750'</p> <p>19</p> <p>WWDK</p>	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p>Signature: <i>Charles Muzzy</i></p> <p>Printed Name: Charles Muzzy</p> <p>Title: Sr Operations Tech</p> <p>Date: 4-20-04</p>
	<p><b>SURVEYOR CERTIFICATION</b></p> <p>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.</p> <p>July 8, 2003</p> <p>Date of Survey</p> <p>Signature and Seal of Registered Surveyor</p> <p><i>GARY B. WILSON</i></p> <p>7016</p> <p>Certificate Number</p>

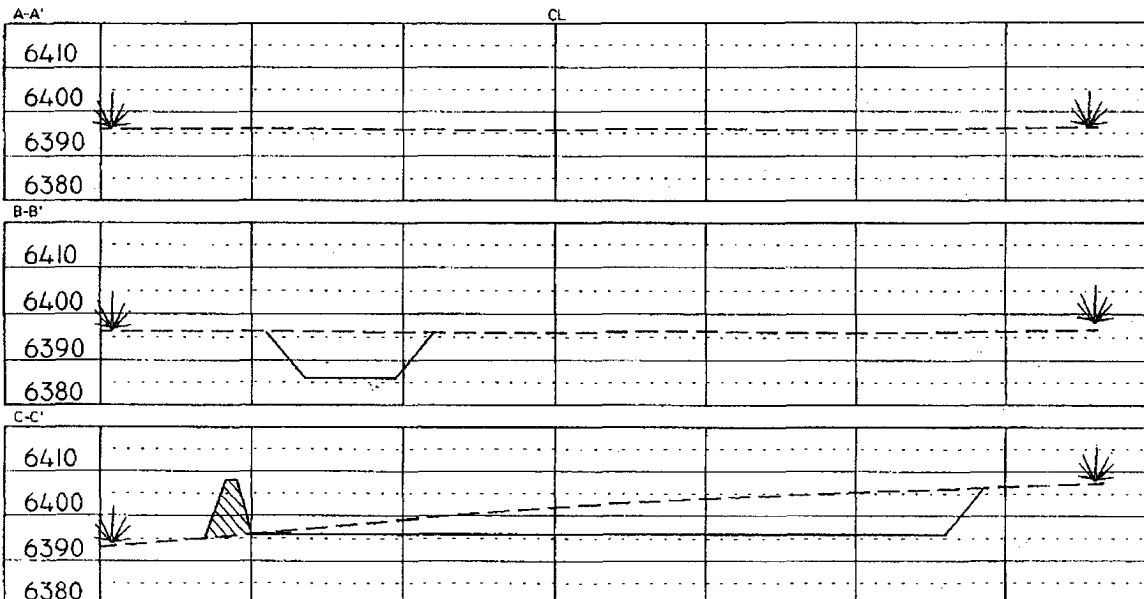
**PAD LAYOUT PLAN & PROFILE**  
**DEVON ENERGY PRODUCTION COMPANY, L.P.**  
**NEBU # 436A**  
**1750' F/NL 1290' F/WL**  
**SEC. 19, T31N, R6W, N.M.P.M.**  
**SAN JUAN COUNTY, NEW MEXICO**

**Lat: 36°53'15"**  
**Long: 107°30'32"**



Area of Construction Zone - 330'x400' or 3.03 acres, more or less.

SCALE: 1"=60'-HORIZ.  
1"=40'-VERT.



NOTE: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least two (2) working days prior to construction.

Cuts and fills shown are approximate - final finished elevation is to be adjusted so earthwork will balance. Corner stakes are approximate and do not include additional areas needed for sideslopes and drainages. Final Pad Dimensions are to be verified by Contractor.

VANN SURVEYS  
P. O. Box 1306  
Farmington, NM

**NEBU 436A  
Unit E 19-31N-6W  
San Juan Co., NM**

**DRILLING PLAN**

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

Formation	TYD (ft)	TMD (ft)	Hydrocarbon/Water Bearing Zones
San Jose	Surface	Surface	
Ojo Alamo	2328	2363	Aquifer
Kirtland	2461	2499	
Fruitland	2958	3001	Gas
Pictured Cliffs	3247	3290	Gas
PTD	3347	3390	

All shows of fresh water and minerals will be adequately protected and reported. A 100' sump will be drilled into the Picture cliffs. A mud logger will be on location collecting samples and measuring gas levels. Should the Picture Cliffs interval appear to be productive the sump will be filled with cuttings and abandoned

**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 1000 psi.

### 3. CASING & CEMENTING PROGRAM:

A. The proposed casing program will be as follows:

TVD	TMD	Hole Size	Size	Grade	Weight	Thread	Condition
0-285	0-285	12-1/4"	9-5/8"	H-40	32#	STC	New
0-2958	0-3001	8-3/4"	7"	J-55	23#	LTC	New
0- TD	0- TD	6-1/4"	5-1/2"*	J-55	15.5 #	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)

**7" Casing:** 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).

B. The proposed cementing program will be as follows:

#### **Surface String:**

9-5/8" Surface cemented in a 12-1/4" hole at 285'.  
32.3# H-40 ST&C 8 Rnd  
Saw tooth guide shoe  
Cemented with 200 sacks Class B mixed at 15.6 ppg w/.25 pps  
Celloflake, 2% calcium chloride. Yield 1.19 ft<sup>3</sup>/sx. \*  
Cement designed to circulate to surface.

238 ft<sup>3</sup>

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

#### **Production String:**

7" Production casing cemented in an 8-3/4" hole  
23# J-55 LT&C 8 Rnd  
Float collar  
Joint  
Float Shoe

765 ft<sup>3</sup>

Cement with

**Lead:** 500 sacks Class B 50/50 POZ, 3% gel, 5# gilsonite, 1/4"# Flocele, .1% CFR 3, .2% Halad 344, yield 1.47 ft<sup>3</sup>/sx.

**Tail:** 25 sx Class 'B'. 1.18 ft<sup>3</sup>/sx. \*

Cement designed to circulate to surface.

Pending hole conditions, cement baskets may be installed above TD

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

**Liner:**

5-1/2" liner\*

15.5# J-55 LT&C 8 Rnd

Shoe

Not Cemented ✓

\* May not be run pending hole conditions.

If well does not respond to proposed to completion, the 5 1/2 " liner will be cemented using 300 sacks class B 50/50 POZ, 3% gel, 5# gilsonite, 1/4"# Flocele, .1% CFR 3, .2% Halad 344, yield 1.47 ft<sup>3</sup>/sx. \*\*

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

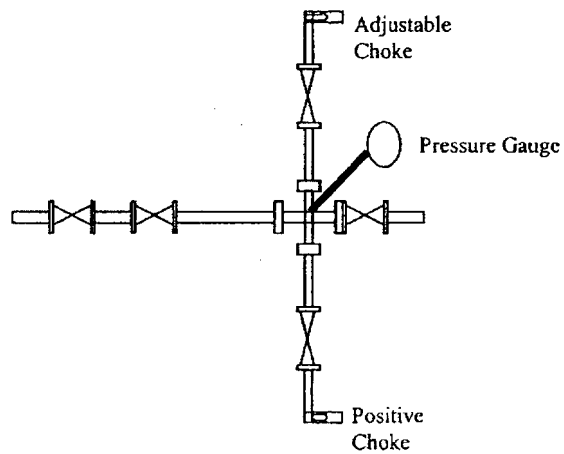
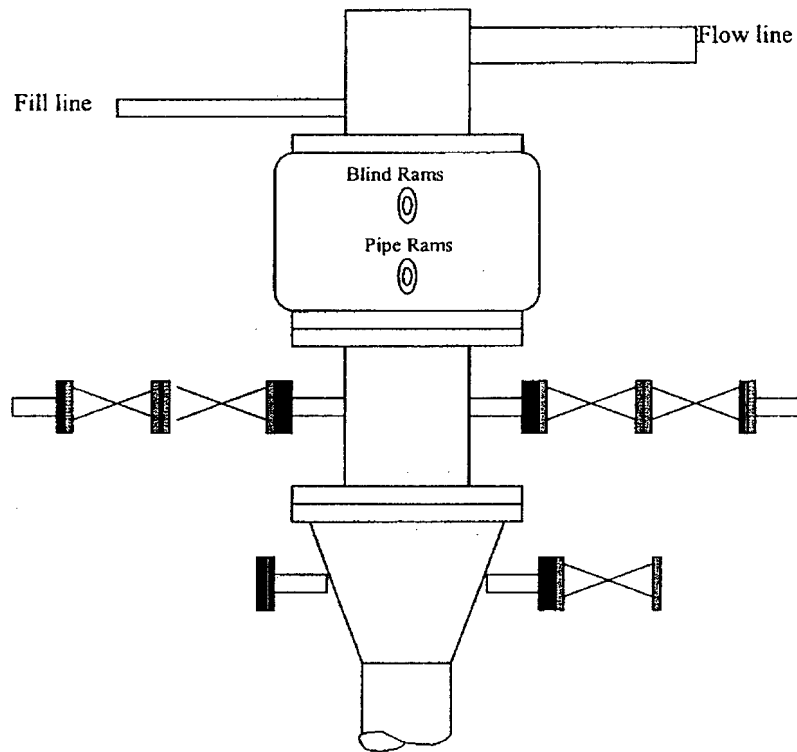
#### 4. DRILLING FLUIDS PROGRAM:

TVD	TMD	Type	Weight (ppg)	Viscosity	pH	Water Loss	Remarks
0-285	0-285	Spud	8.4-9.0	29-70	8.0	NC	FW gel,
285-2958	285-3001	LSND	8.4-9.0	29-70	8.0	10-12	LCM as needed
2958- TD	3001- TD	Air					Foam as needed

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.

## 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 3160 requirements for 2M systems.