

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

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SF 079060
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 Devon Energy Production Company, L.P.		7. If Unit or CA Agreement, Name and No. Northeast Blanco Unit
3a. Address PO Box 6459 Farmington, NM 87419	3b. Phone No. (include area code) 405-552-7917	8. Lease Name and Well No. NEBU 4M
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 1,800' FNL & 2,610' FWL, Unit F, SE NW At proposed prod. zone 1,940' FNL & 1,940' FWL, Unit F, SE NW		9. API Well No. 30-039-30072
14. Distance in miles and direction from nearest town or post office* Approximately 29.3 miles		10. Field and Pool, or Exploratory La Jara Blanco Mesaverde/3-Lee Pinos PC
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1,800'	16. No. of acres in lease 2236.44 Acres	11. Sec., T. R. M. or Blk. and Survey or Area F Sec. 21, T30N, R7W
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 5,955' TMD	12. County or Parish Rio Arriba
21. Elevations (Show whether DF, KDB, RT, GL, etc.) GR 6,287'	22. Approximate date work will start* 11/01/2006	13. State NM
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. | 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 	Name (Printed/Typed) Melisa Zimmerman	Date 9-11-06
Title Senior Operations Technician		

Approved by (Signature) 	Name (Printed/Typed) Adam AFM Munerda	Date 10/25/06
Title Adam AFM Munerda		

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)

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".

NMOCDB

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 30-039-30072	2 Pool Code 96199	3 Pool Name Blanco Mesavende / 15.6 Acres Pictured
4 Property Code 19641	5 Property Name NEBU	6 Well Number # 4M
7 GRID No 4137	8 Operator Name Devon Energy Production Company, L.P.	9 Elevation 6287

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
F	21	30 N	7 W		1800	NORTH	2610	WEST	Rio Arriba

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
F	21	30 N	7 W		1940	NORTH	1940	WEST	Rio Arriba

12 Dedicated Acres 320	13 Joint or Infill	14 Consolidation Code	15 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

	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature: <i>M.S. K.</i> Printed Name: Melisa S. Zimmerman Title: Sr. Operations Technician Date: September 11, 2006
	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. Restaked: November 1, 2005 September 9, 2005 Date of Survey: Revised May 30, 2006 Signature and Seal of Professional Surveyor: <i>[Signature]</i> 7016 Certificate Number

(R) - GLO Record

05/30/2006 3:42PM (GMT-05:00)

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. 30-039-30072
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. SF 079060
7. Lease Name or Unit Agreement Name NORTHEAST BLANCO UNIT
8. Well Number 4M
9. OGRID Number 6137
10. Pool name or Wildcat Blanco Mesaverde/S Los Pinos Pictured Cliffs

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 <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> 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 <u>F</u> : <u>1,800</u> feet from the <u>North</u> line and <u>2,610</u> feet from the <u>West</u> line Section <u>21</u> Township <u>30N</u> Range <u>7W</u> NMPM County - <u>Rio Arriba</u>	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) GR 6,287'	
Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)	
Pit Location: UL <u>F</u> Sect <u>21</u> Twp <u>30N</u> Rng <u>7W</u> Pit type <u>Drilling</u> Depth to Groundwater <u>>100'</u> Distance from nearest fresh water well <u><1000'</u> Distance from nearest surface water <u>>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:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/> PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPLETION <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>
OTHER: CONSTRUCT DRILLING PIT <input checked="" type="checkbox"/>	OTHER: <input type="checkbox"/>
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 9-11-06

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

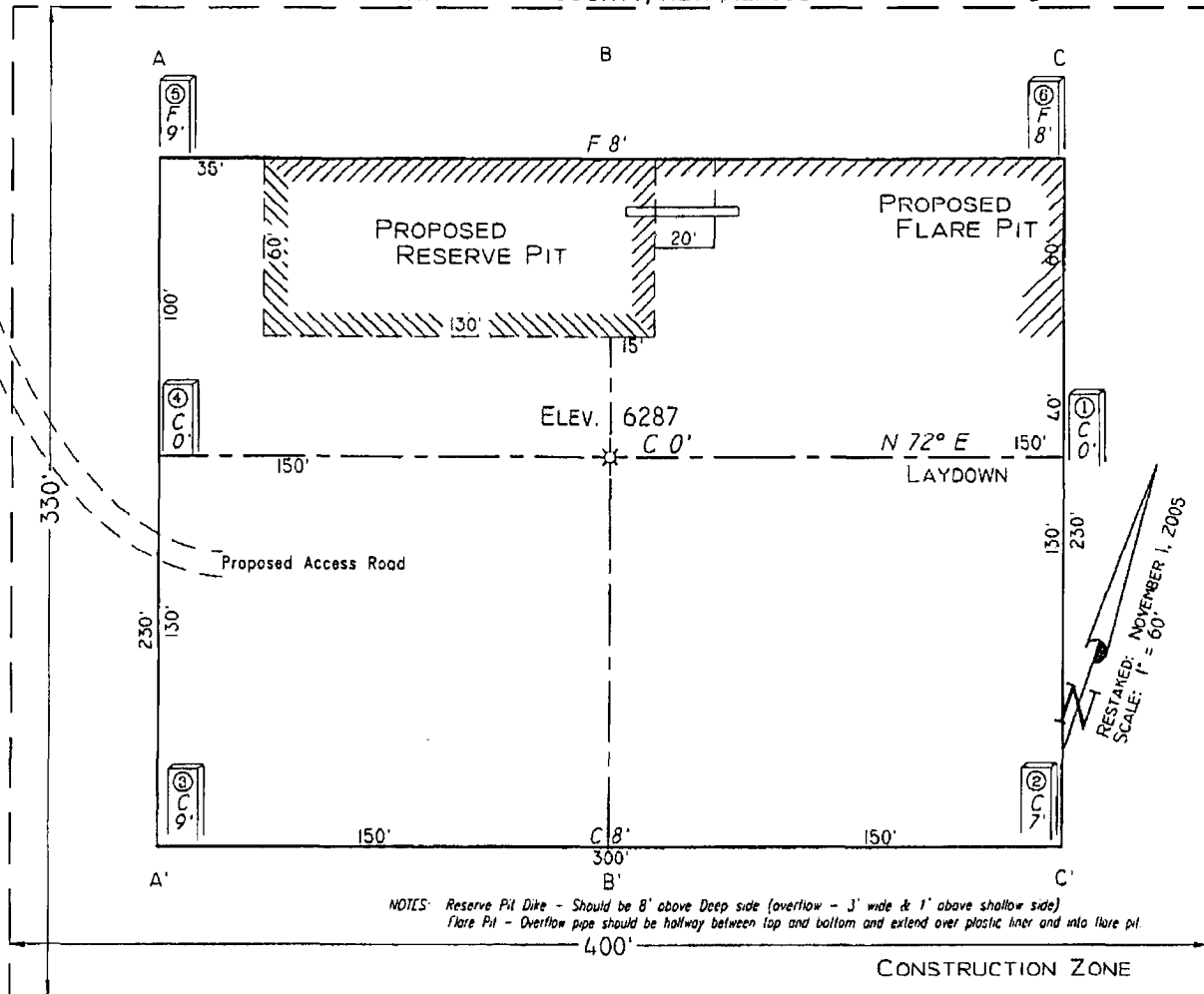
(This space for State use)

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #2 DATE OCT 30 2006
Conditions of approval, if any:

PAD LAYOUT PLAN & PROFILE
DEVON ENERGY PRODUCTION COMPANY, L.P.

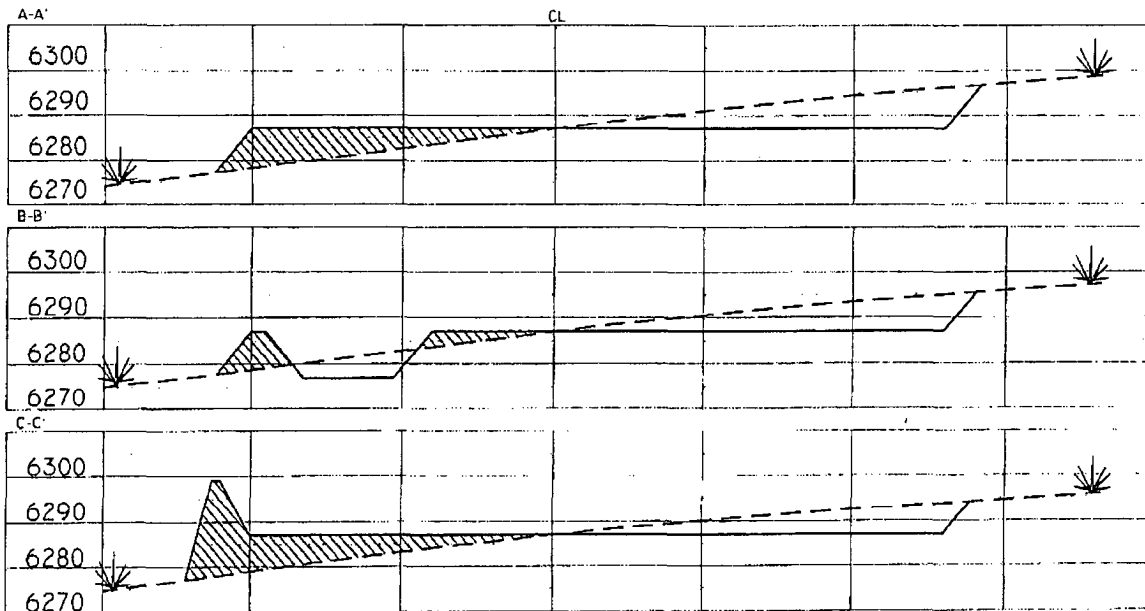
Nebu #4M
1800' F/NL 2610' F/WL
SEC. 21, T30N, R7W, N.M.P.M.
RIO ARriba COUNTY, NEW MEXICO

Lat: 36.80041°
Long: 107.57645° (83)



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

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



VANN SURVEYS
P. O. Box 1306
Farmington, NM

NEBU 4M
Unit F 21-T30N-R7W
Rio Arriba Co., NM

DRILLING PLAN

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

Formation	TVD (FT)	TMD (FT)	Hydrocarbon/Water Bearing Zones
San Jose	Surface	Surface	
Ojo Alamo	2209	2266	Aquifer
Kirtland	2309	2369	
Fruitland	2719	2795	Gas
Pictured Cliffs	3189	3274	Gas
Lewis	3293	3379	Gas
Intermediate TD	3393	3479	
Huefanito Bentonite	3899	3985	Gas
Chacra \ Otera	4268	4354	Gas
Cliff House	5046	5132	Gas
Menefee	5091	5177	Gas
Point Lookout	5417	5503	Gas
Mancos	5855 ↔	5769	Gas
TD	5955 ↔	5869	

*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
0-3393	0-3479	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 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: 500 sx 50/50 Poz, Yd-1.45, Water Gal/sx 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, 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: 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
Cement with 500 sacks Class B 50/50 POZ, 3% gel, 5# gilsonite, 1/4"# Flocele, .1% CFR 3, .2% Halad 344, yield 1.47 ft³/sx.
Cement designed to circulate to surface.
Pending hole conditions, cement baskets may be installed above TD

*** 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 cement design will be used.

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 Sx50/50/Std/ 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**

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'-3,393'	285'-3,479'	Air				NC	
3,393' - TD	3,479' - 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 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.

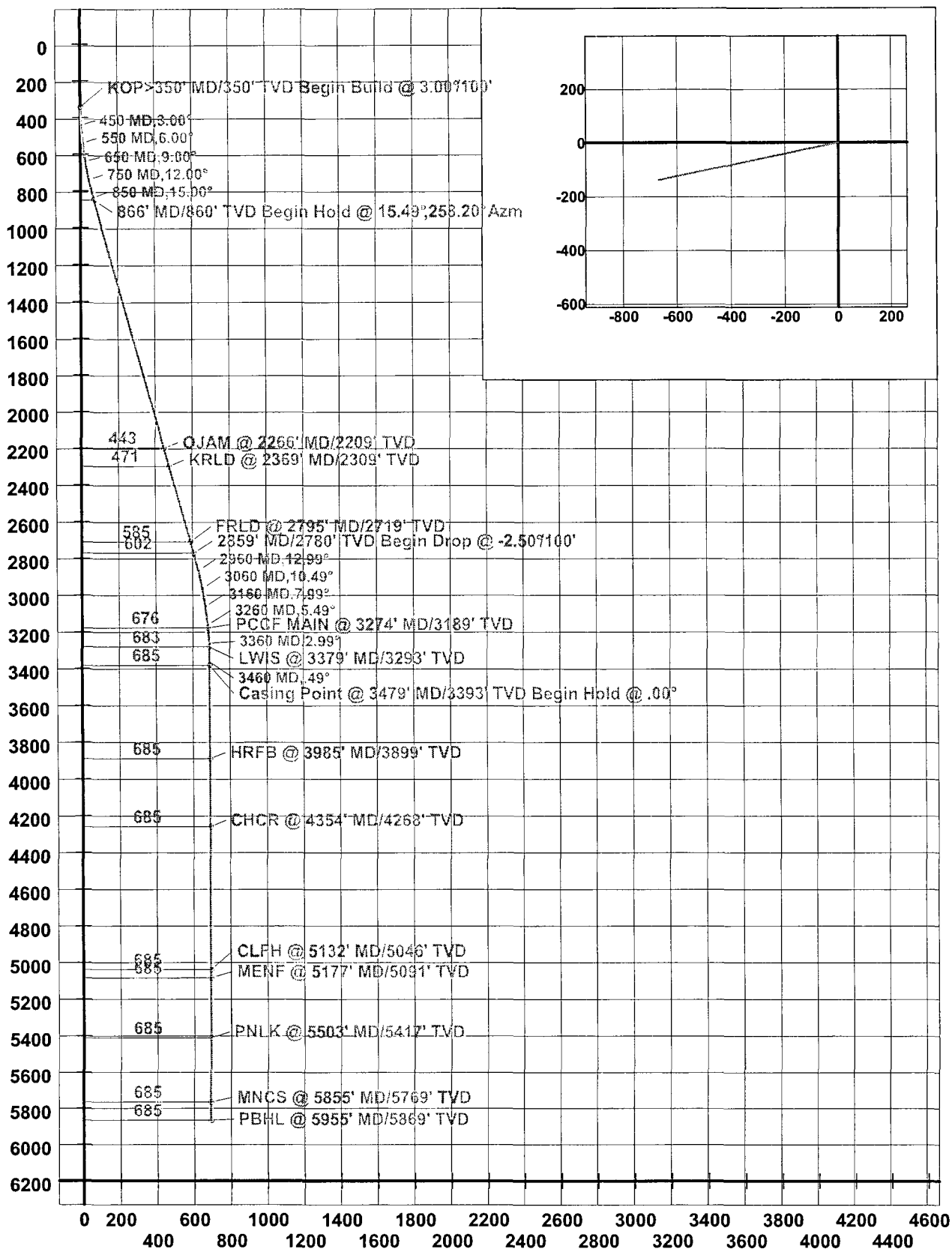
DST's: None anticipated.

6. ABNORMAL CONDITIONS:

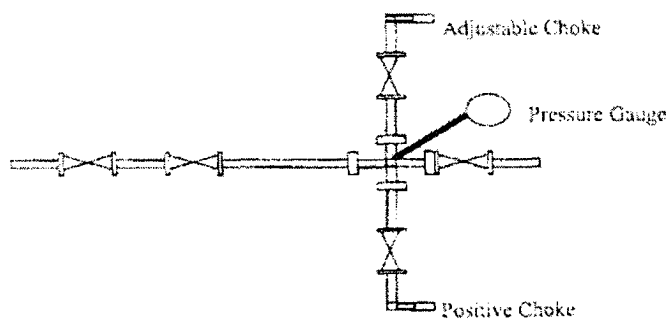
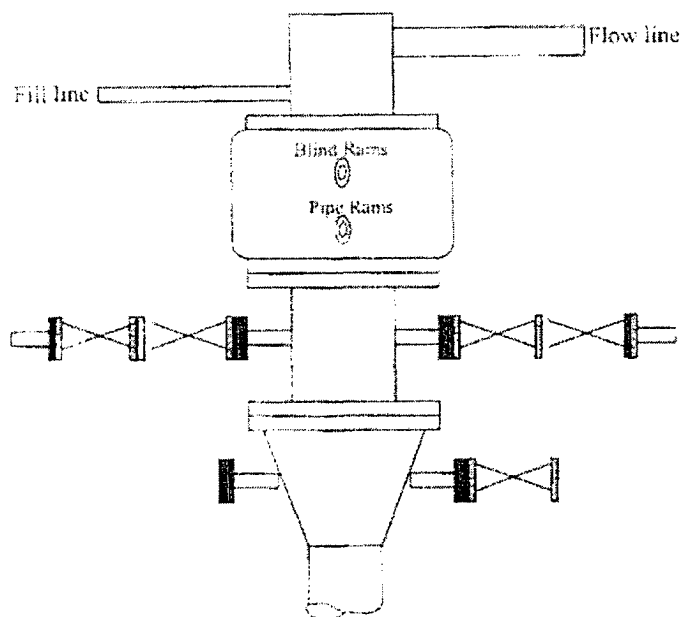
The Fruitland Coal will be encountered within the 8 3/4" hole. Estimated formation pressure is 300 psi. No other abnormal pressures and/or temperatures are expected. No hydrogen sulfide should be present.

7. OTHER INFORMATION:

Company: Devon Energy
 Lease/Well: NEBU # 4 M
 Location: Rio Arriba 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 CFR 3160 requirements for 2M systems.