

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 checked="" type="checkbox"/> REENTER		5. Lease Serial No. <b>SF 079010</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 234</b>
3b. Phone No. (include area code) <b>505-632-0244</b>		9. API Well No. <b>3004532779</b>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface <b>NE SE, Unit 1, 1,440' FSL &amp; 660' FEL</b> At proposed prod. zone <b>Same</b>		10. Field and Pool, or Exploratory <b>Pictured Cliffs S. Los Pinos FS/PC</b>
11. Sec., T. R. M. or Blk. and Survey or Area <b>I Sec. 23, 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 13.2 miles</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>660'</b>	16. No. of acres in lease <b>2,560</b>	17. Spacing Unit dedicated to this well <b>320 Acres - 160 SE/4</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth <b>3,590'</b>	20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>GR 6,444'</b>	22. Approximate date work will start* <b>02/10/2005</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>12-10-04</b>
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Title  
**Senior Operations Technician**

Approved by (Signature) <i>A. Montiel</i>	Name (Printed/Typed) <b>A. Montiel</b>	Date <b>4-26-05</b>
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Title  
**AFM**

Office  
**FFO**

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 application is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

NMOCD

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

2004 DEC 20 6 11 41

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-045-32 779	<sup>2</sup> Pool Code 80690	<sup>3</sup> Pool Name S. 10 S P. 1 Actuated Cliffs FS./P.C.
<sup>4</sup> Property Code 19641	<sup>5</sup> Property Name NEBU	<sup>6</sup> Well Number # 234
<sup>7</sup> OGRID No. 6137	<sup>8</sup> Operator Name Devon Energy Production Company, L.P.	<sup>9</sup> Elevation 6444

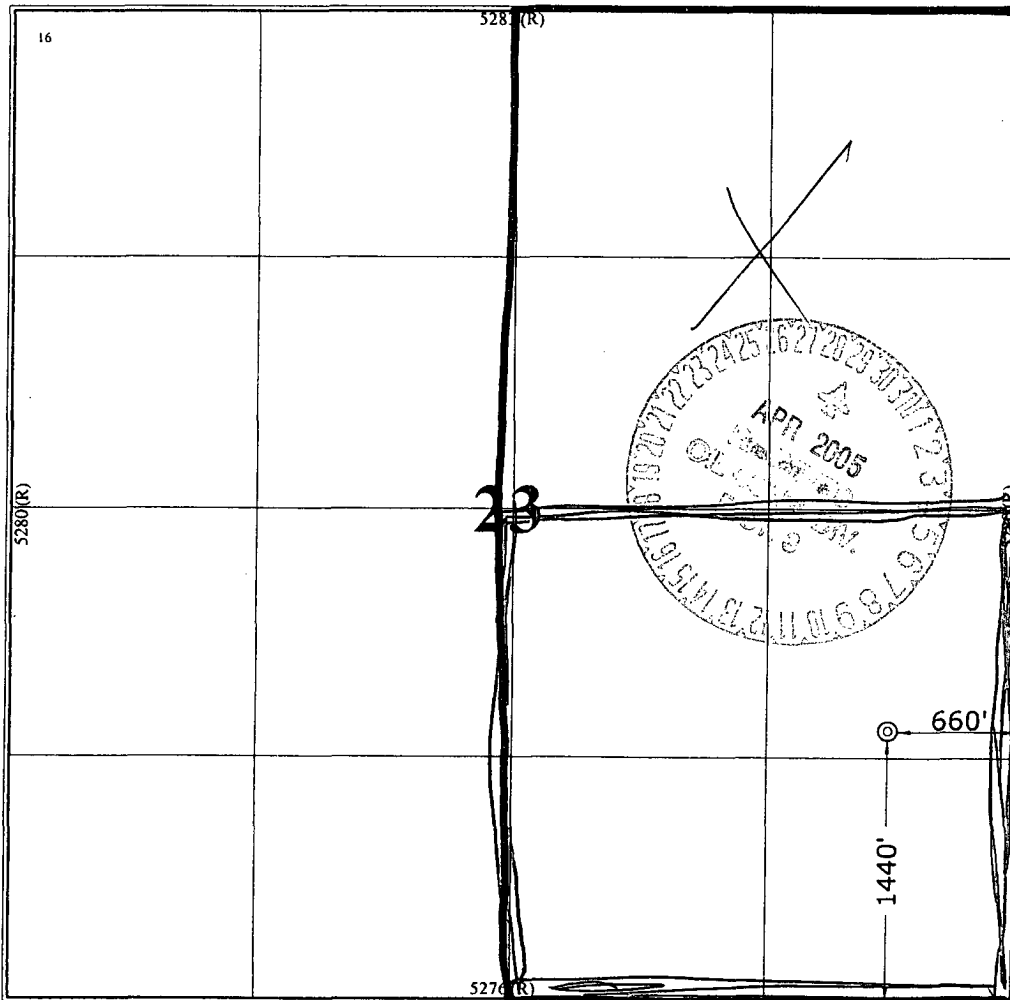
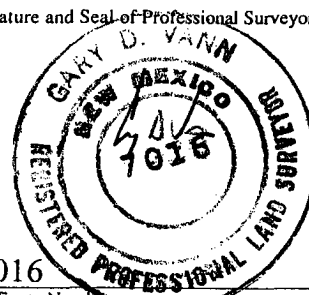
<sup>10</sup> Surface Location

UL or Lot No. I	Section 23	Township 31 N	Range 7 W	Lot Idn	Feet from the 1440	North/South line SOUTH	Feet from the 660	East/West line EAST	County SAN JUAN
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<sup>11</sup> Bottom Hole Location If Different From Surface

<sup>7</sup> UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<sup>12</sup> Dedicated Acres 160	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.						

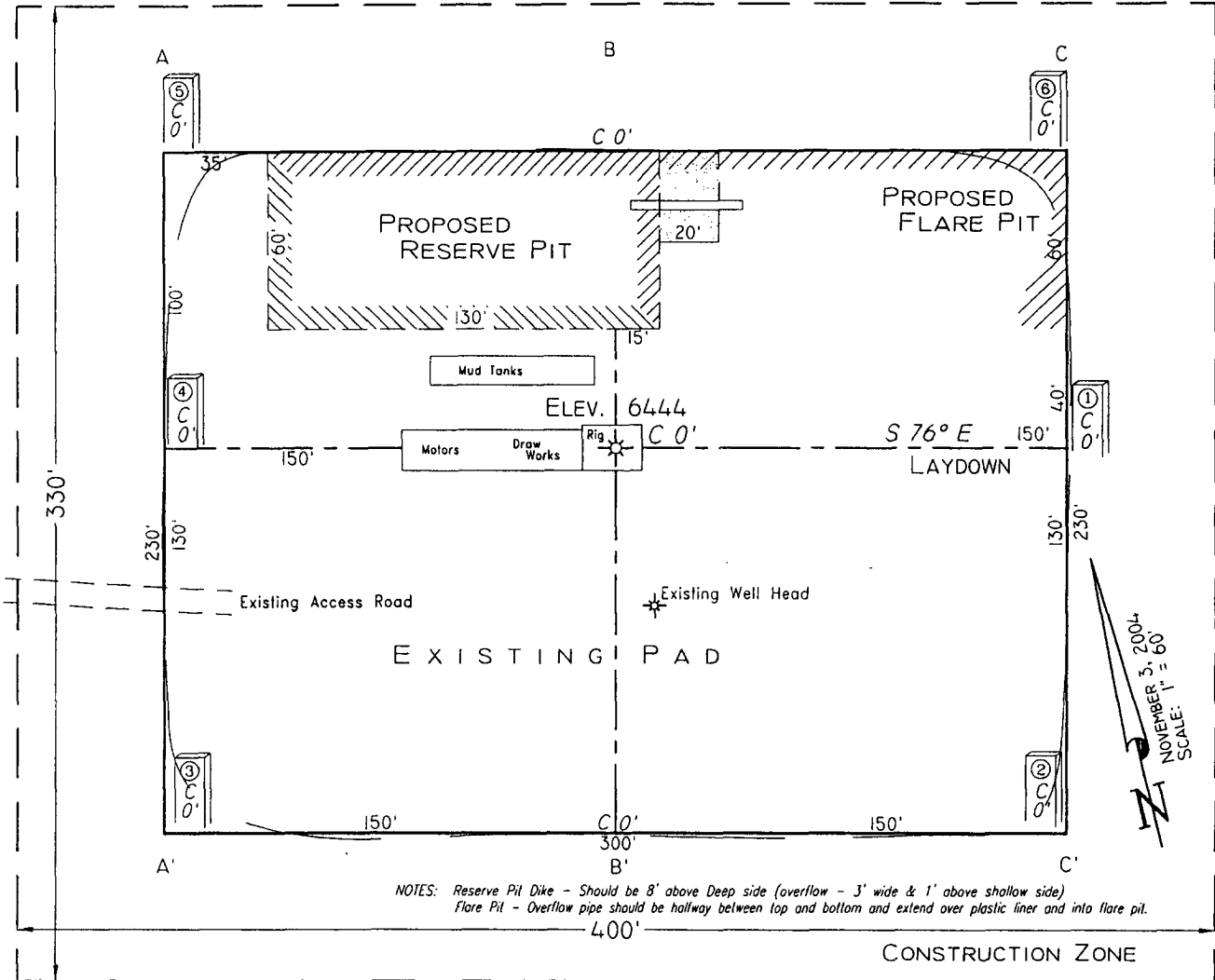
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<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>M.S. Eli</i> Signature Melisa Zimmerman Printed Name Sr. Operations Technician Title 12-10-04 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>November 3, 2004 Date of Survey Signature and Seal of Professional Surveyor  7016 Certificate Number</p>

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

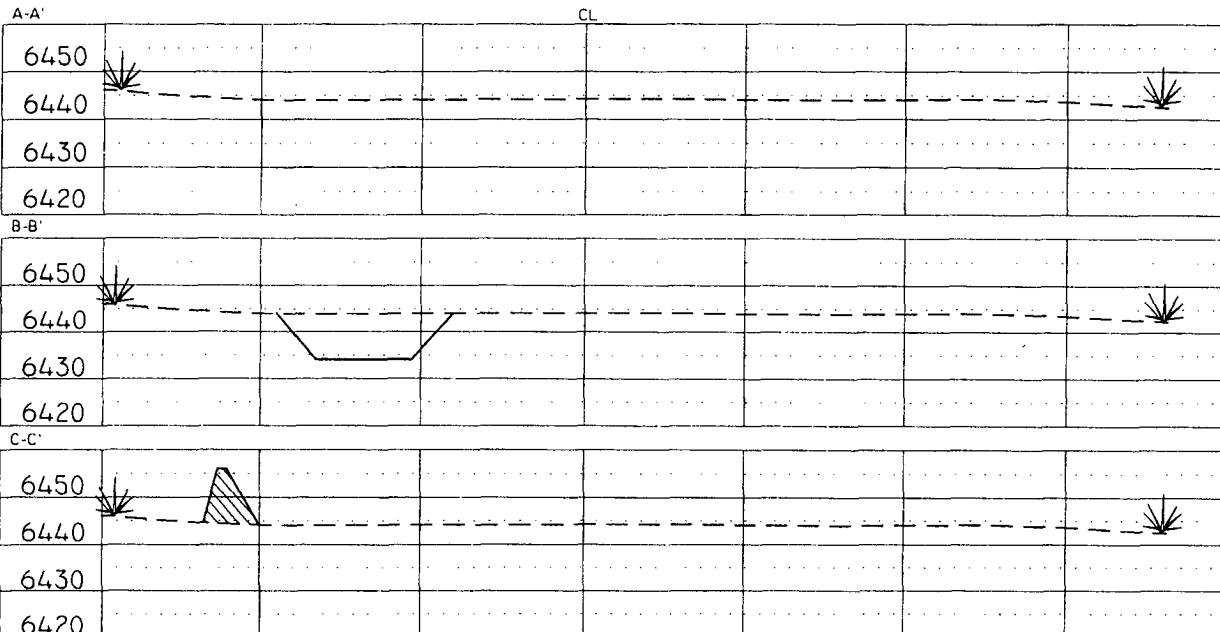
Nebu # 234  
 1440' F/SL 660' F/EL  
 SEC. 23, T31N, R7W, N.M.P.M.  
 SAN JUAN COUNTY, NEW MEXICO

Lat: 36°52'54"  
 Long: 107°32'01"



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 234**  
**Unit I 23-31N-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>Hydrocarbon/Water Bearing Zones</b>
San Jose	Surface	
Ojo Alamo	2322	Aquifer
Kirtland	2443	
Fruitland	2877	Gas
Pictured Cliffs Tongue	3231	Gas
Pictured Cliffs	3362	Gas
Lewis	3490	
TD	3590	

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
0-3669	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)

**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 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 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 Of 50/50/Poz, Yield-1.45 ft<sup>3</sup>/sx, Mixed @ 13ppg Foamed W/ N2 Down To 9.0# Additives 2% Gel, 0.2% Versaset, 0.1% Diacel Lwl.

**Tail:** 75 Sx50/50 / 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**

*circulate cement*

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 *will use mud, but may use air to "lighten" to avoid lost circulation problems per MZ 1/12/05*

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.

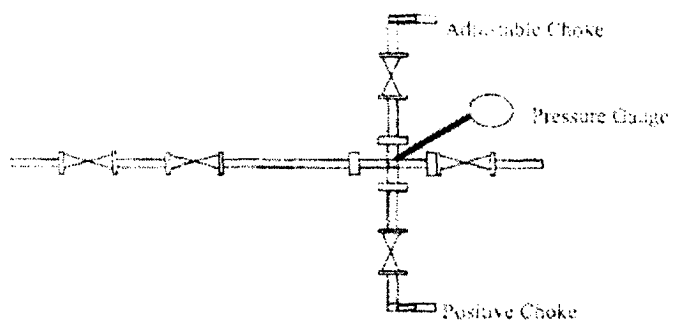
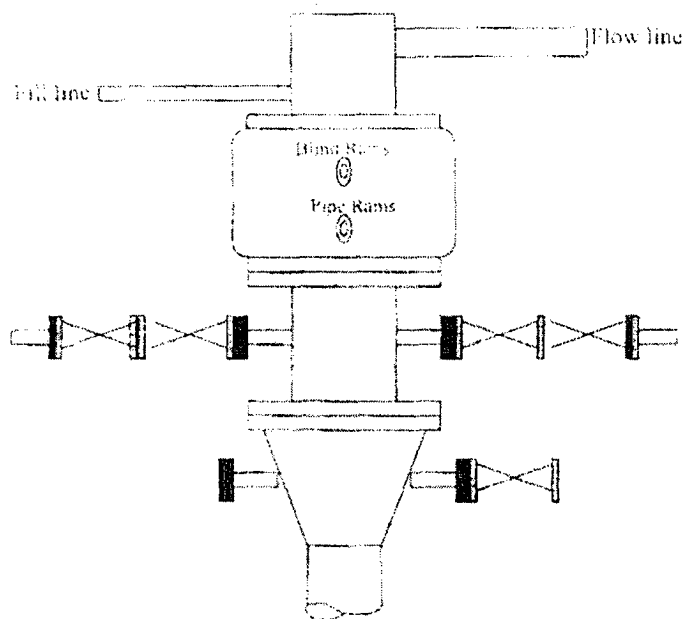
**7. OTHER INFORMATION:**

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.

## 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.