ATS-11-60

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Form 3160-3
(February 2005)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☑ DRILL ☐ REENTER	5. Lease Serial No. **USA NMNM 94118**
1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone	6. If Indian, Allotee or Tribe Name
2. Name of Operator **Devon Energy Production Co., LP** <6137>	7. If Unit or CA Agreement, Name and No.
3a. Address **20 North Broadway, OKC, OK 73102**	8. Lease Name and Well No. **Rattlesnake Federal Unit** <34350> #9H
3b. Phone No. *(include area code)* **(405)-228-8973**	9. API Well No. ~~30~~ 30-025-40068 <96663>
4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* At surface **SESE 330' FSL & 330' FEL Unit P** At proposed prod. zone **NENE 330' FNL & 330' FEL Unit A**	10. Field and Pool, or Exploratory ~~SE Lea County, Leonard/Bone Spr~~ Hardin Tank
	11. Sec., T. R. M. or Blk. and Survey or Area **Sec 15 T26S R34E**
14. Distance in miles and direction from nearest town or post office* **Approximately 15 miles southwest of Jal, NM.**	12. County or Parish **Lea** / 13. State **NM**
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) **330'**	16. No. of acres in lease **1,760 ac** / 17. Spacing Unit dedicated to this well **160 acres**
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. **See attached map**	19. Proposed Depth **TVD 9,654' MD 14,066'** / 20. BLM/BIA Bond No. on file **CO-1104**
21. Elevations (Show whether DF, KDB, RT, GL, etc.) **3229' GL**	22. Approximate date work will start* **07/01/2011** / 23. Estimated duration **45 days**

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must 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 must 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 BLM.

25. Signature	Name *(Printed/Typed)* **Spence Laird**	Date **10/26/2010**
Title **Regulatory Analyst**		
Approved by *(Signature)* /s/ James Stovall	Name *(Printed/Typed)*	Date FEB 18 2011
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

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. APPROVAL FOR TWO YEARS

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)

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Kz 02/25/11

Carlsbad Controlled Water Basin

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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 & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

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Form C-102
Revised October 15,2009
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-025-40068	96661	Hardin Tank ~~LEONARD~~ (BONE SPRING)

[4] Property Code	[5] Property Name	[6] Well Number
34380	RATTLESNAKE FED. UNIT	9H

[7] OGRID No.	[8] Operator Name	[9] Elevation
6137	DEVON ENERGY PRODUCTION COMPANY, L.P.	3229.8

[10] Surface Location

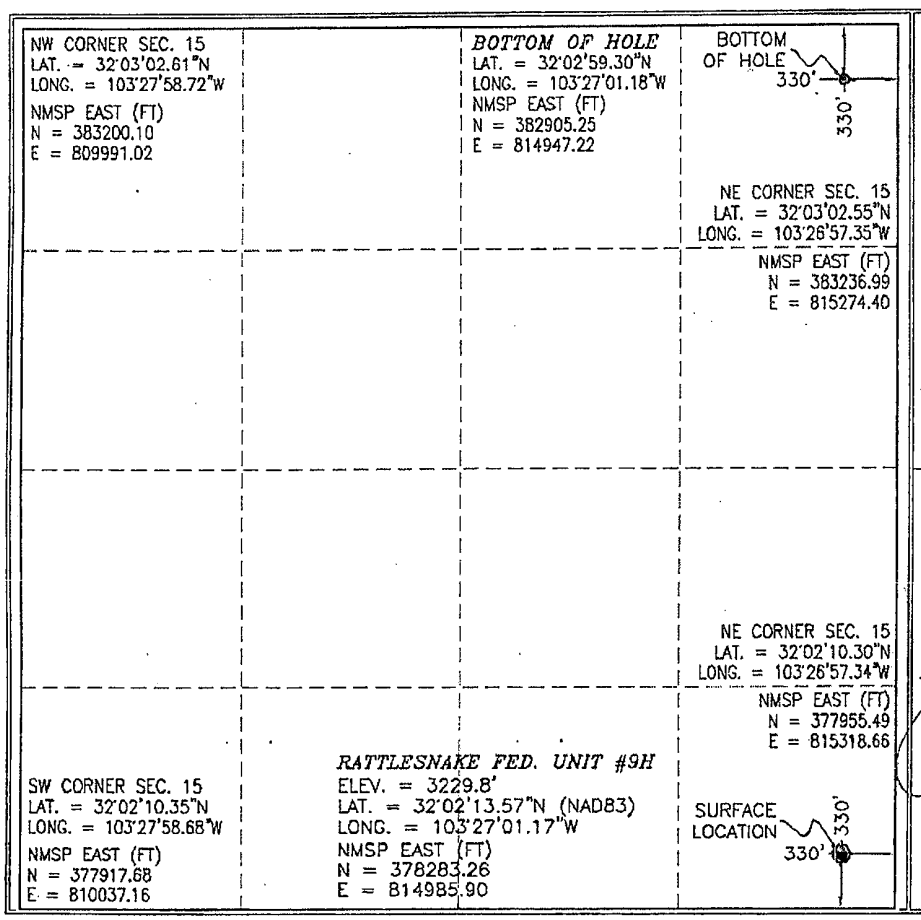
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	15	26 S	34 E		330	SOUTH	330	EAST	LEA

[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
A	15	26 S	34 E		330	NORTH	330	EAST	LEA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
160			

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, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature — Date: 10/20/10

Printed Name: SPENCE LAIRD, REG. ANALYST

[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.

SEPTEMBER 21, 2010
Date of Survey

FILIMON F. JARAMILLO — NEW MEXICO — 12797 — REGISTERED LAND SURVEYOR

Signature and Seal of Professional Surveyor

Certificate Number: FILIMON F. JARAMILLO, PLS 12797

SURVEY NO. 246

DRILLING PROGRAM

Devon Energy Production Company, LP
Rattlesnake Federal Unit #9H
Surface Location: 330' FSL & 330' FEL, Unit P, Sec 15 T26S R34E, Lea, NM
Bottom hole Location: 330' FNL & 330' FEL, Unit A, Sec 15 T26S R34E, Lea, NM

1. Geologic Name of Surface Formation

a. Quatemary

2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:

a.	Rustler	903'	Water	
b.	Salado Salt	1250'	Water	
c.	Bell Canyon	5241'	Oil	
d.	Cherry Canyon	6292'	Oil	
e.	Brushy Canyon	8307'	Oil	
f.	Bone Spring	9370'	Oil	Entry Point: 9378'
g.	Leonard (Bone Spring)	9420'	Oil	
h.	Pilot Hole	10,120'		

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13 3/8" casing at 950' and circulating cement back to surface. The fresh water sands will be protected by setting 9 5/8" casing at 5300' and circulating cement to surface. The Bone Spring intervals will be isolated by setting 5 ½" casing to total depth and circulating cement above the base of the 9 5/8" casing. All casing is new and API approved.

3. Casing Program:

Hole Size	Hole Interval	OD Csg	Casing Interval	Weight	Collar	Grade
17 1/2"	0'-950'	13 3/8"	0'-950'	48#	STC	H-40
12 ¼"	950'-5300'	9 5/8"	0'-5300'	43.5#	LTC	N-80
8 ¾"	5300' -10,120'	PH				
8 ¾"	5300'- 14,100'	5 ½"	0'-9200'	17#	LTC	HCP-110
			9,200'-14,100'	17#	BTC	HCP-110

Design Parameter Factors:

Casing Size	Collapse Design Factor	Burst Design Factor	Tension Design Factor
13 3/8"	1.6	3.6	6.7
9 5/8"	1.4	2.3	4.7
5 ½"	1.3	1.7	2.3

4. Cement Program:

All Cement Volumes exceed 25% excess

Plug Back Volume: cement plug from 10,120'-9,100' with 670 sacks class H with a .9 cuft/sack yield

13 3/8" Surface

Lead: 546 sacks Premium Plus C Cement + 0.125 lbs/sack Cello Flake + 4% bwoc Bentonite + 5% bwow Sodium Chloride + 0.8% bwoc Sodium Metasilicate + 5% bwoc MPA-5 + 101.1% Fresh Water
Yield: 1.75 cf/sack. TOC @ surface.

Tail: 300 sacks Premium Plus C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 56.3% Fresh Water
Yield: 1.35 cf/sack.

9 5/8" Intermediate

Lead: 1316 sacks (35:65) Poz (Fly Ash):Premium Plus C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 6% bwoc Bentonite + 107.8% Fresh Water
Yield: 2.04 cf/sack. TOC @ surface.

Tail: 300 sacks (60:40) Poz (Fly Ash):Premium Plus C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.4% bwoc Sodium Metasilicate + 4% bwoc MPA-5 + 64.7% Water
Yield: 1.37 cf/sack.

5 1/2" Production

1st Stage

Lead: 7545 sacks (35:65) Poz + 0.2% bwoc Sodium Metasilicate + 1.4% bwoc FL-62 + 0.4% bwoc
Yield: 2.01 cf/sack.

Tail
Lead: 1352 sacks (50:50) Poz (Fly Ash):Premium Plus C Cement + 1% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 6% bwoc Bentonite + 0.4% bwoc FL-52A + 0.4% bwoc R-3 + 103.1% Fresh Water
Yield: 1.28 cf/sack.

DV TOOL at ~6000'

2nd Stage

Lead: 120 sacks (35:65) Poz (Fly Ash):Class H Cement + 0.125 lbs/sack Cello Flake + 3 6% bwoc Bentonite + 0.4% bwoc FL-52A + 99.3% Fresh Water
Yield: 2.04 cf/sk

Tail: 100 sacks (60:40) Poz (Fly Ash): Class H Cement + 1% bwow Sodium Chloride + 0.15% bwoc + 63.2% Fresh Water
Yield: 1.37 cf/sk

TOC for All Strings:
Surface: 0'
1st Intermediate: 0'
Production: 4800'

See COA The above cement volumes could be revised pending the caliper measurement from the open hole logs. Actual cement volumes will be adjusted based on fluid caliper and caliper log data.

5. **Pressure Control Equipment:**
BOP DESIGN: The 13 3/8" casing will have a 3,000# (Hydril) annular preventer which will be tested to 2000#. The blow out prevention system will consist of a bag type (hydril) preventer, a double ram preventer stack, and a rotating head. Both the hydril and ram stack will be hydraulically operated. Both BOP systems will be rated at 5000 psi. As shown in the attachment, the Surface Casing BOP will be a 3000 psi Hydril annular. It will be tested as a 2000 psi Hydril annular. Prior to drilling out the 9 5/8" intermediate shoe, the ram stack will be nippled up with 4.5" pipe rams installed and will be used in the BOP. **The hydril will be tested to 1000psi (high) and 250psi (low). Tests on the 5000psi BOP will be conducted per the BLM Drilling Operations Order #2.**

The ram system will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These tests will be logged in the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and hydril, other BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 5000 psi WP.

6. **Proposed Mud Circulation System**

Depth	Mud Wt.	Visc	Fluid Loss	Type System
0' – 950'	8.4-9.0	32-34	NC	Fresh Water/Gel
950'– 5300'	10.0	28-30	NC	Brine
5300'–14,100'	8.8-9.3	28-40	NC	Fresh Water/Brine

The necessary mud products for weight addition and fluid loss control will be on location at all times.

7. **Auxiliary Well Control and Monitoring Equipment:**
   a. A Kelly cock will be in the drill string at all times.
   b. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
   c. Hydrogen Sulfide detection equipment will be in operation after drilling out the 13 3/8" casing shoe until the 5 1/2" casing is cemented. Breathing equipment will be on location upon drilling the 13 3/8" shoe until total depth is reached.

8. **Logging, Coring, and Testing Program:** See COA
   a. Drill stem tests will be based on geological sample shows.
   b. If a drill stem test is anticipated; a procedure, equipment to be used and safety measures will be provided via sundry notice to the BLM.
   c. The open hole electrical logging program will be:
      i. Total Depth to Intermediate Casing — Dual Laterolog-Micro Laterolog with SP and Gamma Ray. Compensated Neutron – Z Density log with Gamma Ray and Caliper.
      ii. Total Depth to Surface — Compensated Neutron with Gamma Ray

iii. No coring program is planned
iv. Additional testing will be initiated subsequent to setting the 5 ½" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

9. Potential Hazards:

a. No abnormal pressures or temperatures are expected. There is no known presence of H2S in this area; therefore, no H2S is anticipated to be encountered. If H2S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 4600 psi and Estimated BHT 135°.

10. Anticipated Starting Date and Duration of Operations:

a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 32 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.

devon

Project: Lea Co., New Mexico (Nad 83)
Site: Rattlesnake Fed Unit #9H
Well: Rattlesnake Fed Unit #9H
Wellbore: Lateral #1
Design: Design #1

EUDD DRILLING & MEASUREMENT SERVICES

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	9117.04	0.00	0.00	9117.04	0.00	0.00	0.00	0.00	0.00	
3	10022.04	90.50	359.52	9689.97	577.94	-4.84	10.00	359.52	577.96	
4	14066.39	90.50	359.52	9654.68	4622.00	-38.68	0.00	0.00	4622.16	PBHL - TD (RFU#9H)

ANNOTATIONS

TVD	MD	Annotation
9117.04	9117.04	KOP - Build 10°/100'
9689.97	10022.04	EOC - Hold I:90.50° @ A:359.52°

PROJECT DETAILS: Lea Co., New Mexico (Nad 83)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL - TD (RFU#9H)	9654.68	4622.00	-38.68	382905.25	814947.22	32° 2' 58.597 N	103° 27' 0.817 W	Point

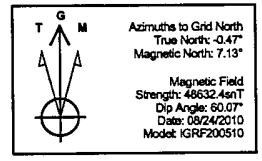
WELL DETAILS: Rattlesnake Fed Unit #9H

Ground Level:
3215.00
WELL @ 3240.00ft (Original Well Elev)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	378283.26	814985.90	32° 2' 12.859 N	103° 27' 0.807 W	

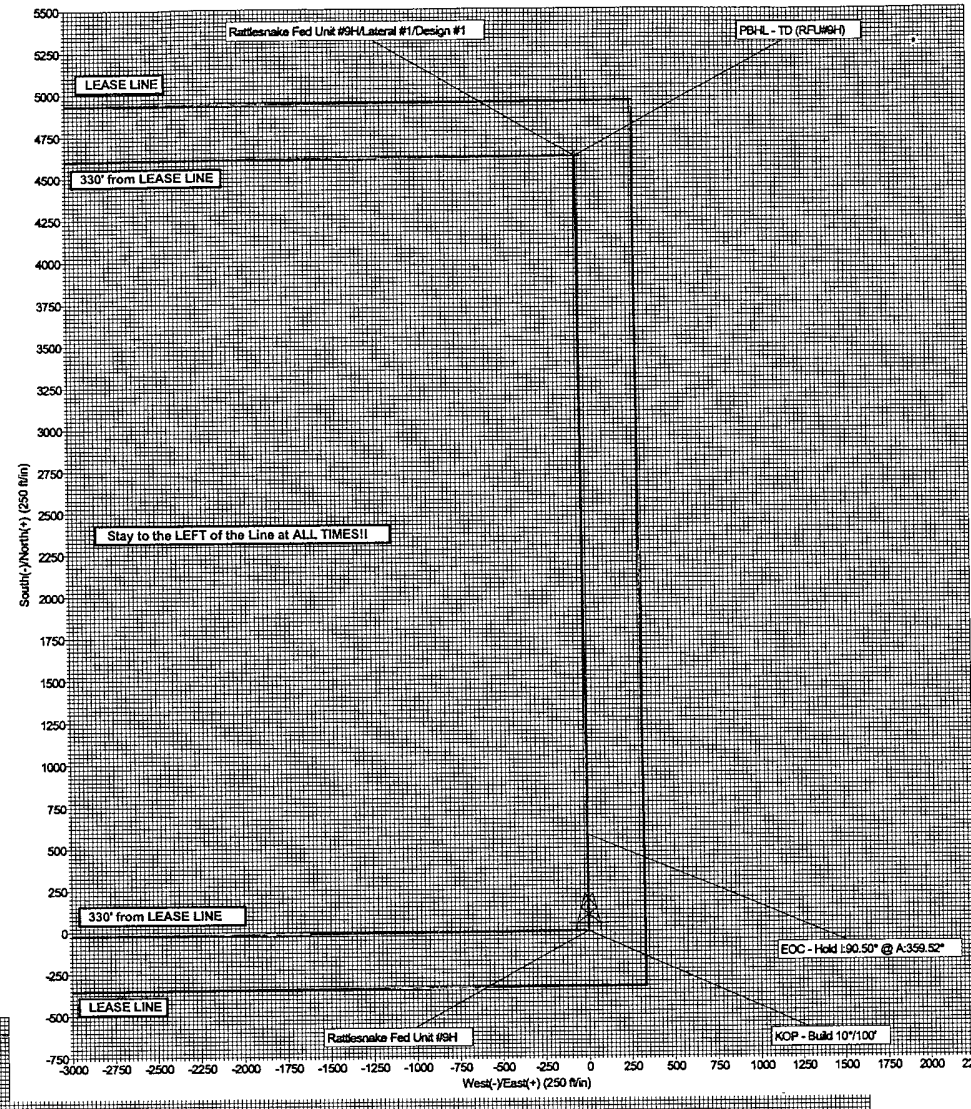
Plan: Design #1 (Rattlesnake Fed Unit #9H/Lateral #1)

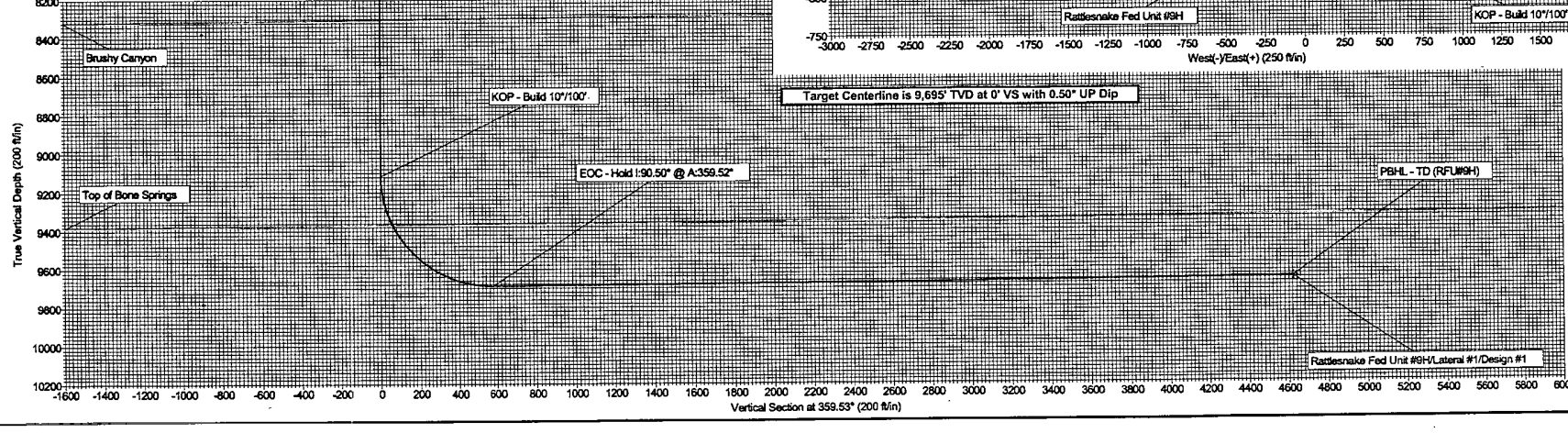
Created By: Mike Starkey Date: 16:10, October 25 2010
Checked: _____ Date: _____
Reviewed: _____ Date: _____
Approved: _____ Date: _____



Azimuths to Grid North
True North: -0.47°
Magnetic North: 7.13°

Magnetic Field
Strength: 48632.4snT
Dip Angle: 60.07°
Date: 08/24/2010
Model: IGRF200510





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Devon Energy

Lea Co., New Mexico (Nad 83)
Rattlesnake Fed Unit #9H
Rattlesnake Fed Unit #9H

Lateral #1

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Plan: Design #1

Standard Survey Report

25 October, 2010

CUDD
DRILLING & MEASUREMENT
SERVICES

Company:	Devon Energy	**Local Co-ordinate Reference:**	Site Rattlesnake Fed Unit #9H
Project:	Lea Co., New Mexico (Nad 83)	**TVD Reference:**	WELL @ 3240.00ft (Original Well Elev)
Site:	Rattlesnake Fed Unit #9H	**MD Reference:**	WELL @ 3240.00ft (Original Well Elev)
Well:	Rattlesnake Fed Unit #9H	**North Reference:**	Grid
Wellbore:	Lateral #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Design #1	**Database:**	EDM 2003.21 Single User Db

Project Lea Co., New Mexico (Nad 83)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site Rattlesnake Fed Unit #9H, Sec 15, T-26S, R-34E

Site Position:		**Northing:**	378,283.26 ft	**Latitude:**	32° 2' 12.859 N
From:	Map	**Easting:**	814,985.90 ft	**Longitude:**	103° 27' 0.807 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	"	**Grid Convergence:**	0.47 °

Well Rattlesnake Fed Unit #9H

Well Position	**+N/-S**	0.00 ft	**Northing:**	378,283.26 ft	**Latitude:**	32° 2' 12.859 N
	+E/-W	0.00 ft	**Easting:**	814,985.90 ft	**Longitude:**	103° 27' 0.807 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	3,240.00 ft	**Ground Level:**	3,215.00 ft

Wellbore Lateral #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	08/24/10	7.60	60.07	48,632

Design Design #1

Audit Notes:

Version:	**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	359.53

Survey Tool Program **Date** 10/25/10

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	9,000.00	Design #1 (Lateral #1)	NS-GYRO-MS	North sensing gyrocompassing m/s
9,000.00	14,066.39	Design #1 (Lateral #1)	CUDD MWD	MWD - Standard CUDD MWD

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,251.00	0.00	0.00	5,251.00	0.00	0.00	0.00	0.00	0.00	0.00
Bell Canyon									
6,292.00	0.00	0.00	6,292.00	0.00	0.00	0.00	0.00	0.00	0.00
Cherry Canyon									
8,307.00	0.00	0.00	8,307.00	0.00	0.00	0.00	0.00	0.00	0.00
Brushy Canyon									
9,117.04	0.00	0.00	9,117.04	0.00	0.00	0.00	0.00	0.00	0.00
KOP - Build 10°/100'									
9,378.47	26.14	359.52	9,369.49	58.61	-0.49	58.61	10.00	10.00	0.00
Top of Bone Springs									

Company:	Devon Energy	**Local Co-ordinate Reference:**	Site Rattlesnake Fed Unit #9H
Project:	Lea Co., New Mexico (Nad 83)	**TVD Reference:**	WELL @ 3240.00ft (Original Well Elev)
Site:	Rattlesnake Fed Unit #9H	**MD Reference:**	WELL @ 3240.00ft (Original Well Elev)
Well:	Rattlesnake Fed Unit #9H	**North Reference:**	Grid
Wellbore:	Lateral #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Design #1	**Database:**	EDM 2003.21 Single User Db

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,022.04	90.50	359.52	9,689.97	577.94	-4.84	577.96	10.00	10.00	0.00
EOC - Hold I:90.50* @ A:359.52*									
14,066.39	90.50	359.52	9,654.68	4,622.00	-38.68	4,622.16	0.00	0.00	0.00
PBHL - TD (RFU#9H)									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL - TD (RFU#9H) - plan hits target center - Point	0.00	359.52	9,654.68	4,622.00	-38.68	382,905.25	814,947.22	32° 2' 58.597 N	103° 27' 0.817 W

Formations

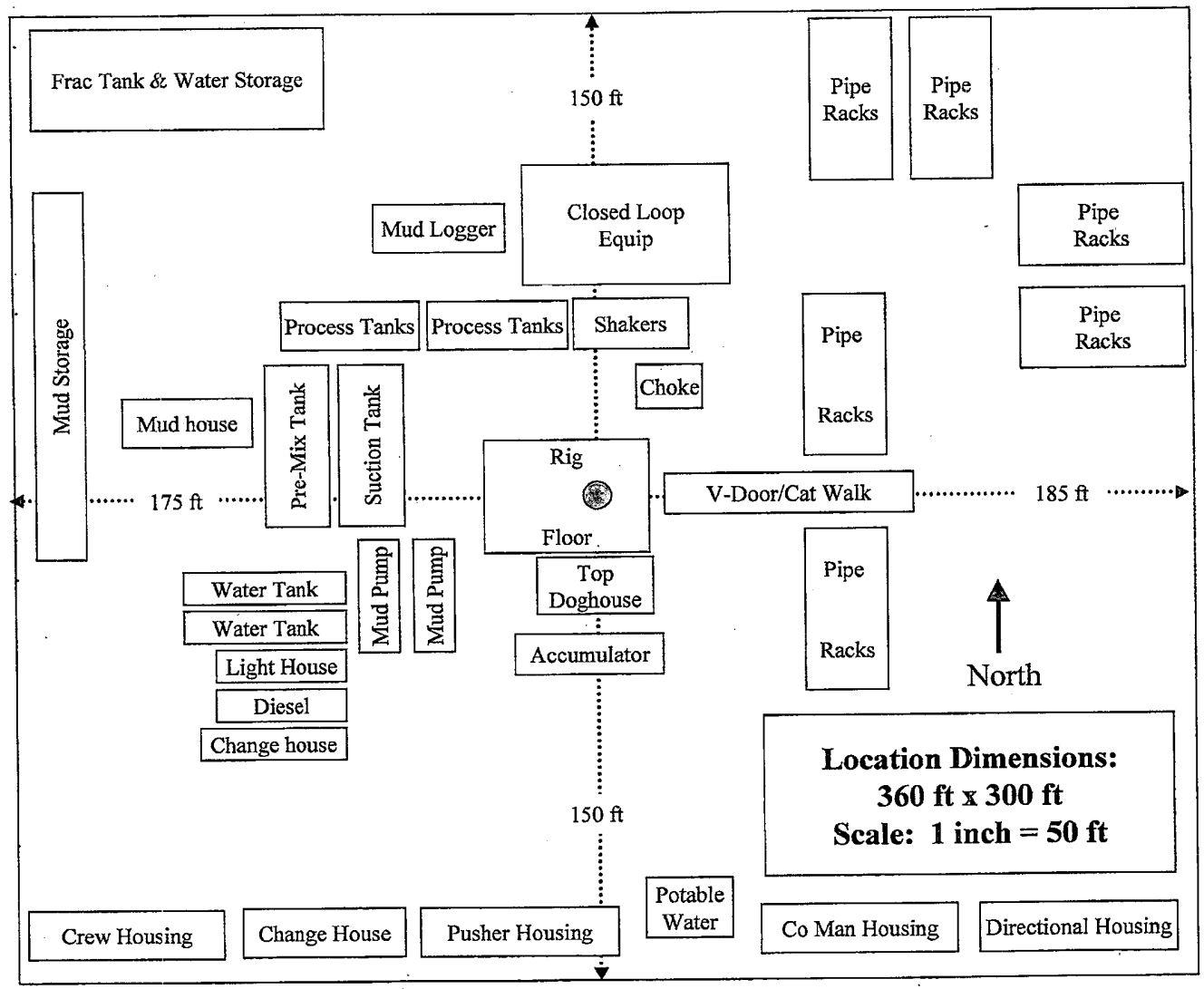
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
5,251.00	5,251.00	Bell Canyon		-0.50	
6,292.00	6,292.00	Cherry Canyon		-0.50	
8,307.00	8,307.00	Brushy Canyon		-0.50	
9,378.47	9,370.00	Top of Bone Springs		-0.50	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
9,117.04	9,117.04	0.00	0.00	KOP - Build 10*/100'
10,022.04	9,689.97	577.94	-4.84	EOC - Hold I:90.50* @ A:359.52*

Checked By: _____ Approved By: _____ Date: _____

Conventional Rig Location Layout



devon

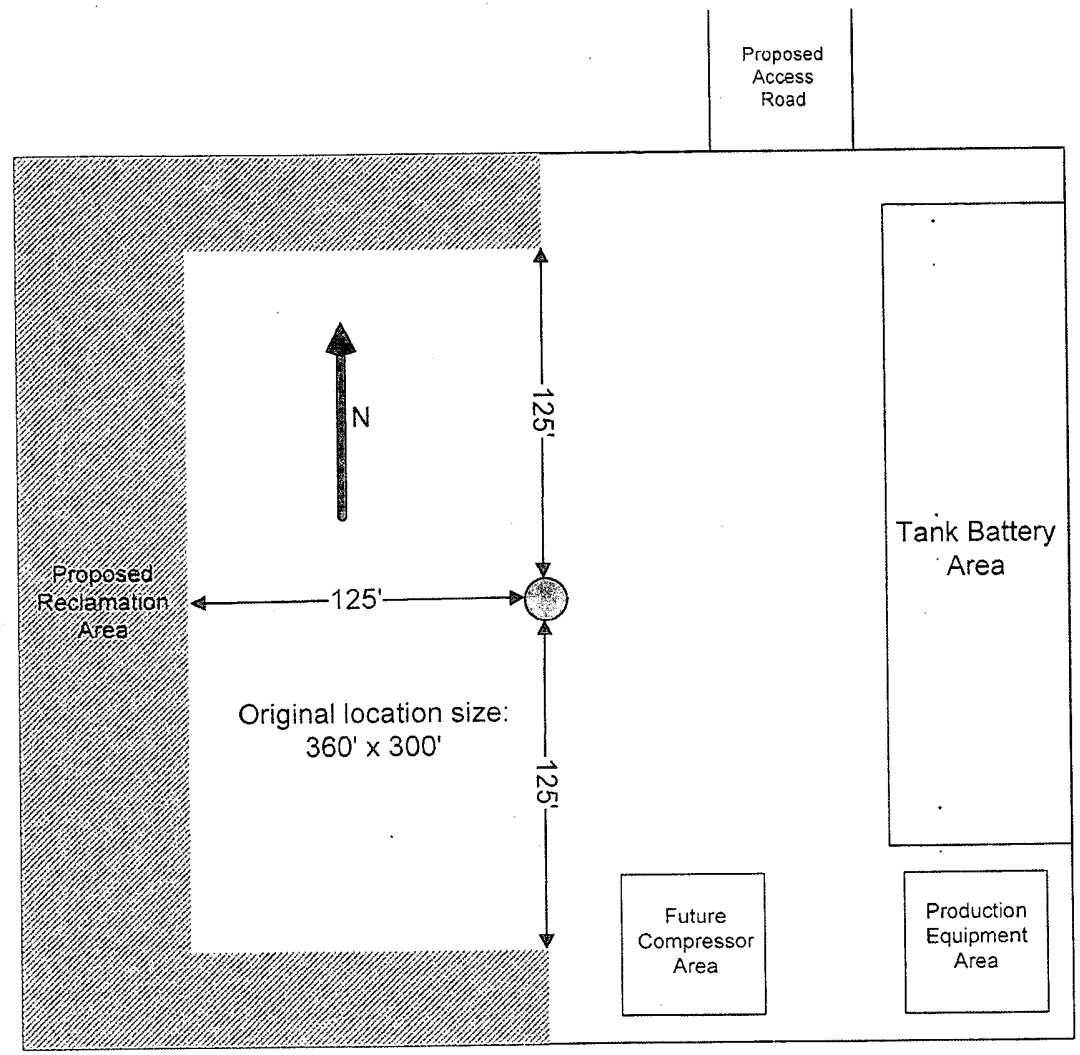
Proposed Interim Site Reclamation

Devon Energy Production Co.

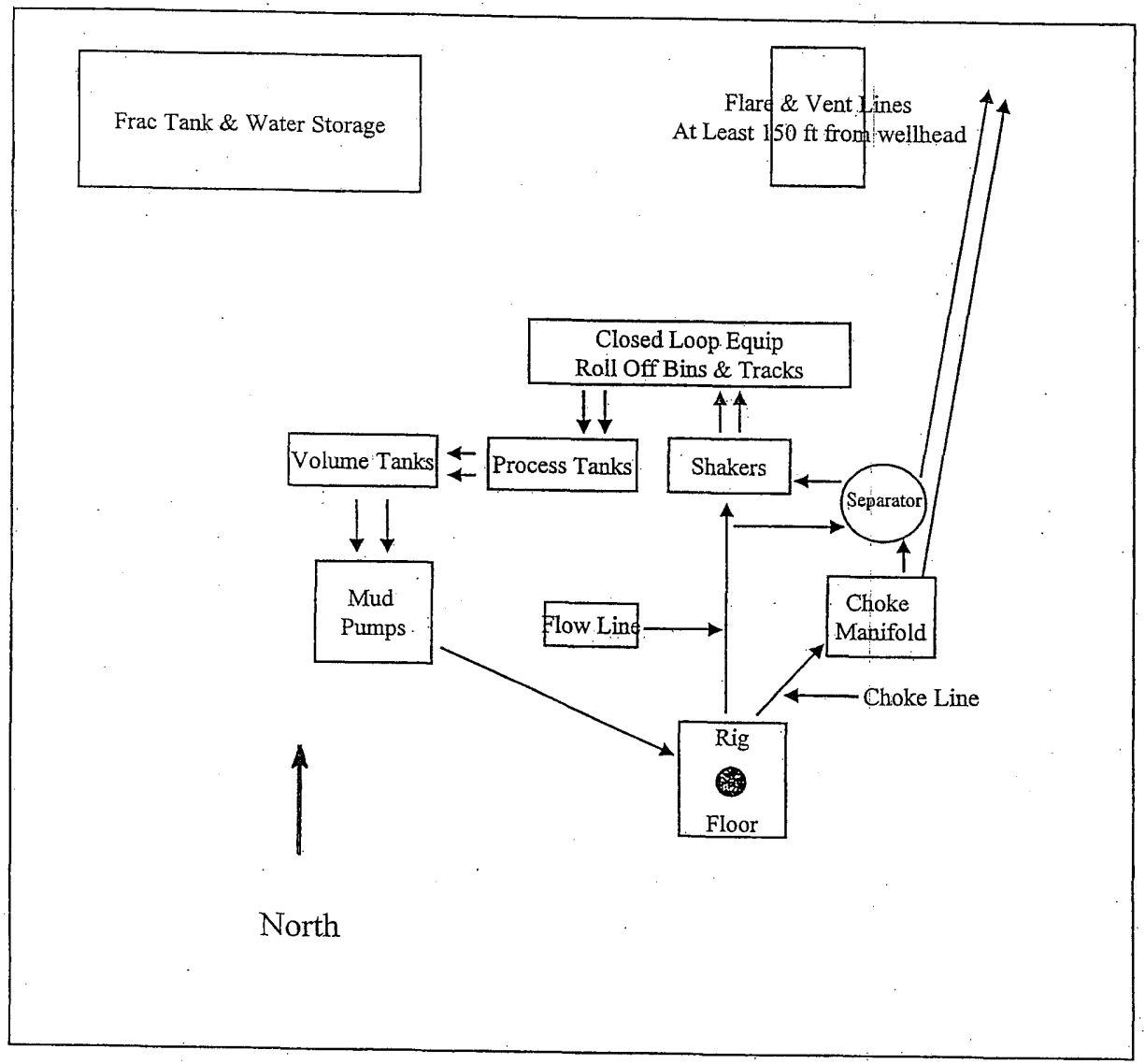
Rattlesnake Fed Unit 9H
330 ' FSL & 330 ' FEL
Sec. 15 - T26S - R34E
Lea County, NM

Proposed Reclamation Area

1" : 60'



Closed Loop Equipment Diagram



Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTERS
Devon Energy Production Company, LP
Rattlesnake Federal Unit #9H
Surface Location: 330' FSL & 330' FEL, Unit P, Sec 15 T26S R34E, Lea, NM
Bottom hole Location: 330' FNL & 330' FEL, Unit A, Sec 15 T26S R34E, Lea, NM

1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.

2. Wear ring will be properly installed in head.

3. Blowout preventer and all associated fittings will be in operable condition to withstand a minimum 5000 psi working pressure.

4. All fittings will be flanged.

5. A full bore safety valve tested to a minimum 5000 psi WP with proper thread connections will be available on the rotary rig floor at all times.

6. All choke lines will be anchored to prevent movement.

7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.

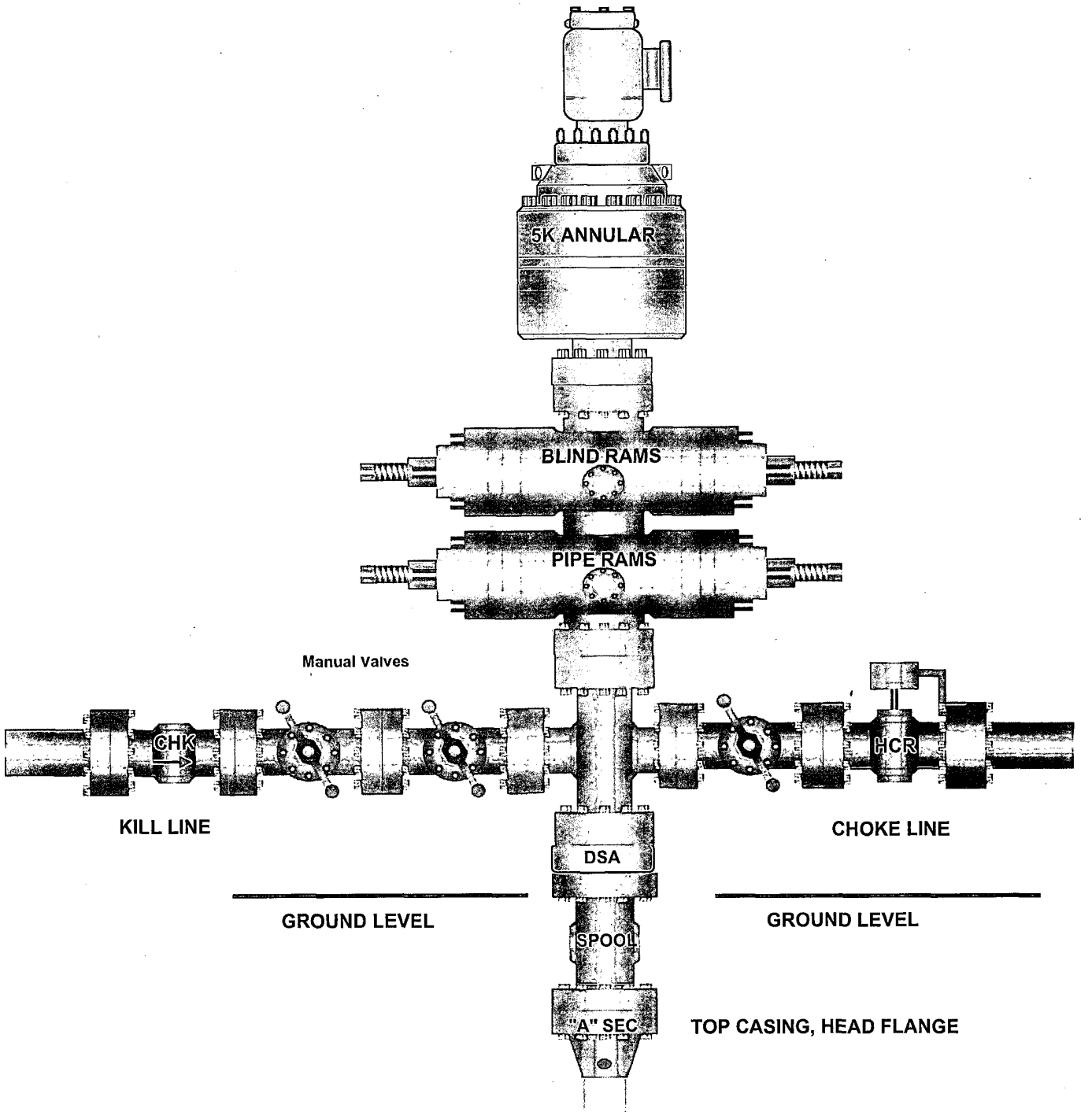
8. Will maintain a kelly cock attached to the kelly.

9. Hand wheels and wrenches will be properly installed and tested for safe operation.

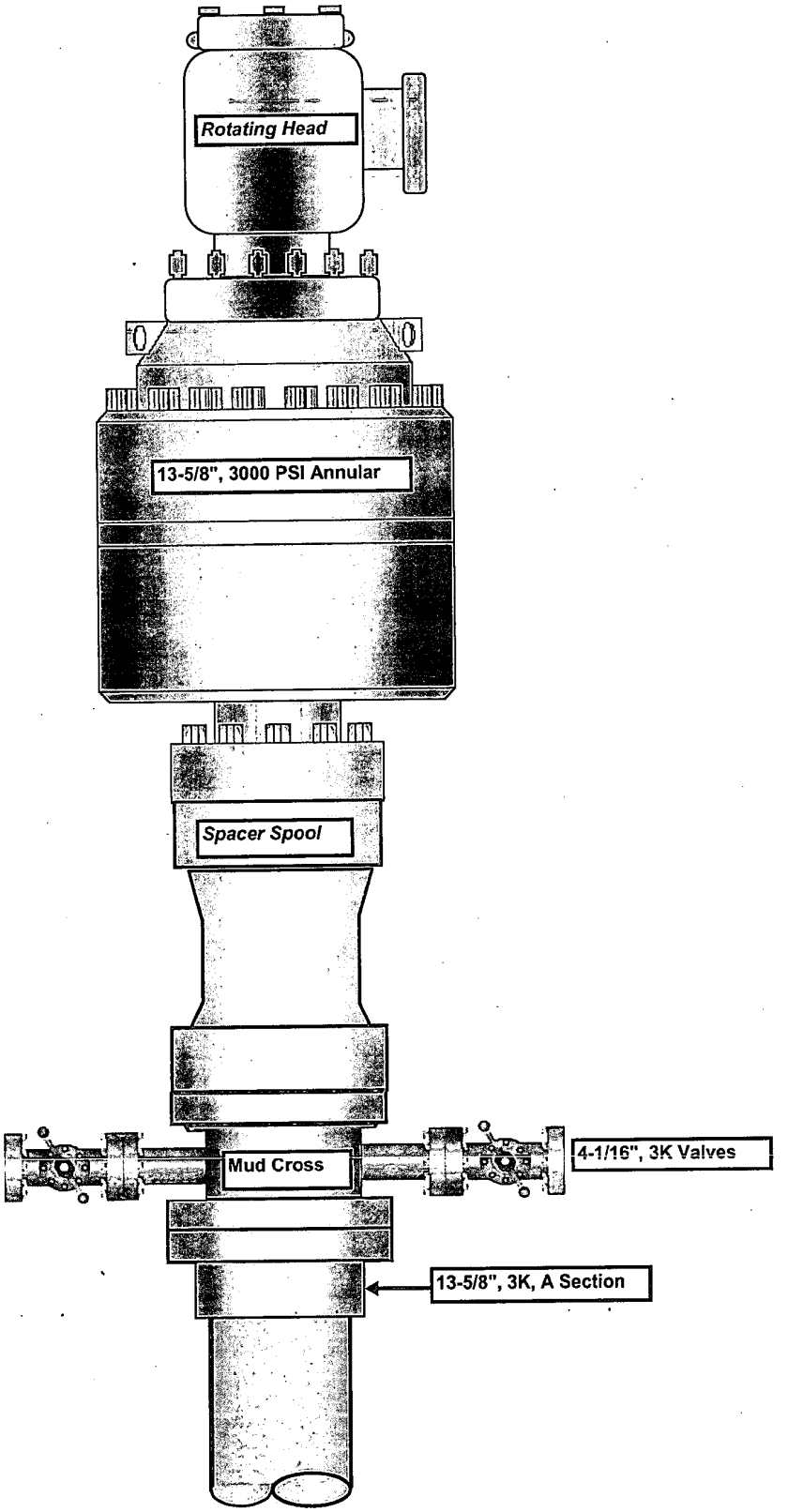
10. Hydraulic floor control for blowout preventer will be located as near in proximity to driller's controls as possible.

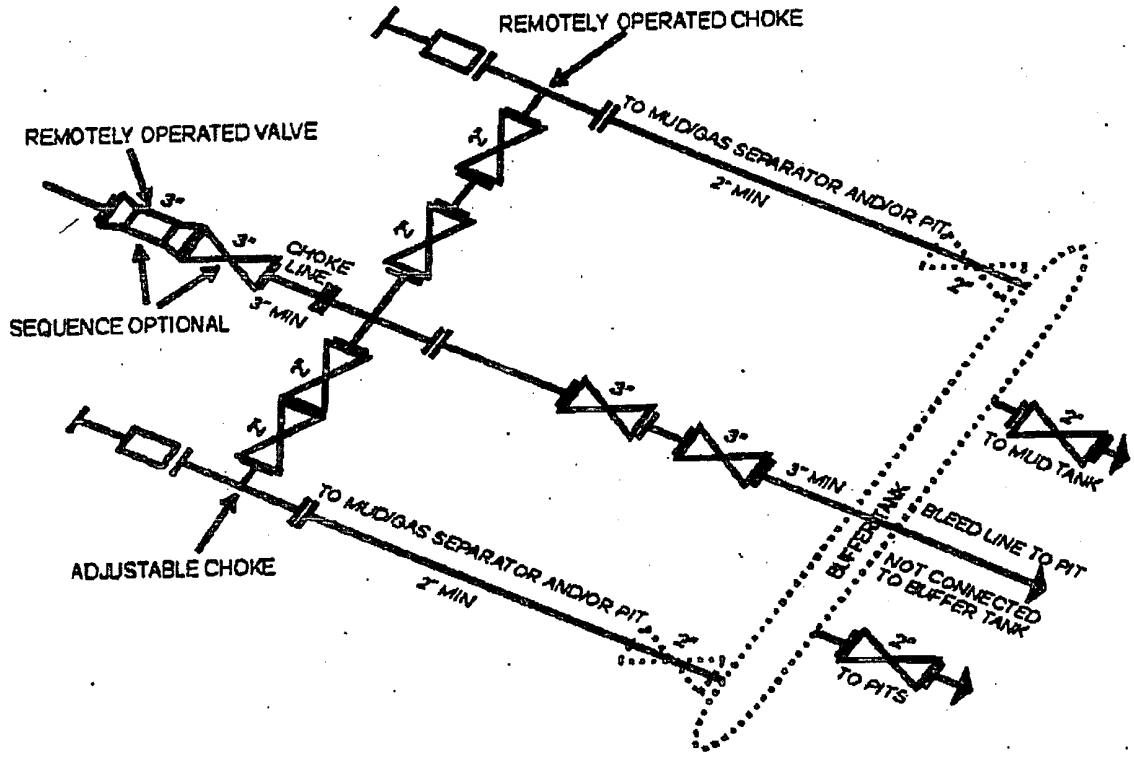
11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

11" x 5,000 psi BOP Stack



13-5/8" 3K Annular





5M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY

Although not required for any of the choke manifold systems, buffer tanks are sometimes installed downstream of the choke assemblies for the purpose of manifolding the bleed lines together. When buffer tanks are employed, valves shall be installed upstream to isolate a failure or malfunction without interrupting flow control. Though not shown on 2M, 3M, 10M, OR 15M drawings, it would also be applicable to those situations.

[54 FR 39528, Sept. 27, 1989]

Per BLM: Operator must supply an accurate choke manifold diagram and not the general example from Onshore Order #2.