

UNITED STATES **2005 JUN 23 AM 11 26**  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**RECEIVED**  
**APPLICATION FOR PERMIT TO DRILL OR REENTER**  
**070 FARMINGTON NM**

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>SF 079043</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 checked="" 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 454A</b>
3b. Phone No. (include area code) <b>505-632-0244</b>		9. API Well No. <b>20-045-33195</b>
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface <b>SW SE, Unit O, 905' FSL &amp; 2,145' FEL</b> At proposed prod. zone <b>SE SE, Unit P, 1,000' FSL &amp; 1,000' FEL</b>		10. Field and Pool, or Exploratory <b>Basin Fruitland Coal</b>
14. Distance in miles and direction from nearest town or post office* <b>Approximately 16.8 miles</b>		11. Sec., T. R. M. or Blk. and Survey or Area <b>0 Sec. 33, T31N, R7W</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>905'</b>	16. No. of acres in lease <b>211.62</b>	12. County or Parish <b>San Juan</b>
17. Spacing Unit dedicated to this well <b>320 Acres E/2</b>	18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	13. State <b>NM</b>
19. Proposed Depth <b>3,320'</b>	20. BLM/BIA Bond No. on file	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>GR 6,319'</b>	22. Approximate date work will start* <b>08/20/2005</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 	Name (Printed/Typed) <b>Melisa Zimmerman</b>	Date <b>6-20-05</b>
Title <b>Senior Operations Technician</b>		
Approved by (Signature) 	Name (Printed/Typed) <b>AFM</b>	Date <b>6-30-05</b>
Title <b>AFM</b>		
Office <b>FFC</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 C164 FOR Directional Survey**

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**

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 76629		3 Pool Name Basin Fruitland Coal		
4 Property Code 19641		5 Property Name NEBU			6 Well Number # 454A	
7 OGRID No. 6137		8 Operator Name Devon Energy Production Company, L.P.			9 Elevation 6319	

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
O	33	31 N	7 W		905	SOUTH	2145	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
P	33	31 N	7 W		1000	SOUTH	1000	EAST	SAN JUAN

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

16		3280(R)		17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature <u>M.S. G. Zimmermann</u> Printed Name <u>Melisa Zimmermann</u> Title <u>Sr. Operations Technician</u> Date <u>June 20, 2005</u>	
2005 JUN 23 AM 11 27 RECEIVED 070 FARMINGTON NM		33		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. Revised BHL Ftg: February 7, 2005 September 15, 2004 Date of Survey Signature and Seal of Professional Surveyor GARY D. FARM NEW MEXICO REGISTERED PROFESSIONAL LAND SURVEYOR 7016 Certificate Number	
5280(R)		5280(R)		2145' Bottom Hole Location 1000' F/SL 1000' F/EL Azimuth <u>85°15'</u> 1149' 905'	

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

<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.)		WELL API NO.
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator <b>Devon Energy Production Company, L.P.</b>		6. State Oil & Gas Lease No. SF 079043
3. Address of Operator <b>PO Box 6459, Navajo Dam, NM 87419</b>		7. Lease Name or Unit Agreement Name <b>NORTHEAST BLANCO UNIT</b>
4. Well Location  Unit Letter <u>O</u> : 905' feet from the <u>South</u> line and <u>2,145'</u> feet from the <u>East</u> line  Section <u>33</u> Township <u>31N</u> Range <u>7W</u> NMPM County - <u>SAN JUAN</u>		8. Well Number 454A
11. Elevation (Show whether DR, RKB, RT, GR, etc.) GR 6,319'		9. OGRID Number 6137
Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)		
Pit Location: UL <u>O</u> Sect <u>33</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		
10. Pool name or Wildcat Basin Fruitland Coal		

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data	
<b>NOTICE OF INTENTION TO:</b> PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPLETION <input type="checkbox"/> OTHER: <b>CONSTRUCT DRILLING PIT</b> <input checked="" type="checkbox"/>	<b>SUBSEQUENT REPORT OF:</b> REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/> COMMENCE DRILLING OPNS. <input type="checkbox"/> PLUG AND ABANDONMENT <input type="checkbox"/> CASING TEST AND CEMENT JOB <input 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 6-20-05

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

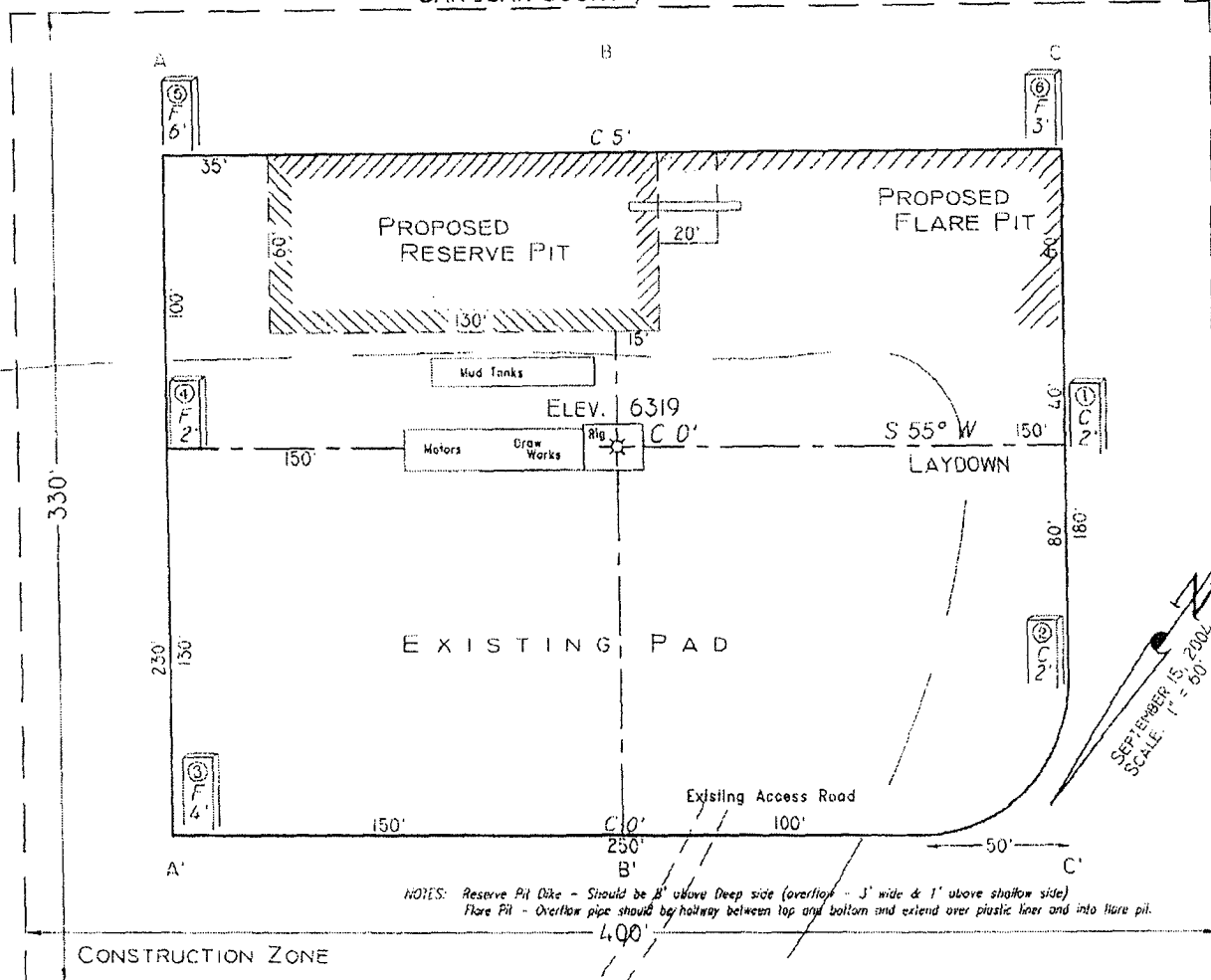
(This space for State use)

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #3 DATE AUG 08 2005  
Conditions of approval, if any:

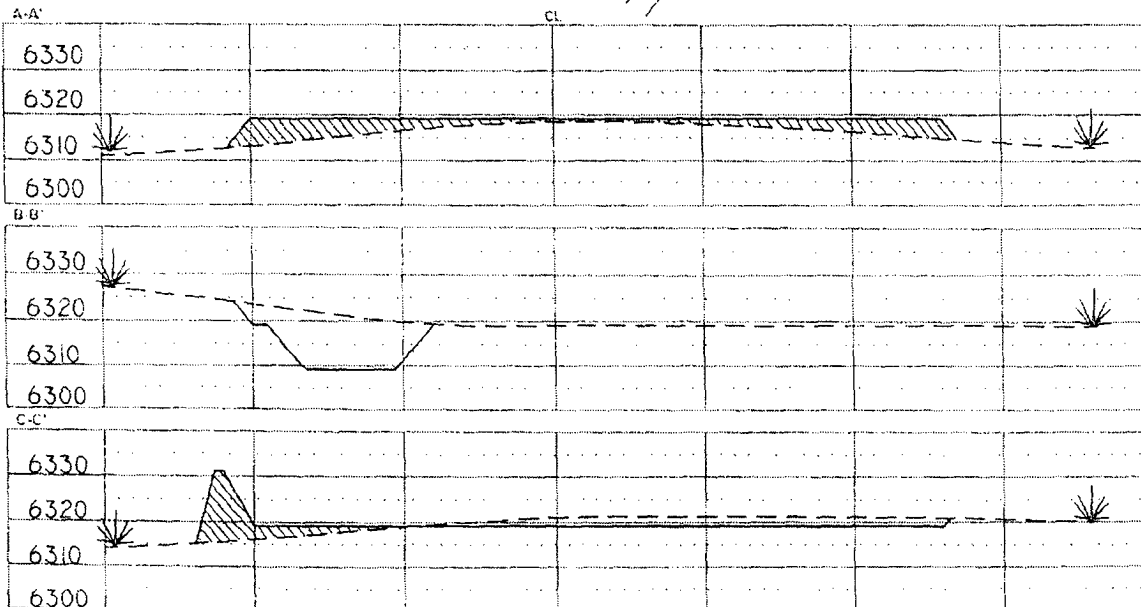
PAD LAYOUT PLAN & PROFILE  
DEVON ENERGY PRODUCTION COMPANY, L.P.

Nebu # 454A  
905' F/SL 2145' F/EL  
SEC. 33, T31N, R7W, N.M.P.M.  
SAN JUAN COUNTY, NEW MEXICO

Lat: 36°51'05"  
Long: 107°34'29"



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 side slopes and drainages. Final Pad Dimensions are to be verified by Contractor.

VANN SURVEYS  
P. O. Box 1306  
Farmington, NM

**NEBU 454A**  
**Unit O 33-31N-7W**  
**San Juan 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	2196	2488	Aquifer
Kirtland	2294	2596	
Fruitland	2731	3230	Gas
Fruitland 1st Coal	2916	3415	
Pictured Cliffs Tongue	3148	3462	
Pictured Cliffs	3220	3534	Gas
<b>PTD</b>	3320	3634	

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
0-2731	0-3230	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.

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

**Production String:**

7" Production casing cemented in an 8-3/4" hole

23# J-55 LT&amp;C 8 Rnd

Float collar

Joint

Float Shoe

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&amp;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,
285-2731	285-3230	LSND	8.4-9.0	29-70	8.0	10-12	LCM as needed
2731 - TD	3230 - 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.

**5. EVALUATION PROGRAM:**

**Wireline Logs:** None

**Mud Logs:** mud logging in Fruitland Coal.

**Survey:** Deviation surveys will be taken every 500' from 0-TD of 8 3/4" hole or first succeeding bit change.

**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:**

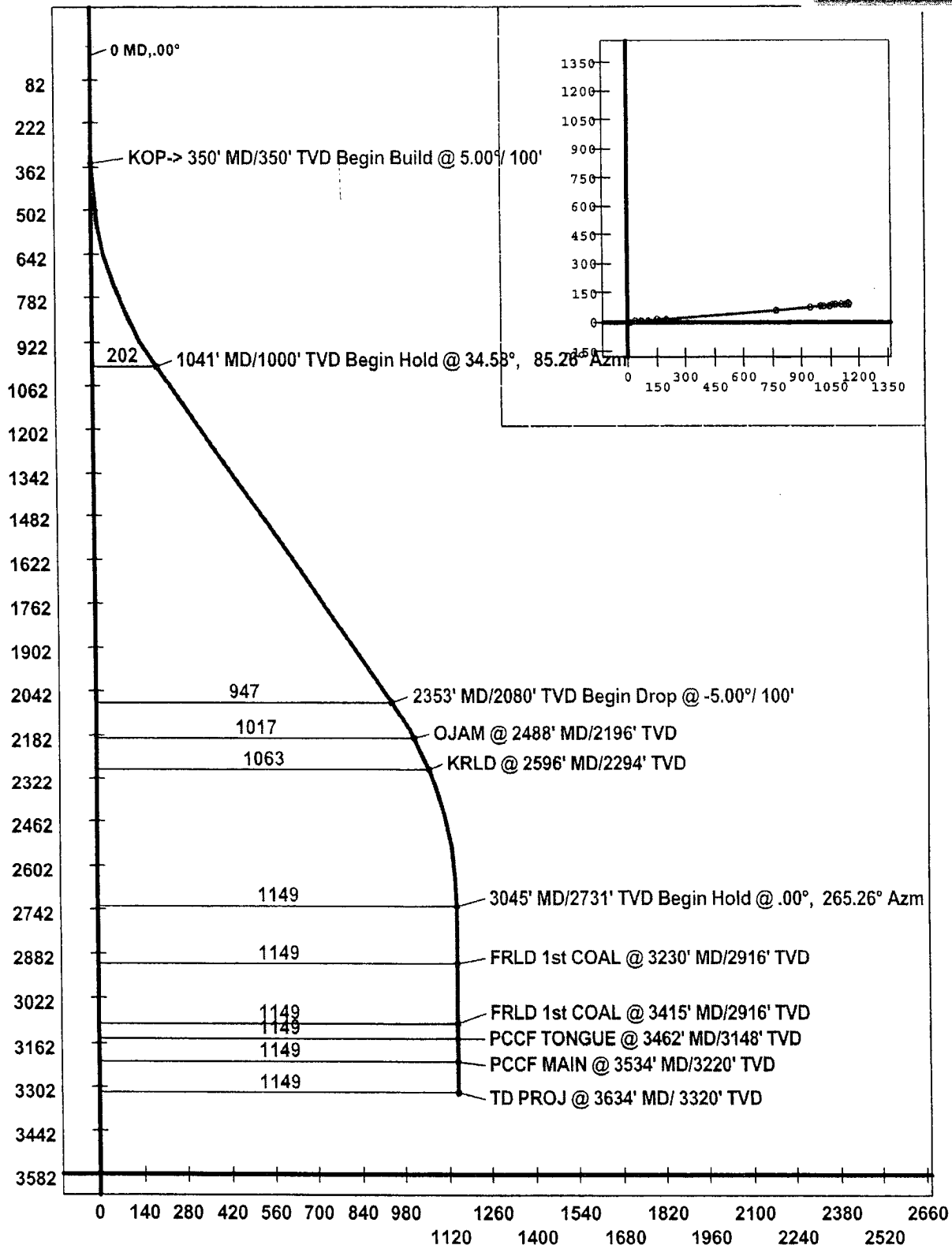
The anticipated starting date and duration of the operation will be as follows:

Starting Date: Upon Approval  
Duration: 20 days

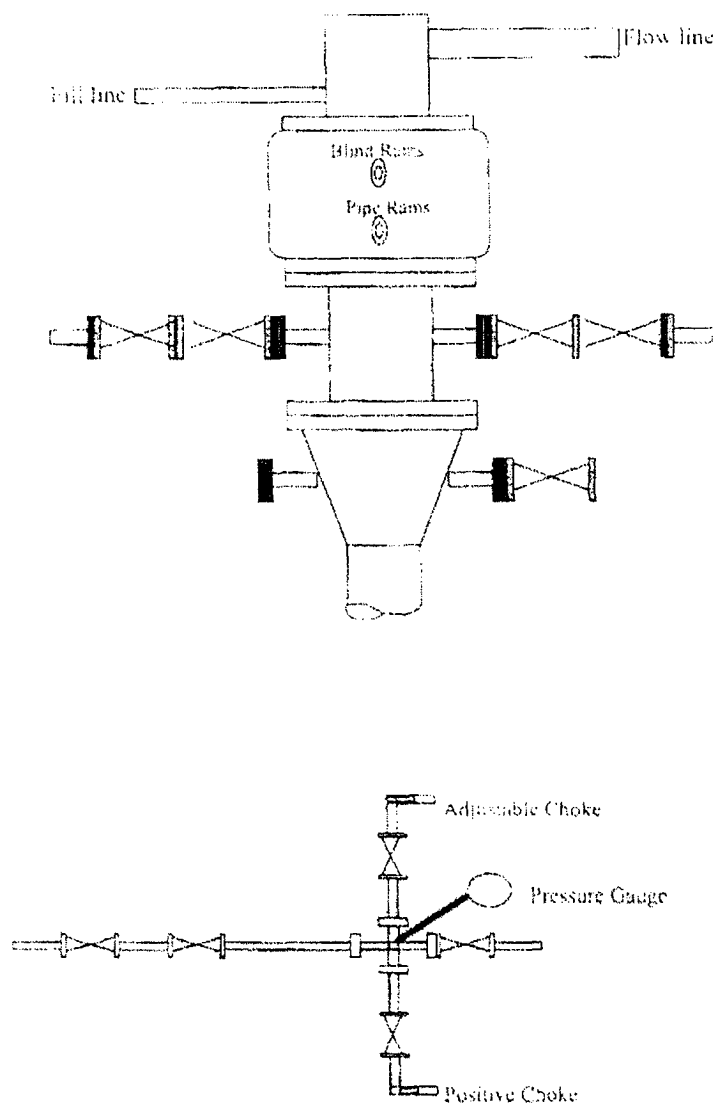
If the well is completed as a dry hole or as a producer, Well Completion or Recompletion Report and Log (Form 3160-4) will be submitted within 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3160. Copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample descriptions, daily drilling reports, daily completion reports, and all other surveys or data obtained and compiled during the drilling, completion, and/or workover operations, will be submitted directly to the Authorized Officer or filed with Form 3160-4.



Company: Devon Energy  
 Lease/Well: NEBU 454A  
 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 CFR 3160 requirements for 2M systems.