

UNITED STATES **2005 AUG 2 PM 12 31**  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

**APPLICATION FOR PERMIT TO DRILL OR REENTER**

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>SF 080557 079082</b>
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator <b>Devon Energy Production Company, L.P.</b>		7. If Unit or CA Agreement, Name and No. <b>Northeast Blanco Unit</b>
3a. Address <b>PO Box 6459 Farmington, NM 87419</b>	3b. Phone No. (include area code) <b>505-632-0244</b>	8. Lease Name and Well No. <b>NEBU 42F</b>
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface <b>265' FSL &amp; 2,988' FEL, Unit N, SE SW Section 19</b> At proposed prod. zone <b>640' FNL &amp; 2,700' FEL, Unit C, NE NW, Section 30, T31N, R7W</b>		9. API Well No. <b>30-045-33264</b>
14. Distance in miles and direction from nearest town or post office* <b>Approximately 30.9 miles</b>		10. Field and Pool, or Exploratory <b>Basin Dakota</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>265'</b>		11. Sec., T. R. M. or Blk. and Survey or Area <b>Sec. 19, T31N, R7W</b>
16. No. of acres in lease <b>320 Acres</b>		12. County or Parish <b>San Juan</b>
17. Spacing Unit dedicated to this well <b>259.82 Acres R-2046</b>		13. State <b>NM</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.		19. Proposed Depth <b>8,097 MD</b>
20. BLM/BIA Bond No. on file		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>GR 6,318'</b>	22. Approximate date work will start* <b>09/27/2005</b>	23. Estimated duration <b>Unknown</b>

**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.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification  |
| 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). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature <b>M.S. Zim</b>	Name (Printed/Typed) <b>Melisa Zimmerman</b>	Date <b>7-27-05</b>
Title <b>Senior Operations Technician</b>		
Approved by (Signature) <b>[Signature]</b>	Name (Printed/Typed) <b>FFU</b>	Date <b>11/1/05</b>
Title <b>AFM</b>		

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.

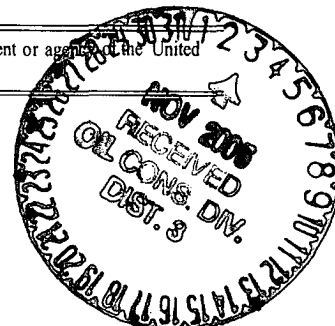
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on page 2)

**HOLD C104 FOR directional Survey (BHL target) 16NSL**

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



**NMOC**

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

2088 AUG 2 PM 12 31

RECEIVED

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-045 33264		<sup>2</sup> Pool Code 71599	<sup>3</sup> Pool Name Basin Dakota	
<sup>4</sup> Property Code 19641	<sup>5</sup> Property Name NEBU			<sup>6</sup> Well Number # 42F
<sup>7</sup> OGRID No. 4637	<sup>8</sup> Operator Name Devon Energy Production Company, L.P.			<sup>9</sup> Elevation 6318

## <sup>10</sup> Surface Location

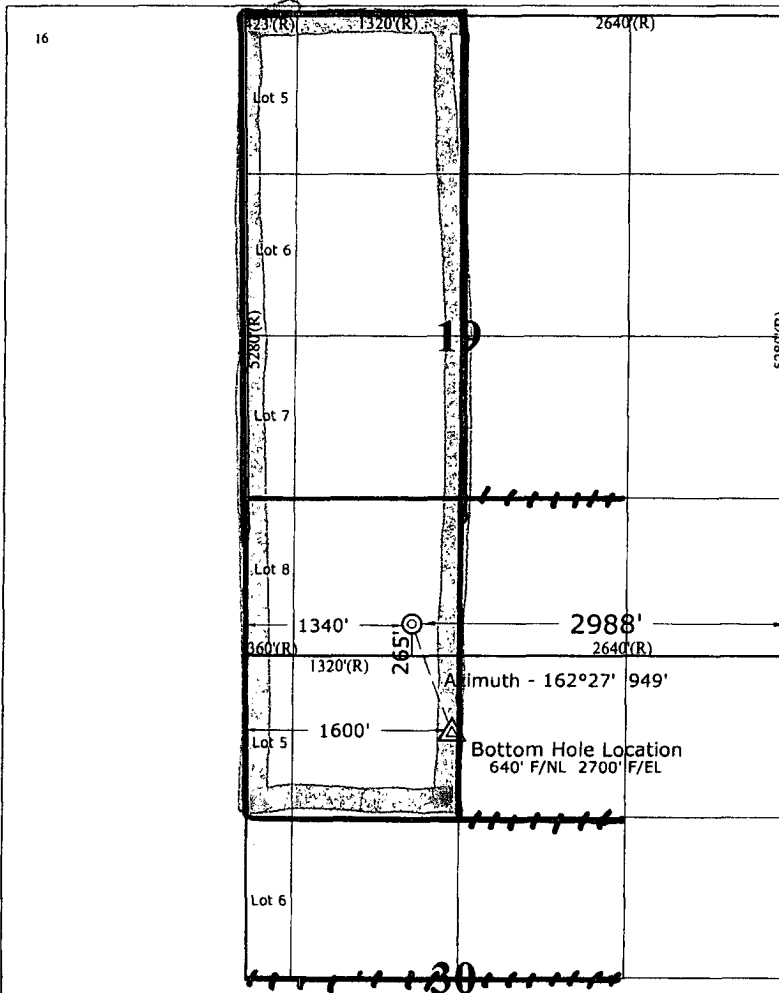
UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>N</b>	<b>19</b>	<b>31 N</b>	<b>7 W</b>		<b>265</b>	<b>SOUTH</b>	<b>2988</b>	<b>EAST</b>	<b>SAN JUAN</b>

<sup>11</sup> Bottom Hole Location If Different From Surface

7	UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	<b>C</b>	<b>30</b>	<b>31 N</b>	<b>7 W</b>		<b>640</b>	<b>NORTH</b>	<b>2700</b>	<b>EAST</b>	<b>SAN JUAN</b>


<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
259.82			R-2046

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



### **<sup>17</sup> OPERATOR CERTIFICATION**

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

Signature 

Melissa Zimmerman  
Printed Name

Printed Name  
SR. Operations Technician  
Title

Date July 27, 2005

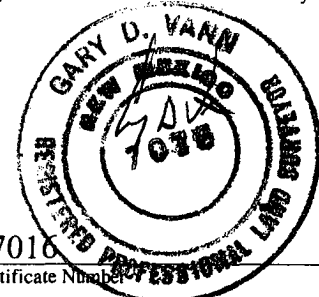
## 18 SURVEYOR CERTIFICATION

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.

June 8, 2005

Date of Survey

Signature and Seal of Professional Surveyor



**Certificate**

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

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

Form C-103

March 4, 2004

WELL API NO.

**30-045-33264**

5. Indicate Type of Lease

STATE ☐ FEE ☐

6. State Oil & Gas Lease No.

SF 080557

7. Lease Name or Unit Agreement Name

NORTHEAST BLANCO UNIT

8. Well Number

42F

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 N : 265' feet from the South line and 2,988' feet from the East line

Section 19 Township 31N Range 7W NMPM County - SAN JUAN

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

GR 6,318'

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

Pit Location: UL        Sect        Twp        Rng        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. The closure of said pit will be in accordance with the NMOCD regulations with the cutting of the liner applying to the BLM rules.**

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 7-27-05

Type or print name Melisa Zimmerman E-mail address: Melisa.zimmerman@dvn.com Telephone No. 405-552-7917

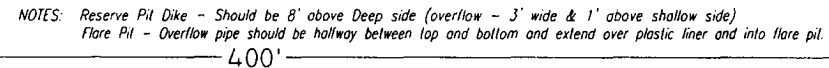
(This space for State use)

APPROVED BY [Signature] TITLE SENIOR OIL & GAS INSPECTOR, DIST. 4 DATE NOV 03 2005

Conditions of approval, if any:

Nebu # 42F  
265' F/SL 1340' F/WL  
SEC. 19, T31N, R7W, N.M.P.M.  
SAN JUAN COUNTY, NEW MEXICO

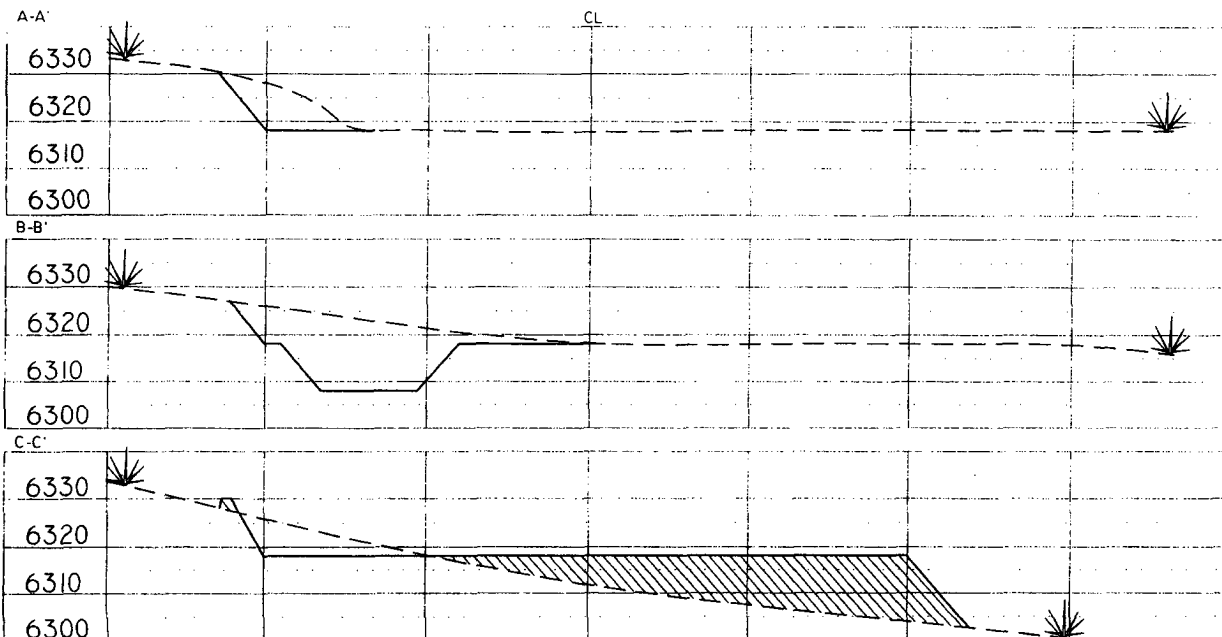
Lat: 36°52'43"  
Long: 107°36'49"



CONSTRUCTION ZONE

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 42F**  
**Unit N 19-31N-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>TMD (ft)</b>	<b>Hydrocarbon/Water Bearing Zones</b>
San Jose	Surface	Surface	
Ojo Alamo	2122	2271	Aquifer
Kirtland	2233	2392	
Fruitland	2732	2915	Gas
Pictured Cliffs Tongue	3176	3364	Gas
Pictured Cliffs Main	3235	3423	Gas
Lewis	3331	3519	Gas
<b>Intermediate TD</b>	3431	3619	
Huerfanito Bentonite	3995	4183	Gas
Chacra \ Otera	4370	4558	Gas
Cliff House	5161	5349	Gas
Menefee	5221	5409	Gas
Point Lookout	5517	5705	Gas
Mancos	5915	6103	Gas
Gallup	6837	7025	Gas
Greenhorn	7537	7725	
Graneros	7591	7779	Gas
Dakota	7710	7898	Gas
Paguate	7720	7908	
Cubero	7750	7938	
Oak Canyon	7808	7996	
Encinal Canyon	7825	8013	

Lower Encinal Canyon	7859	8047	
TD	7909	8097	

\*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	TMD	Hole Size	Size	Grade	Weight	Thread	Condition
0-285'	0-285'	12-1/4"	9-5/8"	H-40	32#	STC	New
0-3431	0-3619	8-3/4"	7"	K-55	23#	LTC	New
0- TD	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 3500' (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 50/50 Poz, Yd-1.45, Water Gal/sx 6.8, Mixed @ 13ppg Foamed W/ N<sub>2</sub> Down To 9.0# Additives 2% Gel, 0.2% Versaset, 0.1% Diacel Lwl.

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

**\* 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/sx; Water: 6.42 gal/sx

**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**

**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:**

TVD Interval	TMD Interval	Type	Weight (ppg)	Viscosity	pH	Water Loss	Remarks
0-285'	0-285'	Spud-foam	8.4-9.0	29-70	8.0	NC	FW gel, LSND or stiff foam
285'-3,431'	285'-3,619'	Air				NC	
3,431' - TD	3,619' - 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.

**Survey:** Deviation surveys will be taken every 500' from 0-TD or first succeeding bit change. The hole will be air drilled from intermediate casing point to TD. The equipment used in this type of operation will not allow for single shot surveys 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:**

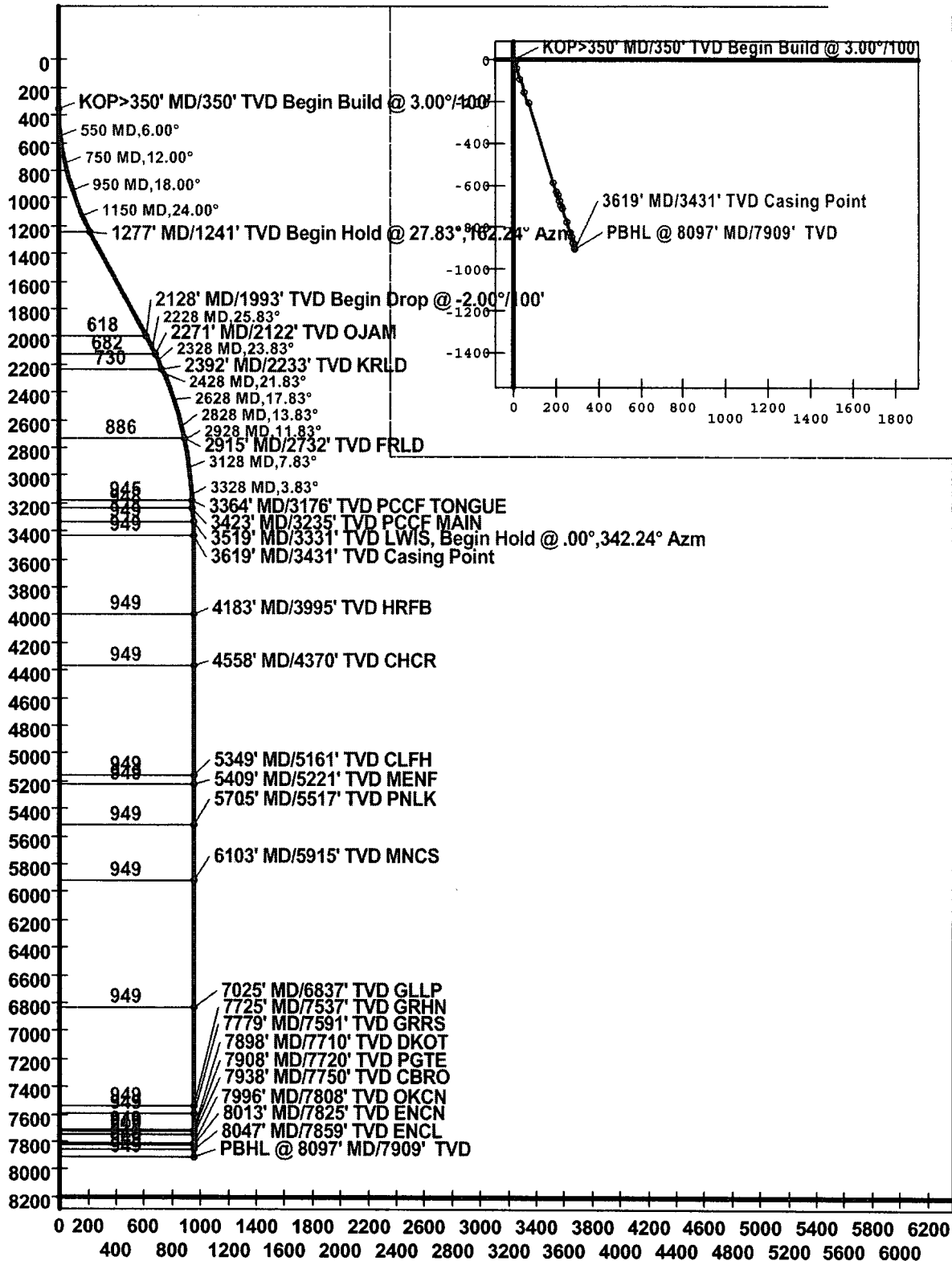
The Fruitland Coal will be encountered in the 8-3/4" hole. Estimated formation pressure is 300 psi. No other abnormal pressures and/or temperatures are expected. No hydrogen sulfide should be present.

**7. OTHER INFORMATION:**

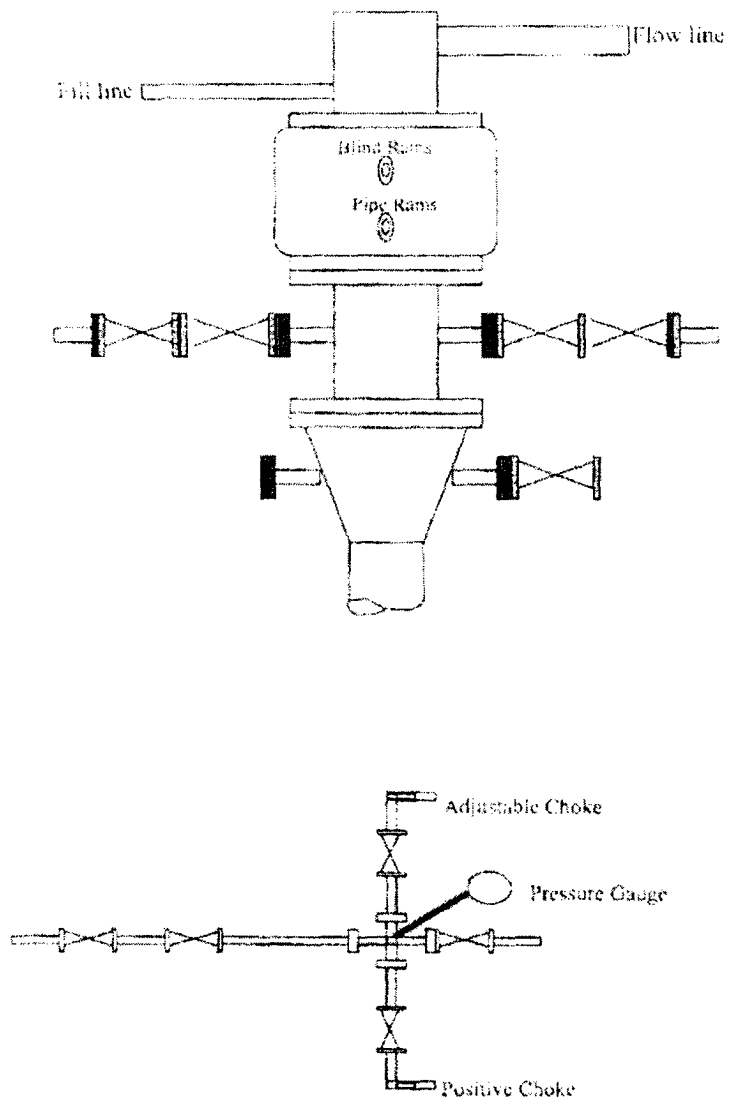
The anticipated starting date and duration of the operation will be as follows:



Company: Devon Energy  
 Lease/Well: NEBU 42F  
 Location: San Juan County  
 State/Country: NM



# 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.