

UNITED STATES <sup>2005</sup> JUL 1 AM 10 51  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT RECEIVED

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>NM 03356</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>		8. Lease Name and Well No. <b>NEBU 231</b>
3b. Phone No. (include area code) <b>505-632-0244</b>		9. API Well No. <b>30-045-33215</b>
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface <b>SE NW, Unit F, 1,820' FNL &amp; 2,575' FWL</b> At proposed prod. zone <b>SE NW, Unit F, 1,430' FNL &amp; 1,470' FWL</b>		10. Field and Pool, or Exploratory <b>S. Los Pinos Frt Snd Pictured Cliffs</b>
11. Sec., T. R. M. or Blk. and Survey or Area <b>F Sec. 14, T31N, R7W</b>		12. County or Parish <b>San Juan</b>
13. State <b>NM</b>		
14. Distance in miles and direction from nearest town or post office* <b>Approximately 10.7 miles</b>	15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>1,820'</b>	16. No. of acres in lease <b>2396.8 Acres</b>
17. Spacing Unit dedicated to this well <b>160 Acres NW/4</b>	18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth <b>3,534'</b>
20. BLM/BIA Bond No. on file	21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>GR 6,393'</b>	22. Approximate date work will start* <b>08/26/2005</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:

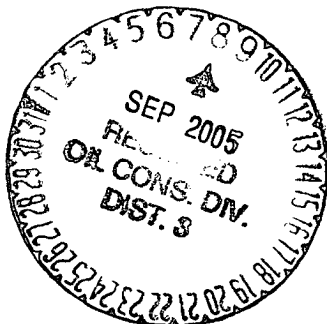
- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification  |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, 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 <i>M.S. Zimmerman</i>	Name (Printed/Typed) <b>Melisa Zimmerman</b>	Date <b>6-29-05</b>
Title <b>Senior Operations Technician</b>		
Approved by (Signature) <i>Wayne Townsend</i>	Name (Printed/Typed) <b>Wayne Townsend</b>	Date <b>9/6/05</b>
Title <b>Acting AFM</b>	Office <b>FFO</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 G104 FOR directional survey

NMOCD

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".

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

<sup>1</sup> API Number	<sup>2</sup> Pool Code 80690	<sup>3</sup> Pool Name S. Los Pinos Fm. Snd. Pictured Cliffs
<sup>4</sup> Property Code 19641	<sup>5</sup> Property Name NEBU	<sup>6</sup> Well Number # 231
<sup>7</sup> OGRID No. 6137	<sup>8</sup> Operator Name Devon Energy Production Company, L.P.	<sup>9</sup> Elevation 6393

<sup>10</sup> Surface Location

UL or Lot No. F	Section 14	Township 31 N	Range 7 W	Lot Idn	Feet from the 1820	North/South line NORTH	Feet from the 2575	East/West line WEST	County SAN JUAN
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<sup>11</sup> Bottom Hole Location If Different From Surface

<sup>7</sup> UL or lot no. F	Section 14	Township 31 N	Range 7 W	Lot Idn	Feet from the 1430	North/South line NORTH	Feet from the 1470	East/West line WEST	County SAN JUAN
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<sup>12</sup> Dedicated Acres 160	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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

<div><p>16</p><p>Bottom Hole Location 1430' F/NL 1470' F/WL</p><p>Azimuth - 289°26' 1172'</p><p>2575'</p><p>1820'</p><p>14</p><p>5279'(R)</p><p>5280'(R)</p><p>5283(R)</p></div>	<div><p><sup>17</sup> OPERATOR CERTIFICATION</p><p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p><p><i>Melisa Zimmerman</i> Signature Melisa Zimmerman Printed Name Sr. Operations Technician Title 6-29-05 Date</p><p><sup>18</sup> SURVEYOR CERTIFICATION</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>Added Btm Hole: April 23, 2005 November 16, 2004 Date of Survey</p><p>Signature and Seal of Professional Surveyor</p><p>GARY D. VANN NEW MEXICO REGISTERED PROFESSIONAL LAND SURVEYOR 7016</p><p>7016 Certificate Number</p></div>
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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 <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. NM 03356
7. Lease Name or Unit Agreement Name NORTHEAST BLANCO UNIT
8. Well Number 231
9. OGRID Number 6137
10. Pool name or Wildcat S. Los Pinos Frt. Snd. Pictured Cliffs

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (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 <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other	
2. Name of Operator <b>Devon Energy Production Company, L.P.</b>	
3. Address of Operator <b>PO Box 6459, Navajo Dam, NM 87419</b>	
4. Well Location Unit Letter <u>F</u> : <u>1,820'</u> feet from the <u>North</u> line and <u>2,575'</u> feet from the <u>West</u> line Section <u>14</u> Township <u>31N</u> Range <u>7W</u> NMPM County - <u>SAN JUAN</u>	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) GR 6,393'	
<b>Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)</b> Pit Location: UL <u>F</u> Sect <u>14</u> Twp <u>31N</u> Rng <u>7W</u> Pit type <u>Drilling</u> Depth to Groundwater <u>&gt;100'</u> Distance from nearest fresh water well <u>&gt;1000'</u> Distance from nearest surface water <u>&gt;1000'</u> Below-grade Tank Location UL <u></u> Sect <u></u> Twp <u></u> Rng <u></u> ; feet from the <u></u> line and <u></u> feet from the <u></u> 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 6-29-05

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

(This space for State use)

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. IV DATE SEP 08 2005  
Conditions of approval, if any:

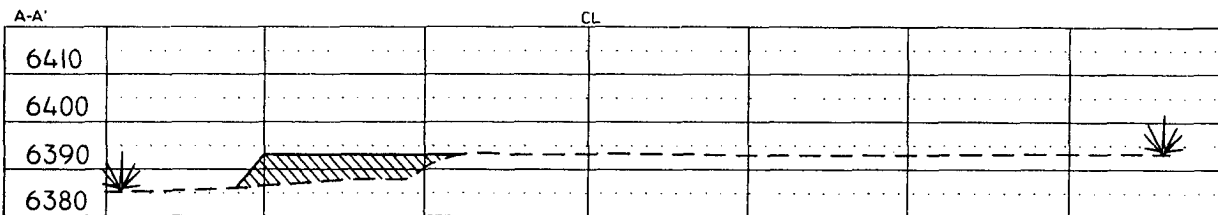
Nebu # 231  
1820' F/NL 2575' F/WL  
SEC. 14, T31N, R7W, N.M.P.M.  
SAN JUAN COUNTY, NEW MEXICO

The site plan shows a rectangular area with dimensions 330' by 400'. The area is divided into several sections. At the top, there is a 'PROPOSED RESERVE PIT' and a 'PROPOSED FLARE PIT'. Below these is a 'Reclaimed Reserve Pit'. In the center, there are 'Mud Tanks', 'Motors', 'Draw Works', and a 'Rig'. To the right of the rig is an 'Existing Well Head'. The bottom section is labeled 'EXISTING PAD'. The plan includes various dimensions and labels for existing and proposed structures. A north arrow and the date 'NOVEMBER 16, 2004' are located on the right side. The scale is '1" = 60'.

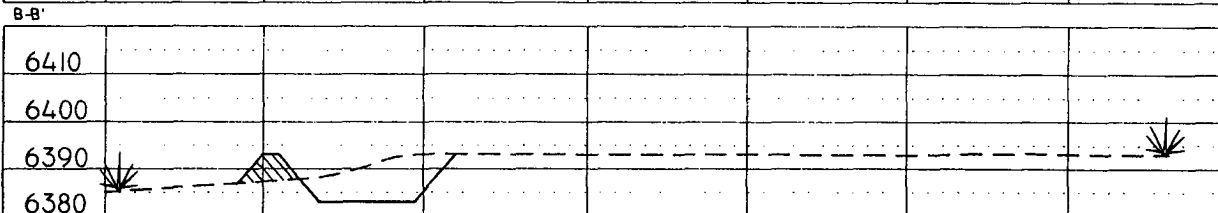
NOTES: Reserve Pit Dike - Should be 8' above Deep side (overflow - 3' wide & 1' above shallow side)  
Flare Pit - Overflow pipe should be halfway between top and bottom and extend over plastic liner and into flare pit.

CONSTRUCTION ZONE

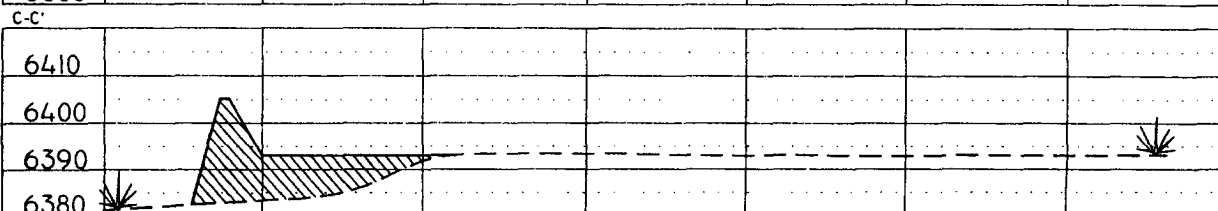
SCALE: 1"=60'-HORIZ.  
1"=40'-VERT.



**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 231  
Unit F 14-31N-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	2236	2536	Aquifer
Kirtland	2367	2678	
Fruitland	2832	3151	Gas
Fruitland 1 <sup>st</sup> Coal	3000	3319	Gas
Pictured Cliffs Tongue	3186	3505	Gas
Pictured Cliffs	3291	3610	Gas
Lewis	3434	3753	
<b>TD</b>	<b>3534</b>	<b>3854</b>	

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 1500 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-TD	6-1/4"	4-1/2"	J-55	11.6#	LTC	New

TMD  
3864

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)

**4-1/2" Casing:** The bottom three joints of the 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 sx 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.

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

#### **Production String:**

4-1/2" Production casing cemented in an 6-1/4" hole  
11.6# J-55 LT&C 8 Rnd  
Float collar

Joint

Float Shoe

**Lead:** 500 sx 50/50 Poz, Yield-1.45 ft<sup>3</sup>/sx, Mixed @ 13ppg  
Foamed W/ N<sub>2</sub> Down To 9.0# Additives 2% Gel, 0.2% Versaset,  
0.1% Diacel Lwl. *2.18 ft<sup>3</sup>/sx when foamed*

**Tail:** 75 sx 50/50 Poz, Yield-1.45 ft<sup>3</sup>/sx, 13 lb/gal, Additives 2%  
Gel, 0.2% Versaset, 0.1% Diacel Lwl.

**\* 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	Type	Weight (ppg)	Viscosity	pH	Water Loss	Remarks
0-285'	Spud	8.4-9.0	29-70	8.0	NC	FW gel,
285-TD	LSND/Air	8.4-9.0	29-70	8.0	10-12	LCM 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.

**5. EVALUATION PROGRAM:**

**Wireline Logs:** None

**Mud Logs:** Possible mud logging in Fruitland Coal & Pictured Cliffs.

**Survey:** Deviation surveys will be taken every 500' from 0-TD of 6-1/4" hole or first succeeding bit change.

**Cores:** None anticipated.

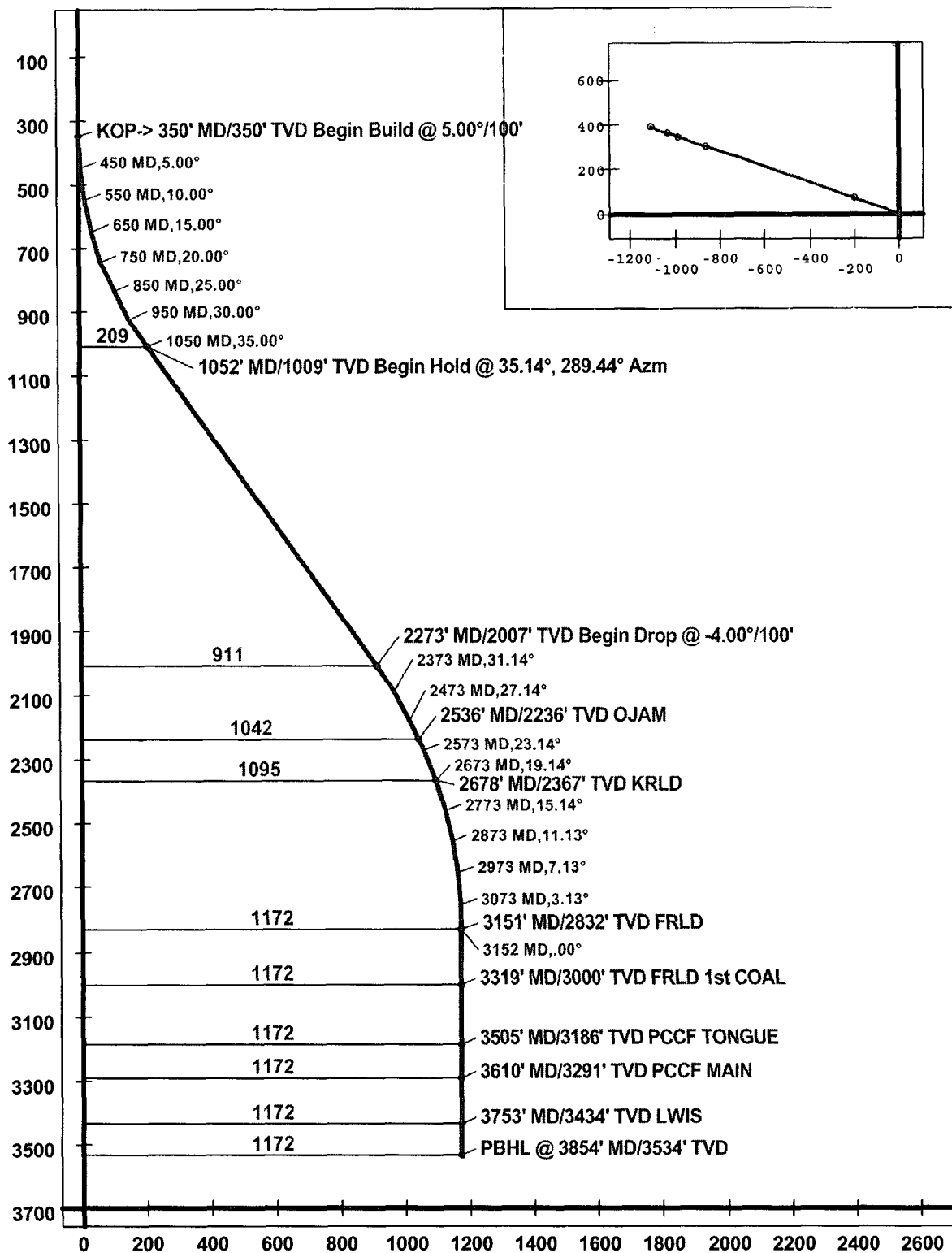
**DST's:** None anticipated.

**6. ABNORMAL CONDITIONS:**

The Fruitland Coal will be encountered at approximately 3030' TMD. Estimated formation pressure is 300 psi. No other abnormal pressures and/or temperatures are expected. No hydrogen sulfide should be present.

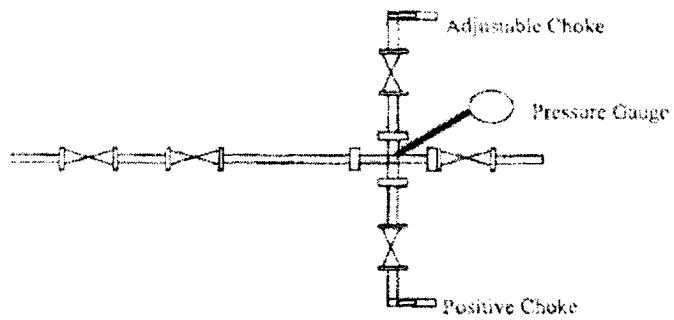
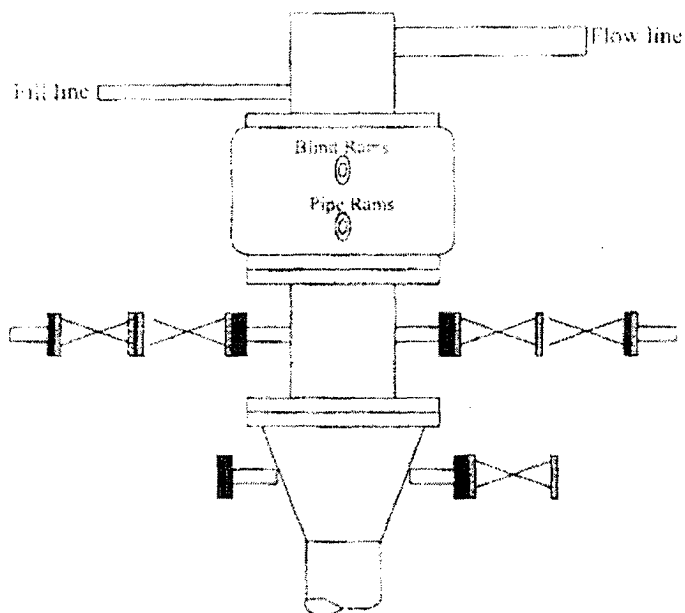
**7. OTHER INFORMATION:**

**Company:** Devon Energy  
**Lease/Well:** NEBU 231  
**Location:** San Juan County  
**State/Country:** New Mexico





## 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 CTR 3160 requirements for 2M systems.