Form 3160-3
(August 1999)

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER	5. Lease Serial No. SF-079010
	6. If Indian, Allottee or Tribe Name
	7. If Unit or CA Agreement, Name and No. NEBU 307N
1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone	8. Lease Name and Well No. NORTHEAST BLANCO UNIT 307N
2. Name of Operator DEVON ENERGY PRODUCTION CO LP Contact: PATTI RIECHERS E-Mail: patti.riechers@dvn.com	9. API Well No. 30045 32144
3a. Address 20 N BROADWAY, SUITE 1500 OKLAHOMA CITY, OK 73102	3b. Phone No. (include area code) Ph: 405.228.4248 Fx: 405.228.4848
	10. Field and Pool, or Exploratory BLANCO MESAVERDE/BASIN DAKO
4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* At surface SWNW 1710FNL 690FWL At proposed prod. zone SWNW 1710FNL 690FWL	11. Sec., T., R., M., or Blk. and Survey or Area E Sec 24 T31N R7W Mer NMP
14. Distance in miles and direction from nearest town or post office* APROXIMATELY 12 MILES SOUTH FROM IGNACIO, CO	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) 690	16. No. of Acres in Lease / 17. Spacing Unit dedicated to this well 320 W/2
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 8161 MD / 20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KB, RT, GL, etc. 6421 GL	22. Approximate date work will start / 23. Estimated duration 20 DAYS

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.
2. A Drilling Plan.
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).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature (Electronic Submission)	Name (Printed/Typed) PATTI RIECHERS	Date 01/23/2004
Title AUTHORIZED SIGNATURE		
Approved by (Signature)	Name (Printed/Typed)	Date 5-28-04
Title AFM	Office FFO	

JUN 2004 RECEIVED OIL CONS. DIV. DIST. 3

Application approval does not warrant or certify 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.

Additional Operator Remarks (see next page)

Electronic Submission #27101 verified by the BLM Well Information System
For DEVON ENERGY PRODUCTION CO LP, sent to the Farmington

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

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

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

NMOCD

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	[3] Pool Name
30-045-32144	72319/71599	Blanco Mesaverde / Basin Dakota

[4] Property Code	[5] Property Name	[6] Well Number
19641	NEBU	# 307N

[7] OGRID No.	[8] Operator Name	[9] Elevation
6137	Devon Energy Production Company, L.P.	6421

[10] Surface Location

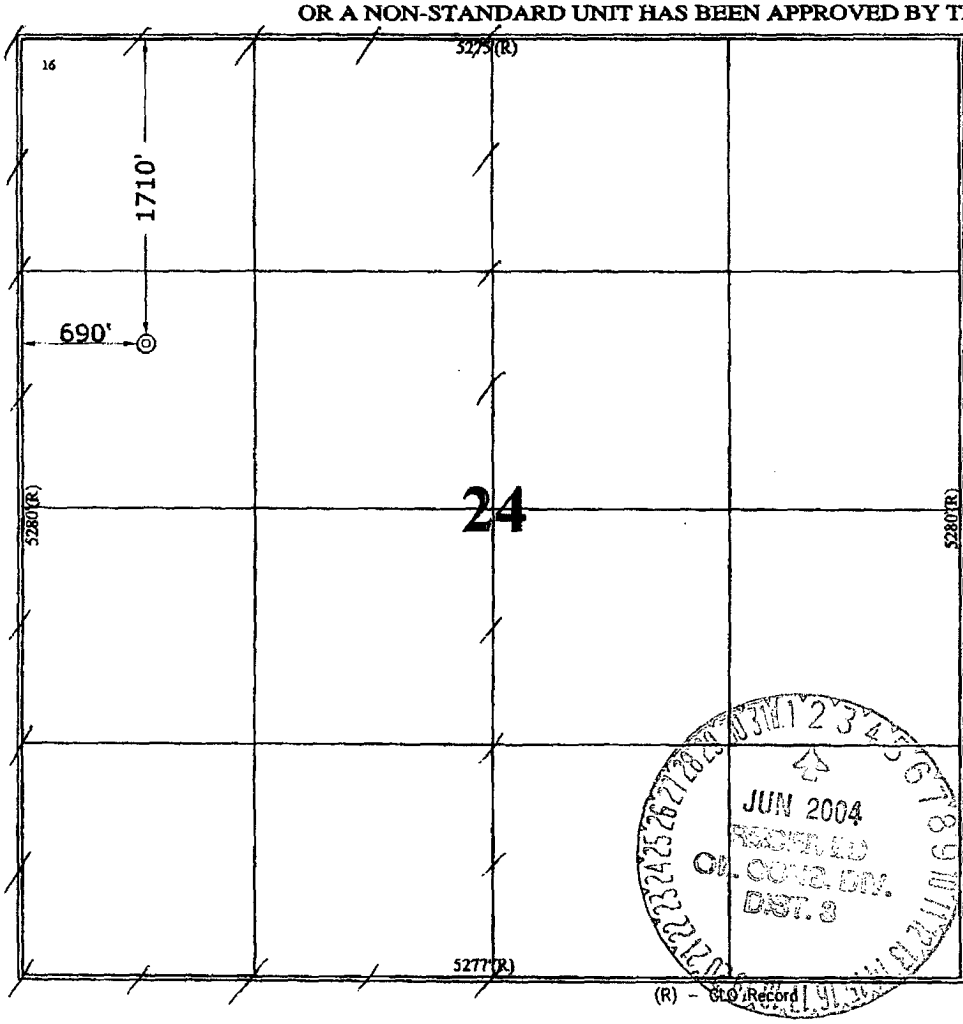
UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	24	31 N	7 W		1710	NORTH	690	WEST	SAN JUAN

[11] Bottom Hole Location If Different From Surface

[7] UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
326			

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.

Patti Rievers
Signature
Patti Rievers
Printed Name
Sr. Operations Tech.
Title
January 23, 2004
Date

[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.

October 23, 2003
Date of Survey

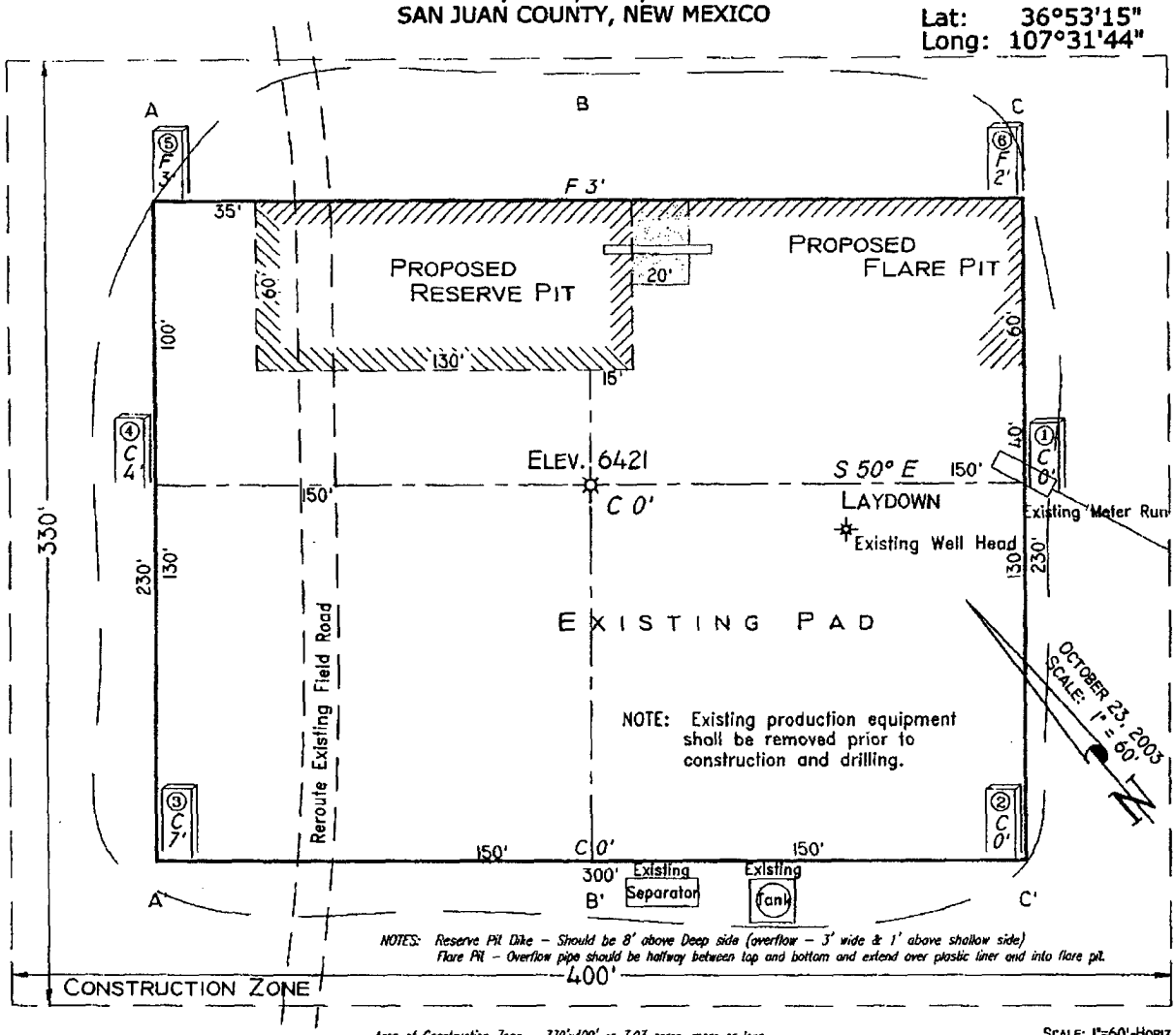
Signature and Seal of Professional Surveyor

GARY L. JONES
NEW MEXICO
7016
REGISTERED PROFESSIONAL LAND SURVEYOR

7016
Certificate Number

PAD LAYOUT PLAN & PROFILE
DEVON ENERGY PRODUCTION COMPANY, L.P.
NEBU # 307N
1710' F/NL 690' F/WL
SEC. 24, T31N, R7W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO

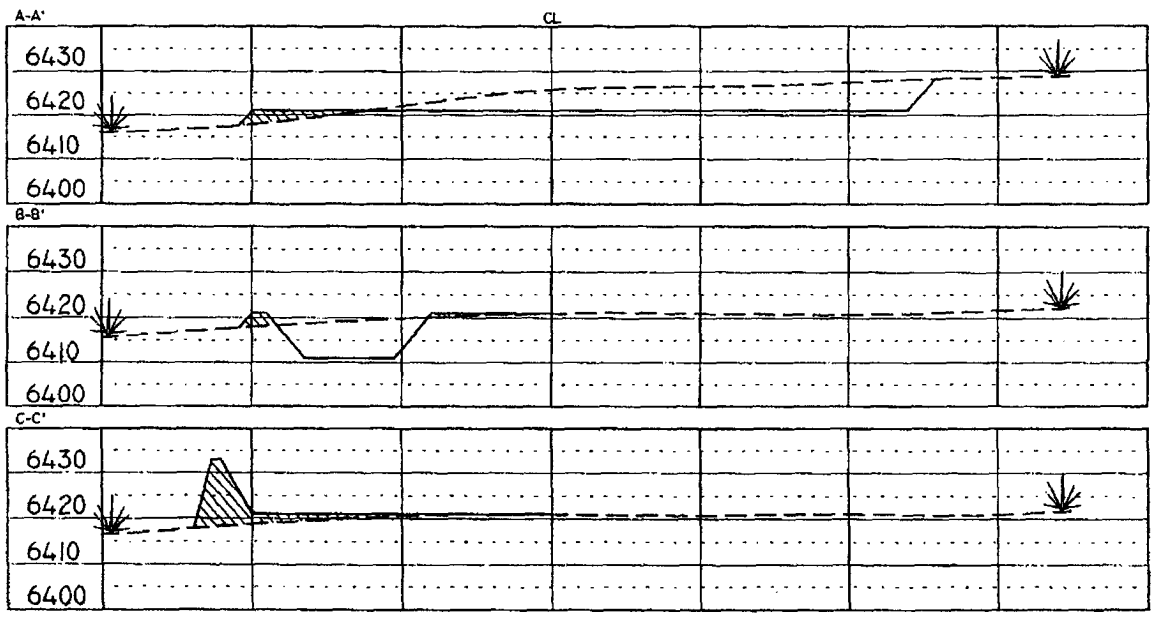
Lat: 36°53'15"
Long: 107°31'44"



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 307N
Unit E 24-31N-7W
San Juan Co., NM

DRILLING PLAN

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

Formation	TVD (ft)	Hydrocarbon/Water Bearing Zones
San Jose	Surface	
Ojo Alamo	2291	Aquifer
Kirtland	2408	
Fruitland	2844	Gas
Pictured Cliffs	3346	Gas
Lewis	3471	Gas
Intermediate TD	3571	
Mesaverde	4116	Gas
Cliff House	5301	
Menefee	5371	Gas
Point Lookout	5611	Gas
Mancos	5981	Gas
Gallup	7021	Gas
Greenhorn	7661	
Graneros	7716	
Dakota	7844	Gas
Burro Canyon	8031	
Morrison	8111	
TD	8161	

*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	Hole Size	Size	Grade	Weight	Thread	Condition
0-285	12-1/4"	9-5/8"	H-40	32#	STC	New
0-3571	8-3/4"	7"	K-55	23#	LTC	New
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 additives mixed at 15.6 ppg, 1.19 ft3/sks.

Intermediate String: Cement will be circulated to surface.

Lead: 575 sks 50/50 Poz with additives mixed at 13.0 ppg, 1.44 ft3/sks prio to foaming, 9 ppg, 2.18 ft3/sks after foaming.
Tail: 75 sks 50/50 Poz with additives mixed at 13.0 ppg, 1.44 ft3/sks.

If hole conditions dictate, an alternate, two stage cement design Will be used: Stage 1: 85 sacks Class B 50/50 POZ, 3% gel, 5# Gilsonite, ¼# Flocele, 1/10% CFR 3, .2% Halad 344, Yield 1.47 ft3/sks. Stage 2: 450 sacks Class B 50/50 POZ, 3% gel, 5# Gilsonite, ¼# Flocele, .1% CFR 3, .2% Halad 344, Yield 1.47 ft3/sks. Cement designed to circulate to surface.

Production String: TOC designed to circulate to surface, cement will tie into the intermediate casing as a minimum. Volumes may vary with actual well characteristics.

Lead: 500 sks 50/50 Poz with additives mixed at 13.0 ppg, Yield
1.47 ft3/sks.

Actual volumes will be calculated and adjusted with caliper log prior to cementing.

If hole conditions dictate, an alternate, two stage cement design will be used. Stage 1: 325 sxs 50/50 POZ, 3% gel, .9% Halad 9, .2% CFR 3, %# Gilsonite & ¼# Flocele. Yield 1.47 13#. Stage 2: Lead: 450 sx 50/50 POZ, 3% Gel, .9% Halad 9, .2% CFR 3, 5# Gilsonite & ¼# Flocele. Yield 1.47 13 ppg. Tail: 25 sx (5 bbls) Class B .4% Halad 9. Yield 1.18 15.6#.

4. DRILLING FLUIDS PROGRAM:

Interval	Type	Weight (ppg)	Viscosity	pH	Water Loss	Remarks
0-3571'	Spud-foam	8.4-9.0	29-70	8.0	NC	FW gel, LSND or stiff foam
3571'-7844'	Air				NC	
7844' - 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' from 0-TD or first succeeding bit change. The hole will be air drilled from 3571' – TD. The equipment used in this type of operation will not allow for single shot suveys 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:

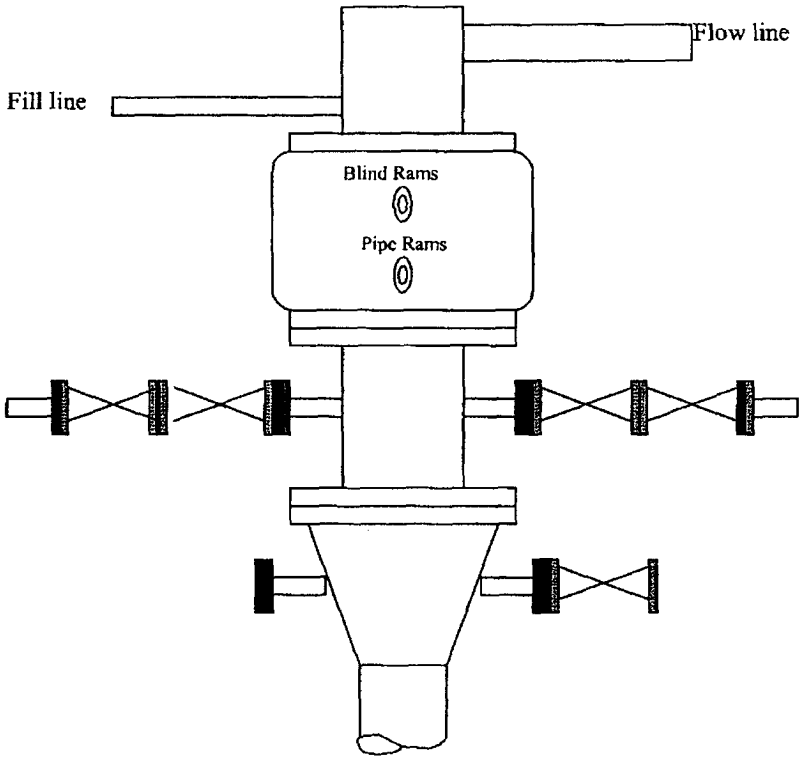
The Fruitland Coal will be encountered at approximately 2844' TMD. Estimated formation pressure is 300 psi. No other abnormal pressures and/or temperatures are expected. No hydrogen sulfide should be present.

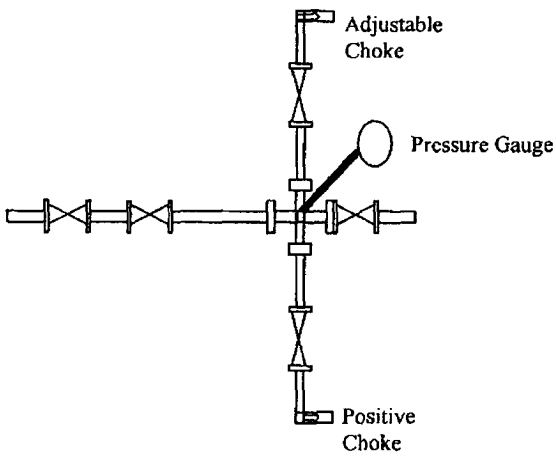
7. OTHER INFORMATION:

NEBU 307N

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.