Form 3160-3
(August 1999)

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

5. Lease Serial No.
SF 079003

6. If Indian, Allottee or Tribe Name

1a. Type of Work: ☒ DRILL ☐ REENTER

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

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

8. Lease Name and Well No.
NEBU 55E

2. Name of Operator
DEVON ENERGY CORP.
Contact: CHARLES MUZZY
E-Mail: charles.muzzy@dvn.com

9. API Well No.
30045 32260

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

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

10. Field and Pool, or Exploratory
BASIN DAKOTA

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

At surface NESE Lot I 1415FSL 1020FEL

At proposed prod. zone NESE Lot I 1415FSL 1020FEL

11. Sec., T., R., M., or Blk. and Survey or Area
Sec 22 T31N R7W Mer NMP

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

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)

16. No. of Acres in Lease
2560.00

17. Spacing Unit dedicated to this well
320.00 E/2

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

19. Proposed Depth
8141 MD

20. BLM/BIA Bond No. on file

21. Elevations (Show whether DF, KB, RT, GL, etc.
6486 GL

22. Approximate date work will start

23. Estimated duration

APR 2004
RECEIVED
OIL CONS. DIV.
DIST. 3

## 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
(Electronic Submission)

Name (Printed/Typed)
CHARLES MUZZY

Date
04/01/2004

Title
SR. STAFF OPERATIONS TECH

Approved by (Signature)
/s/ David J. Mankiewicz

Name (Printed/Typed)

Date
APR - 8 2004

Title

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.

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 #29183 verified by the BLM Well Information System**
**For DEVON ENERGY CORP., sent to the Farmington**

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".

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

NMOCD

District I
PO Box 1980, Hobbs NM 88241-1980
District II
PO Drawer KK, Artesia, NM 87211-0719
District III
1000 Rio Brazos 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

# WELL LOCATION AND ACREAGE DEDICATION PLAT

| 1 API Number | 2 Pool Code | 3 Pool Name |
|---|---|---|
| 30-045-32260 | 71599 | BASIN DAKOTA |

| 4 Property Code | 5 Property Name | 6 Well Number |
|---|---|---|
| 19641 | NEBU | # 55E |

| 7 OGRID No. | 8 Operator Name | 9 Elevation |
|---|---|---|
| 6137 | Devon Energy Production Company, L.P. | 6486 |

## 10 Surface Location

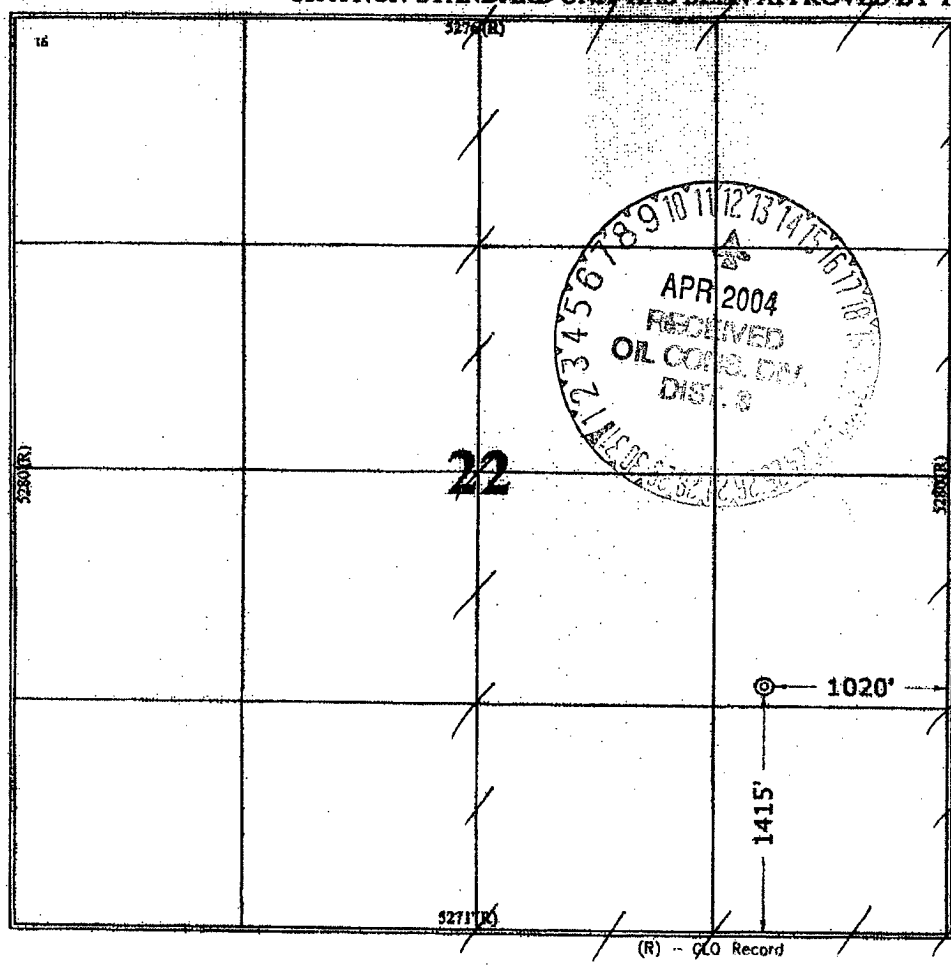
| UL or Lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| I | 22 | 31 N | 7 W | | 1415 | SOUTH | 1020 | EAST | SAN JUAN |

## 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 |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

| 12 Dedicated Acres | 13 Joint or Infill | 14 Consolidation Code | 15 Order No. |
|---|---|---|---|
| 320 | | | |

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




## 17 OPERATOR CERTIFICATION

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

Signature: Charles Muzzy
Printed Name: Charles Muzzy
Title: Sr. Operations Tech
Date: 4-1-04

## 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.*

August 15, 2003
Date of Survey

Signature and Seal of Professional Surveyor

GARY D. VANN
NEW MEXICO
REGISTERED PROFESSIONAL
7016

7016
Certificate Number

## 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 |
| 0-3600 | 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 sks Class "B" with 100% Standard Cement, 2.00% CaCl2, .25 #/sk Flocele. Density: 15.6 lb/gal; Yield: 1.18 cuft/sk; Water: 5.24 gal/sk *

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

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

**Lead:** 575 sks 50/50 Poz with 50% Class B Cement, 50% San Juan Poz, .4% Halad-344, .1% CFR-3, 3% Bentonite, 5#/sk Gilsonite, .25#/sk Flocele. Density: 13.0 lb/gal; Yield: 1.46 cuft/sk; Water: 6.42 gal/sk *
**Tail:** 75 sks 50/50 Poz with 94#/sk Standard Cement, 0.3% Halad-344, .25 #/sk Flocele. Density: 15.6 lb/gal; Yield: 1.18 cuft/sk; Water: 5.23 gal/sk *

If hole conditions dictate, an alternate, two stage cement design Will be used:
**Stage 1:** 85 sacks Class B 50/50 POZ, 3% gel, 5# Gilsonite, ¼# Flocele, 1/10% CFR 3, .2% Halad 344, Yield 1.47 ft3/sks. *
**Stage 2:** 450 sacks Class B 50/50 POZ, 3% gel, 5# Gilsonite, ¼# Flocele, .1% CFR 3, .2% Halad 344, Yield 1.47 ft3/sks. *

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

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

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

If hole conditions dictate, an alternate, two stage cement design will be used.
**Stage 1:** 325 sxs 50/50 POZ, 3% gel, .9% Halad 9, .2% CFR 3, %# Gilsonite & ¼# Flocele. Yield 1.47 13#. *
**Stage 2:** Lead: 450 sx 50/50 POZ, 3% Gel, .9% Halad 9, .2%

CFR 3, 5# Gilsonite & ¼# Flocele. Yield 1.47 13 ppg. *
**Tail:** 25 sx (5 bbls) Class B .4% Halad 9. Yield 1.18 15.6#. *
* ***Minor variations possible due to existing conditions***

## 4. DRILLING FLUIDS PROGRAM:

| Interval | Type | Weight (ppg) | Viscosity | pH | Water Loss | Remarks |
|---|---|---|---|---|---|---|
| 0-3600' | Spud-foam | 8.4-9.0 | 29-70 | 8.0 | NC | FW gel, LSND or stiff foam |
| 3600'-7903' | Air | | | | NC | |
| 7903' - 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 ¾" 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.

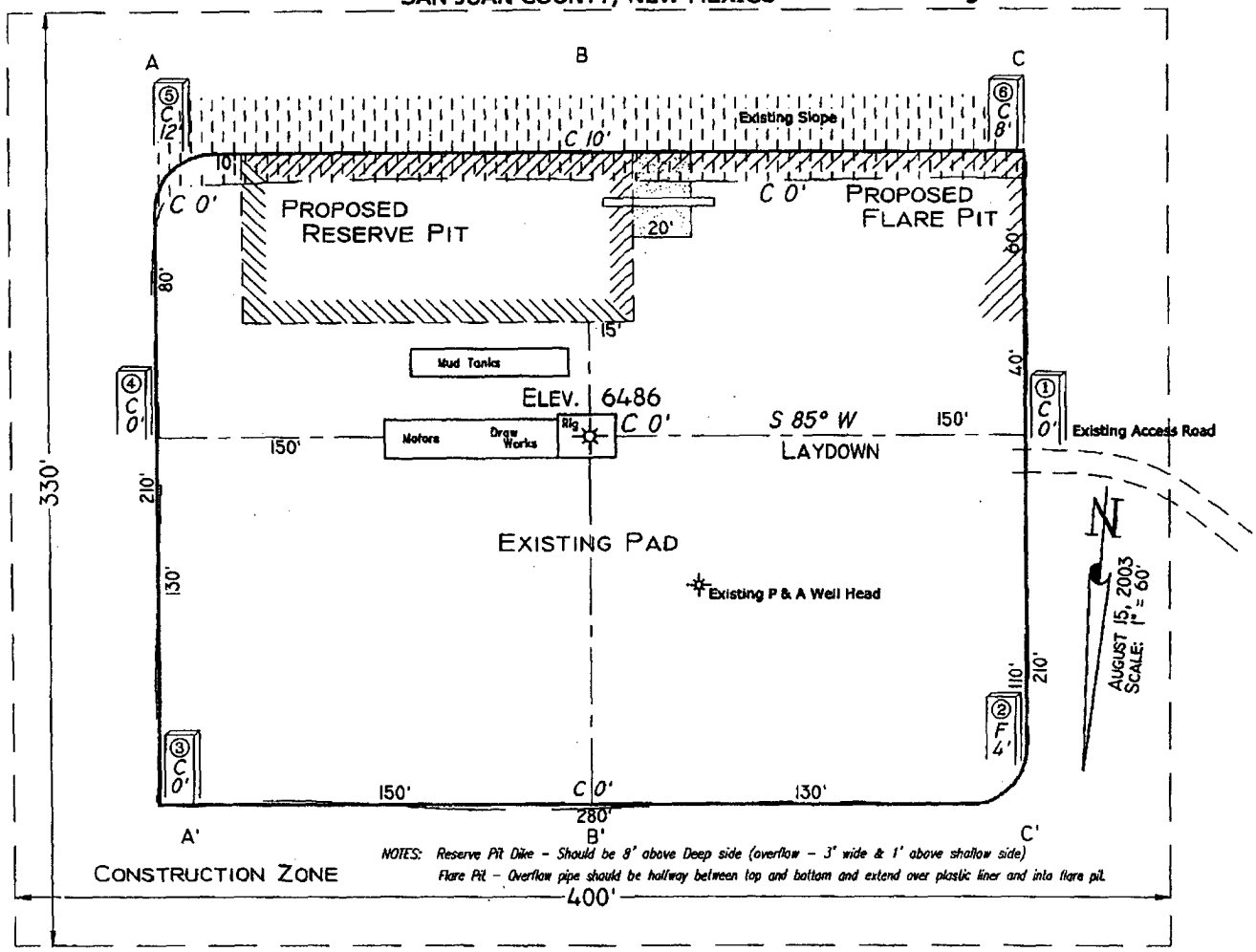
**DST's:** None anticipated.

## 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.

# PAD LAYOUT PLAN & PROFILE
## DEVON ENERGY PRODUCTION COMPANY, L.P.
## NEBU # 55E
## 1415' F/SL 1020' F/EL
## SEC. 22, T31N, R7W, N.M.P.M.
## SAN JUAN COUNTY, NEW MEXICO

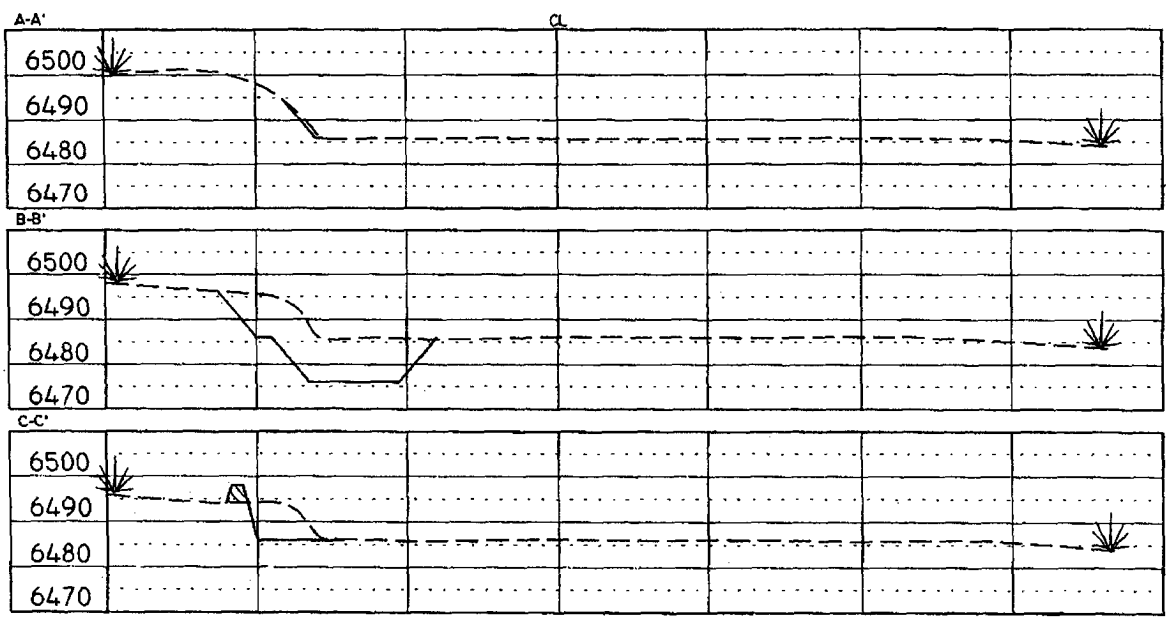
Lat: 36°52'54"
Long: 107°33'10"




NOTES: Reserve Pit Dike - Should be 9' above Deep side (overflow - 3' wide & 1' above shallow side)
Flare Pit - Overflow pipe should be halfway between top and bottom and extend over plastic liner and into flare pit.

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