

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

2007 MAY 22

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED

5. Lease Serial No.  
SF079010

6. If Indian, Allottee or Tribe Name

1a. Type of work: ☒ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.  
Northeast Blanco Unit

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.  
NEBU 344

2. Name of Operator  
Devon Energy Production Company, L.P.

9. API Well No.  
30-045-34325

3a. Address 20 N. Broadway  
Oklahoma City, OK 73102

3b. Phone No. (include area code)  
405-552-7917

10. Field and Pool, or Exploratory  
Basin Dakota/Blanco Mesaverde

4. Location of Well (Report location clearly and in accordance with any State requirements.)  
At surface 1,335' FNL & 1,050' FEL, Unit H, SE NW NE  
At proposed prod. zone 1,420' FNL & 750' FWL, Unit E, SW NE NW

11. Sec., T. R. M. or Blk. and Survey or Area  
H Sec. 26-31N-7W - SHL  
E 34-25-31N-7W - BHL

14. Distance in miles and direction from nearest town or post office\*  
Approximately 13.5 miles

12. County or Parish  
San Juan

13. State  
NM

15. Distance from proposed\*  
location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any) 1,050'

16. No. of acres in lease  
2560 Acres

17. Spacing Unit dedicated to this well  
320 Acres W/2

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft. 55'

19. Proposed Depth  
8,624'

20. BLM/BIA Bond no. on file  
CO 1104

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
GR 6,319'


22. Approximate date work will start\*  
07/17/2007

23. Estimated duration  
Unknown

24. Attachments

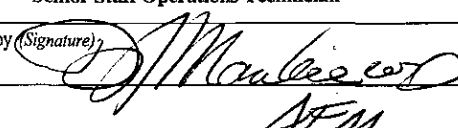
The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature   
Title Senior Staff Operations Technician

Name (Printed/Typed)  
Melisa Castro

Date  
5-17-07

Approved by (Signature)   
Title AFM

Name (Printed/Typed)

Date  
6/1/07

Office  
FEO

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)

NOTIFY AZTEC OCD 24 HRS.  
PRIOR TO CASING & CEMENT

RCVD JUN 5 '07  
OIL CONS. DIV.

DIST. 3

HOLD G104 FOR directional survey

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 30-045-34325	<sup>2</sup> Pool Code 71599/72319	<sup>3</sup> Pool Name Basin Dakota / Blanco Mesaverde
<sup>4</sup> Property Code 19641	<sup>5</sup> Property Name NEBU	<sup>6</sup> Well Number 344
<sup>7</sup> OGRID No. 6137	<sup>8</sup> Operator Name Devon Energy Production Company, L.P.	<sup>9</sup> Elevation 6319

<sup>10</sup> Surface Location

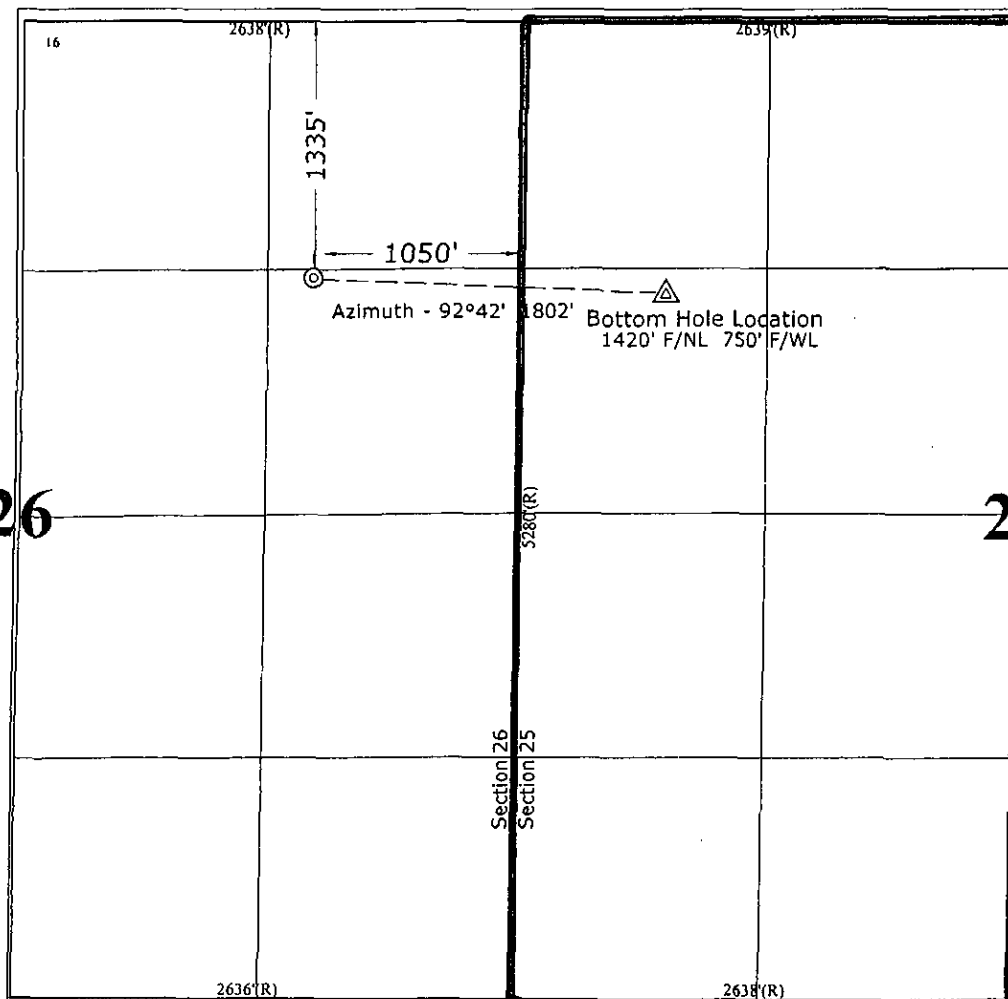
UL or Lot No. H	Section 26	Township 31 N	Range 7 W	Lot Idn	Feet from the 1335	North/South line NORTH	Feet from the 1050	East/West line EAST	County SAN JUAN
--------------------	---------------	------------------	--------------	---------	-----------------------	---------------------------	-----------------------	------------------------	--------------------

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

<sup>7</sup> UL or lot no. E	Section 25	Township 31 N	Range 7 W	Lot Idn	Feet from the 1420	North/South line NORTH	Feet from the 750	East/West line WEST	County SAN JUAN
---------------------------------	---------------	------------------	--------------	---------	-----------------------	---------------------------	----------------------	------------------------	--------------------

<sup>12</sup> Dedicated Acres 320	<sup>13</sup> Joint or Infill W/2 Sect 25	<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



<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.

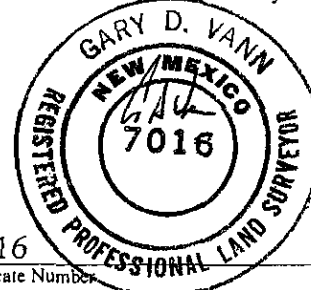
Signature  
Melise S. Castro  
Printed Name  
Sr. Staff Operations Tech.  
Title  
May 17, 2007  
Date

<sup>18</sup> 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.

Revise BHL August 30, 2006  
July 30, 2006

Date of Survey  
Signature and Seal of Professional Surveyor



7016  
Certificate Number

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  
May 27, 2004

WELL API NO. <b>30-045-34325</b>
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. SF 079010

<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	7. Lease Name or Unit Agreement Name <b>Northeast Blanco Unit</b>
2. Name of Operator <b>Devon Energy Production Company, L.P.</b>	8. Well Number 344
3. Address of Operator <b>20 N. Broadway, Oklahoma City, OK 73102</b>	9. OGRID Number 6137
4. Well Location Unit Letter <b>H</b> : <b>1,335</b> feet from the <b>North</b> line and <b>1,050</b> feet from the <b>East</b> line Section <b>26</b> Township <b>31N</b> Range <b>7W</b> NMPM County <b>San Juan</b>	10. Pool name or Wildcat Basin Dakota/Blanco Mesaverde
11. Elevation (Show whether DR, RKB, RT, GR, etc.) GR 6,319'	
Pit or Below-grade Tank Application <input checked="" type="checkbox"/> or Closure <input type="checkbox"/>	
Pit type <b>Drilling</b> Depth to Groundwater <b>&gt;100'</b> Distance from nearest fresh water well <b>&gt;1000'</b> Distance from nearest surface water <b>&gt;1000'</b>	
Pit Liner Thickness: <b>12</b> mil Below-Grade Tank: Volume <b>bbls</b> ; Construction Material <b>Synthetic Liner</b>	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

<b>NOTICE OF INTENTION TO:</b>		<b>SUBSEQUENT REPORT OF:</b>	
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"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
OTHER: <b>Construction Drilling Pit</b> <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.

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  TITLE **Senior Staff Operations Technician** DATE **5-17-07**

Type or print name **Melisa Castro** E-mail address: **Melisa.castro@dvn.com** Telephone No. **(405) 552-7917**

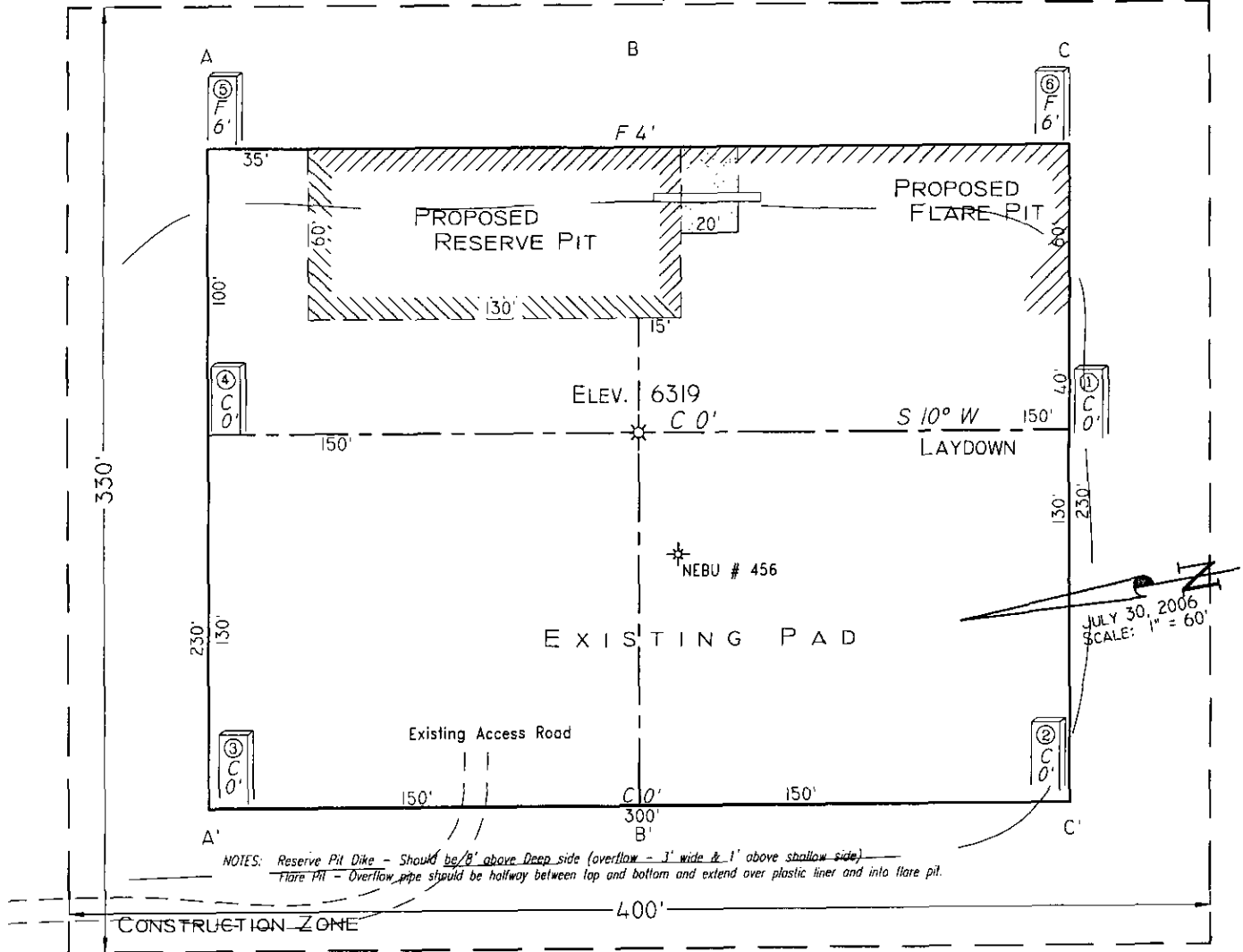
For State Use Only

APPROVED BY:  TITLE **DEPUTY OIL & GAS INSPECTOR, DIST. 8** DATE **JUN 08 2007**  
Conditions of Approval (if any):

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

Nebu # 344  
 1335' F/NL 1050' F/EL  
 SEC. 26, T31N, R7W, N.M.P.M.  
 SAN JUAN COUNTY, NEW MEXICO

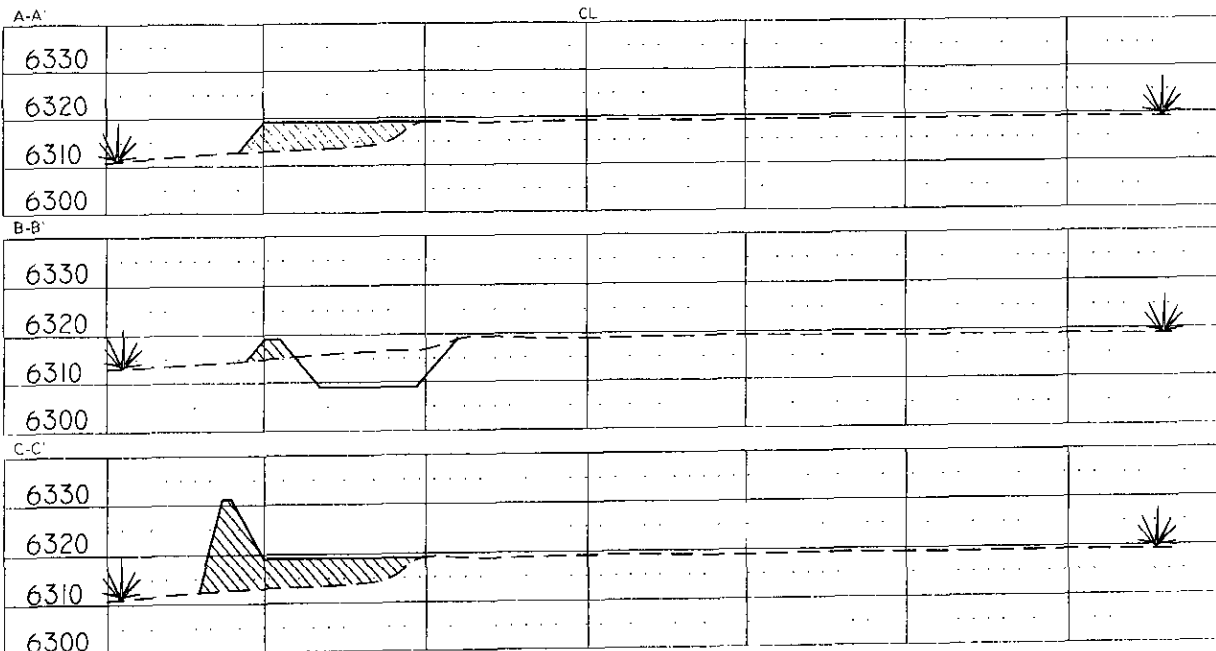
Lat: 36.87414°  
 Long: 107.53486° (83)



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.

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 344**  
**Unit H 26-31N-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>TMD (ft)</b>	<b>TVD (ft)</b>	<b>Hydrocarbon/Water Bearing Zones</b>
San Jose	Surface	Surface	
Ojo Alamo	2727	2195	Aquifer
Kirtland	2907	2336	
Fruitland	3412	2778	Gas
Fruitland 1 <sup>st</sup> Coal	3538	2897	Gas
Pictured Cliffs Tongue	3764	3117	Gas
Pictured Cliffs Main	3899	3250	Gas
Lewis	4009	3360	Gas
<b>Intermediate TD</b>	4109	3460	
Huefanito Bentonite	4626	3977	Gas
Chacra / Otera	5017	4368	Gas
Cliff House	5805	5156	Gas
Menefee	5847	5198	Gas
Point Lookout	6137	5488	Gas
Mancos	6593	5944	Gas
Gallup	7485	6836	Gas
Greenhorn	8181	7532	
Graneros	8236	7587	Gas
Dakota	8354	7705	Gas
Paguate	8366	7717	
Cubero	8402	7753	
Oak Canyon	8445	7796	

Encinal Canyon	8469	7820	
Lower Encinal Canyon	8485	7836	
Burro Canyon	8529	7880	
Morrison	8574	7925	
TD	8624	7975	

\*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, with a size of 2", 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:

TMD	TVD	Hole Size	Size	Grade	Weight	Thread	Condition
0-285'	0-285'	12-1/4"	9-5/8"	H-40	32#	STC	New
0-4109	0-3460'	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:**

TMD Interval	TVD 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'-4,109'	285'-3,460'	Water/Mud	8.4-9.0	29-70	8.0	NC	
4,109' - TD	3,460' - 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.

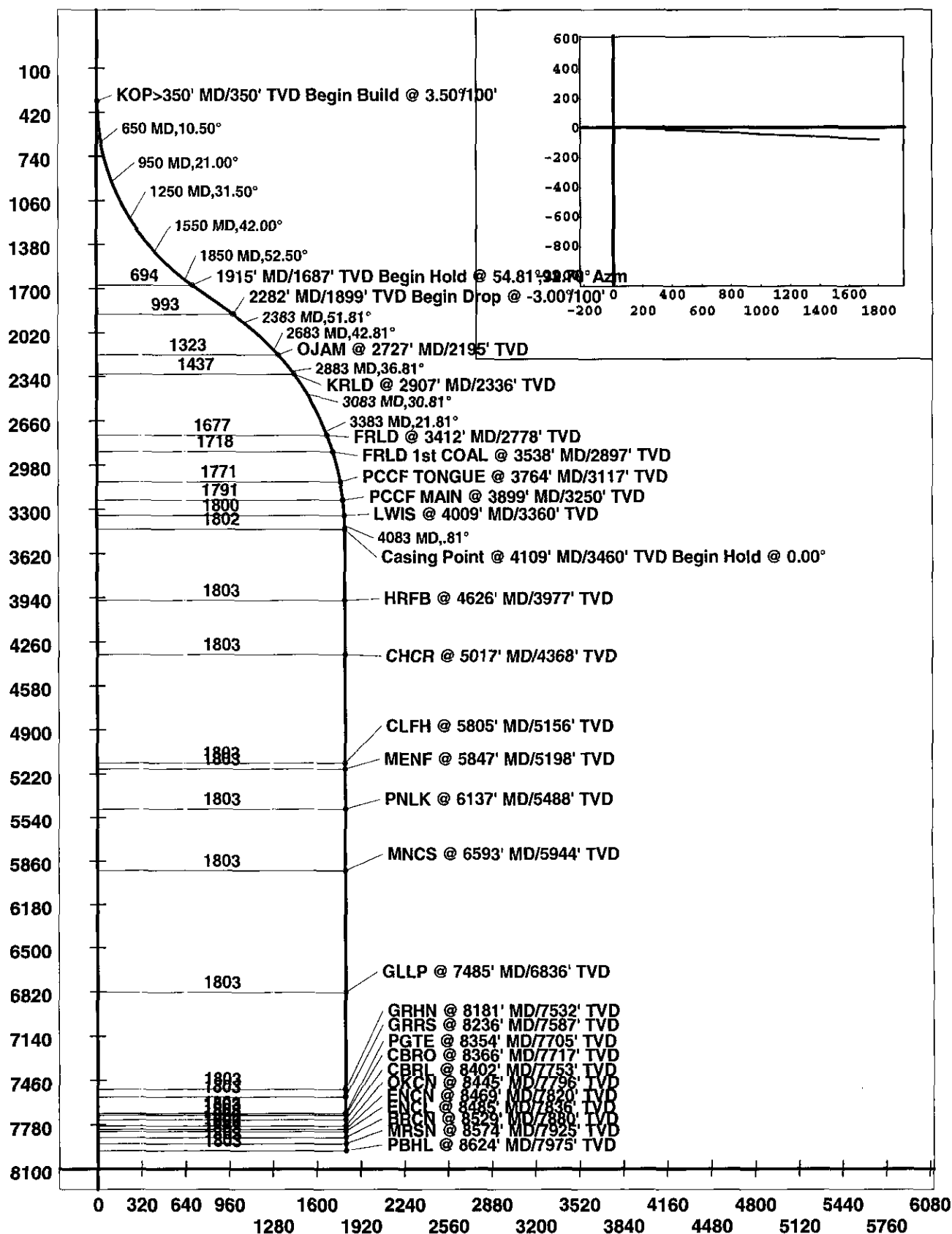
**7. OTHER INFORMATION:**

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

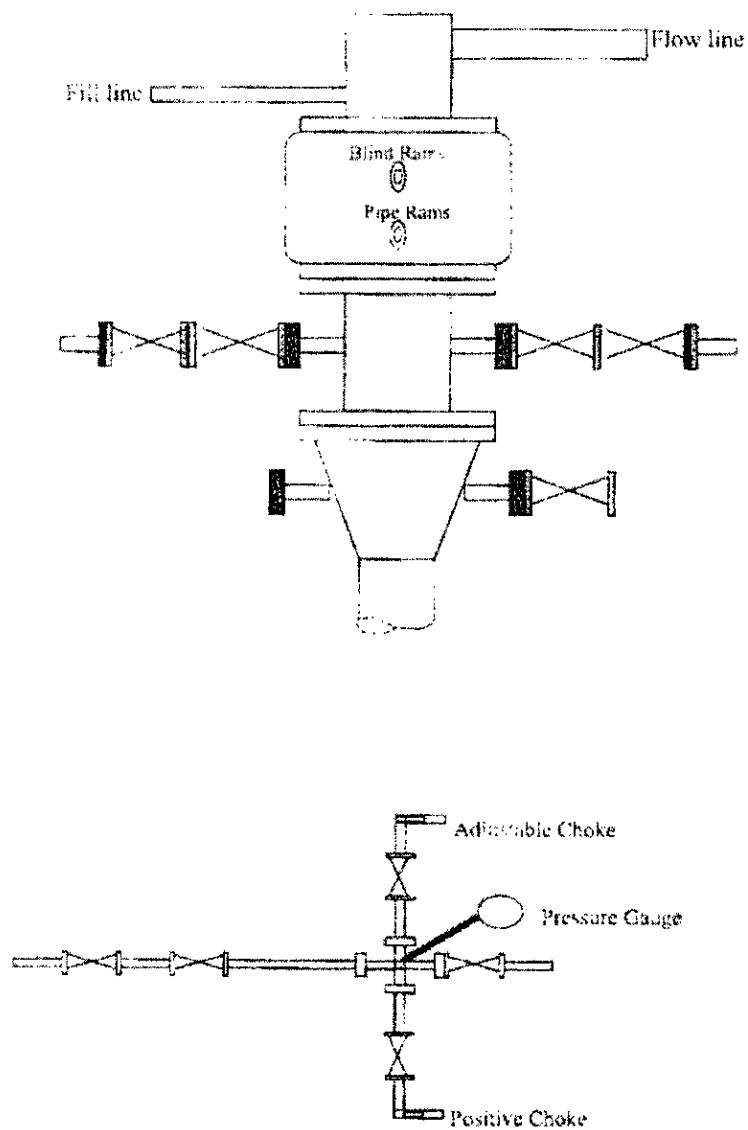
Starting Date:	Upon Approval
Duration:	20 days

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 344  
 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.