ATS-10-787

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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

5. Lease Serial No. **NMNM-94191**

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

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

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

8. Lease Name and Well No. <30880> **Shinnery 14 Federal 10H**

2. Name of Operator **Devon Energy Production Co., LP** <6137>

9. API Well No. 30-025-40072

3a. Address **20 North Broadway, OKC, OK 73102**

3b. Phone No. *(include area code)* **(405)-552-7802**

10. Field and Pool, or Exploratory **Querecho Plains Upper Bone Spring** <50600>

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface **SENE 2110' FNL & 330' FEL Unit H**

At proposed prod. zone **NWNW 1980' FNL & 330' FWL Unit E**

11. Sec., T. R. M. or Blk. and Survey or Area **Sec 14-T18S-R32E**

14. Distance in miles and direction from nearest town or post office*
Approximately 12 miles southeast of Maljamar, 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 **104.180 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 9,318' MD 13,657'** PH 9400'

20. BLM/BIA Bond No. on file **CO-1104**

21. Elevations (Show whether DF, KDB, RT, GL, etc.) **3825' GL**

22. Approximate date work will start*

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: **08/27/2010**

Title: **Regulatory Analyst**

Approved by *(Signature)*: /s/ James Stovall — Name *(Printed/Typed)*: — Date: FEB 22 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)

KZ 03/02/2011

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Capitan Controlled Water Basin

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

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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

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
30-025-40072	50600	BONE SPRING

[4] Property Code	[5] Property Name	[6] Well Number
30480	SHINNERY "14" FED.	10H

[7] OGRID No.	[8] Operator Name	[9] Elevation
6137	DEVON ENERGY PRODUCTION COMPANY, L.P.	3825.1

[10] Surface Location

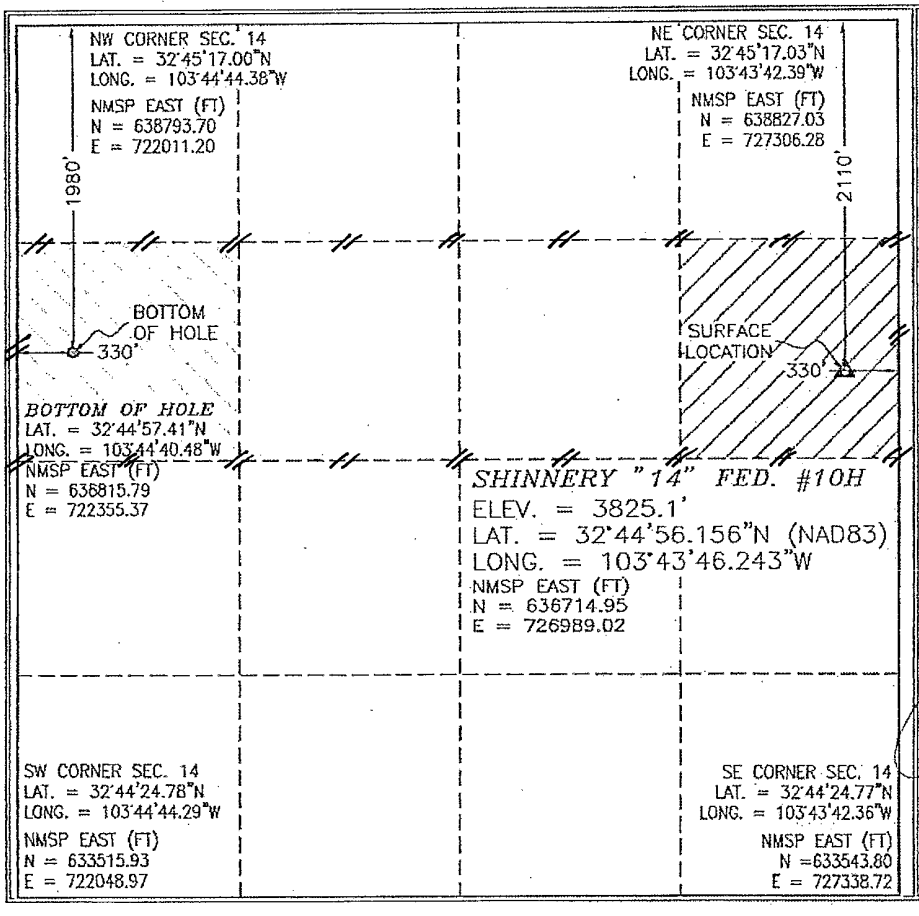
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	14	18 S	32 E		2110	NORTH	330	EAST	LEA

[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
E	14	18 S	32 E		1980	NORTH	330	WEST	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 8/31/10 Date

Printed Name SPENCE LAIRD

[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.

JULY 29, 2010

Date of Survey

Signature and Seal of Professional Surveyor

Certificate Number FILIMON F. JARAMILLO, PLS 12797

SURVEY NO. 171

DRILLING PROGRAM

Devon Energy Production Company, LP
Shinnery 14 Federal 10H
Surface Location: 2110' FNL & 330' FEL, Unit H, Sec 25 T18S R31E, Lea, NM
Bottom hole Location: 1980' FNL & 330' FWL, Unit E, Sec 25 T18S R31E, Lea, NM

1. Geologic Name of Surface Formation

a. Permian

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

a.	Rustler	1195'	FW
b.	Salado	2065'	Salt
c.	Base Salt	2800'	Salt
d.	Yates	2850'	Oil
e.	Queen	3950'	Oil
f.	Greyburg	4430'	Oil
g.	Delaware	4920'	Oil
h.	Bone Springs	6800'	Oil
i.	1st Bone Spring SD	8340'	Oil
j.	2nd Bone Spring SD	9020'	Oil
k.	2nd Bone Spring Lower SD	9117'	Oil
l.	2nd Bone Spring SD (pay tgt)	9278'	Oil
m.	Total Depth of Pilot Hole	9400'	
n.	Depth of entry point of pay tgt	9165'	
o.	Total Depth of producing well	TVD 9318' MD 13657'	

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 1350' and circulating cement back to surface. The fresh water sands will be protected by setting 9 5/8" casing at 5000' 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'-1350'	13 3/8"	0'-1350'	54.5#	STC	J-55
12 ¼"	1350'-5000'	9 5/8"	1350'-5000'	40#	BTC	N-80
8 ¾"	5000'-9400' (PH)	9 5/8"				
8 ¾"	0' -8600'	5 ½"	0-8600'	17#	LTC	P-110
8 ¾"	8600'- ~~13700'~~ 13657'	5 ½"	8600'- ~~13700'~~ 13657'	17#	BTC	P-110

Design Parameter Factors:

Casing Size	Collapse Design Factor	Burst Design Factor	Tension Design Factor
13 3/8"	1.79	4.32	6.99
9 5/8"	1.23	2.30	5.09
5 ½"	1.33	1.74	2.01

4. Cement Program:

Cementing Program for the Pilot Hole: 520 sacks Class H, 18 ppg with a .9 cuft yield.

Cementing Program:

13 3/8" Surface

Lead: 915 sacks (40:60) Poz (Fly Ash):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: 1.83 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: 1405 sacks (40:60) 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: 1.73 cf/sack. TOC @ surface.

Tail: 300 sacks (40:60) 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: 1.35 cf/sack.

5 1/2" Production

1st Stage

Lead: 655 sacks 35:65 Poz Class C + 0.2% bwoc Sodium Metasilicate + 1.4% bwoc FL-62 + 0.4%
Yield: 2.00 cf/sack.

Tail: 1135 sacks 50:50 Poz Class C
Yield:1.28 cf/sack

DV TOOL at ~6000'

2nd Stage

Lead: 400 sacks Poz Class C Cement + 0.125 lbs/sack Cello Flake + 3 6% bwoc Bentonite + 0.4% bwoc FL-52A + 99.3% Fresh Water
Yield: 2.89 cf/sk

Tail: 150 sacks (60:40) Poz Class C Cement + 1% bwow Sodium Chloride + 0.15% bwoc + 63.2% Fresh Water
Yield: 1.35 cf/sk

TOC for All Strings:

Surface:	0'
Intermediate:	0'
Production	2800'

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 for the 9 5/8" casing 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. The 9 5/8" BOP system will be rated at 5,000psi. Prior to drilling out the 9 5/8" intermediate shoe, the ram stack will be nippled up with 4.5" pipe rams installed. **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. All testing will be performed by independent testers, not the rig pumps.**

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' – 1350'	8.4-9.0	32-34	NC	Fresh Water
1350'– 5000'	10.0	28-30	NC	Brine
5000'–~~13000'~~ 13657'	8.6-9.2	28	NC-12	Fresh Water/Brime

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 Casing	Neutron – Density w/ Spectral Gamma Ray (Pilot Hole)
ii. Total Depth to Casing	Laterolog (Pilot Hole)
iii. Total Depth to Casing	Long Space Sonic (Pilot Hole)
iv. Casing to Surface	Gamma Ray/Neutron (Pilot Hole)
v. Kickoff to Total Depth	Gamma Ray while drilling

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 3900 psi and Estimated BHT 170°.

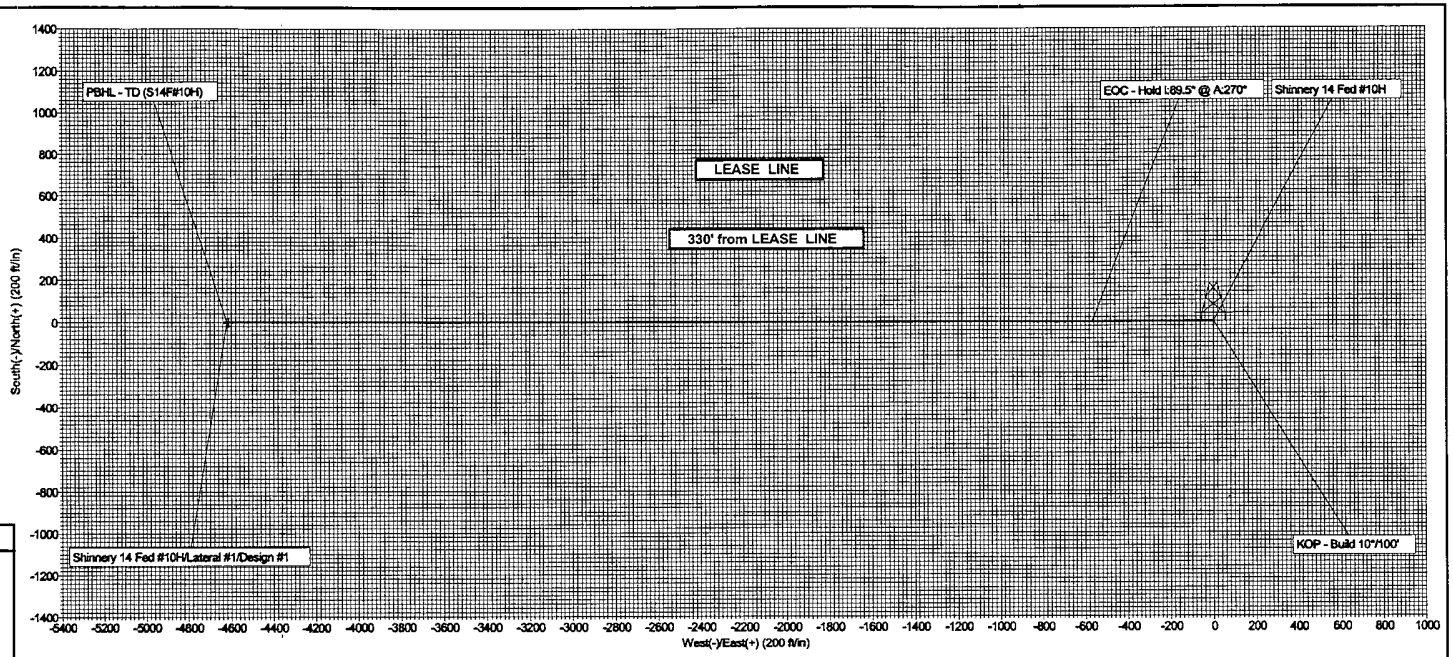
10. Anticipated Starting Date and Duration of Operations:

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: Shinnery 14 Fed #10H
Well: Shinnery 14 Fed #10H
Wellbore: Lateral #1
Design: Design #1

CUDD
DRILLING & MEASUREMENT SERVICES



Plan: Design #1 (Shinnery 14 Fed #10H/Lateral #1)			
Created By: Mike Starkey		Date: 11:42, August 20 2010	
Checked:		Date:	
Reviewed:		Date:	
Approved:		Date:	

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	8710.02	0.00	0.00	8710.02	0.00	0.00	0.00	0.00	0.00	
3	9605.02	89.50	270.00	9282.96	0.00	-567.96	10.00	270.00	567.96	
4	13657.22	89.50	270.00	9318.32	0.00	-4620.00	0.00	0.00	4620.00	PBHL - TD (S14F#10H)

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

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL - TD (S14F#10H)	9318.32	0.00	-4620.00	635671.81	722727.24	32° 44' 45.997 N	103° 44' 36.094 W	Point

ANNOTATIONS

TVD	MD	Annotation
8710.02	8710.02	KOP - Build 10°/100'
9282.96	9605.02	EOC - Hold I:89.5° @ A:270°

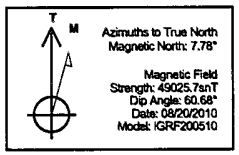
WELL DETAILS: Shinnery 14 Fed #10H

Ground Level:
3816.00
WELL @ 3832.00ft (Original Well Elev)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	635698.20	727347.16	32° 44' 46.000 N	103° 43' 42.000 W	

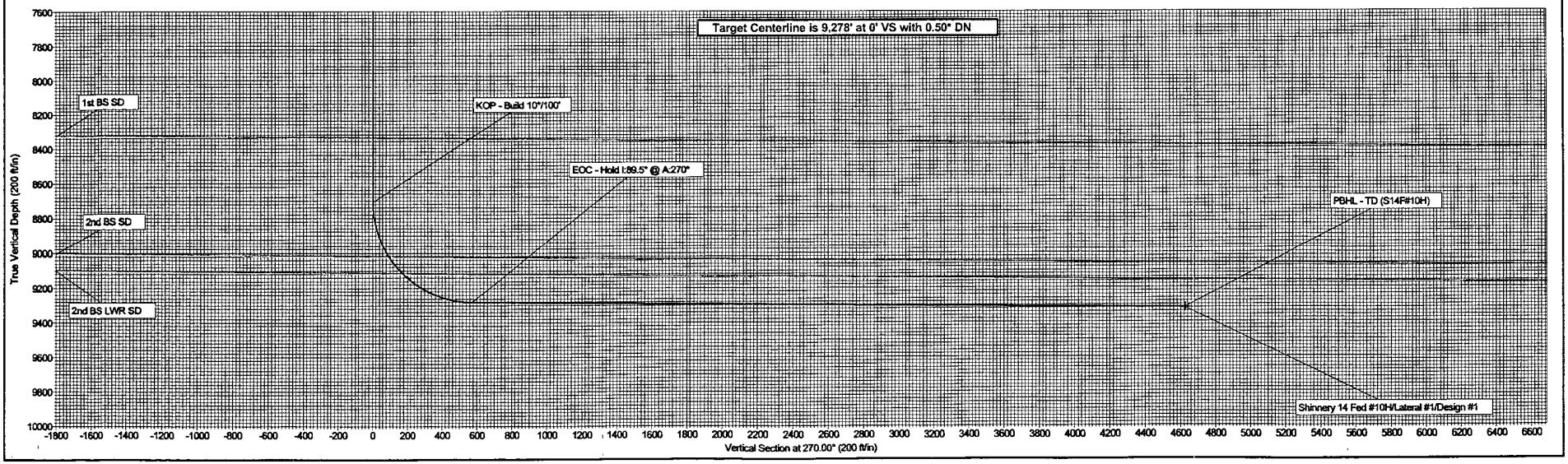
PROJECT DETAILS: Lea Co., New Mexico (Nad 83)

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



Azimuths to True North
Magnetic North: 7.78°

Magnetic Field
Strength: 49025.7nT
Dip Angle: 60.68°
Date: 08/20/2010
Model: IGRF200510



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Devon Energy

Lea Co., New Mexico (Nad 83)
Shinnery 14 Fed #10H
Shinnery 14 Fed #10H

Lateral #1

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Plan: Design #1

Standard Survey Report

20 August, 2010

CUDD
DRILLING & MEASUREMENT
SERVICES

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CUDD Drilling & Measurement Services

Survey Report

CUDD DRILLING & MEASUREMENT SERVICES

Company:	Devon Energy	**Local Co-ordinate Reference:**	Site Shinnery 14 Fed #10H
Project:	Lea Co., New Mexico (Nad 83)	**TVD Reference:**	WELL @ 3832.00ft (Original Well Elev)
Site:	Shinnery 14 Fed #10H	**MD Reference:**	WELL @ 3832.00ft (Original Well Elev)
Well:	Shinnery 14 Fed #10H	**North Reference:**	True
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 Shinnery 14 Fed #10H, Sec 14, T-18S, R-32E

Site Position:		**Northing:**	635,698.20 ft	**Latitude:**	32° 44' 46.000 N
From:	Lat/Long	**Easting:**	727,347.16 ft	**Longitude:**	103° 43' 42.000 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	"	**Grid Convergence:**	0.33 °

Well Shinnery 14 Fed #10H

Well Position	**+N/-S**	0.00 ft	**Northing:**	635,698.20 ft	**Latitude:**	32° 44' 46.000 N
	+E/-W	0.00 ft	**Easting:**	727,347.16 ft	**Longitude:**	103° 43' 42.000 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	3,832.00 ft	**Ground Level:**	3,816.00 ft

Wellbore Lateral #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	08/20/10	7.78	60.68	49,026

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	270.00

Survey Tool Program **Date** 08/20/10

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	8,600.00	Design #1 (Lateral #1)	NS-GYRO-MS	North sensing gyrocompassing m/s
8,600.00	13,657.22	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
4,920.00	0.00	0.00	4,920.00	0.00	0.00	0.00	0.00	0.00	0.00
Delaware									
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
Bone Spring									
8,340.00	0.00	0.00	8,340.00	0.00	0.00	0.00	0.00	0.00	0.00
1st BS SD									
8,710.02	0.00	0.00	8,710.02	0.00	0.00	0.00	0.00	0.00	0.00
KOP - Build 10°/100'									
9,038.50	32.85	270.00	9,020.80	0.00	-91.61	91.61	10.00	10.00	0.00
2nd BS SD									

devon

CUDD Drilling & Measurement Services

Survey Report

CUDD DRILLING & MEASUREMENT SERVICES

Company:	Devon Energy	**Local Co-ordinate Reference:**	Site Shinnery 14 Fed #10H
Project:	Lea Co., New Mexico (Nad 83)	**TVD Reference:**	WELL @ 3832.00ft (Original Well Elev)
Site:	Shinnery 14 Fed #10H	**MD Reference:**	WELL @ 3832.00ft (Original Well Elev)
Well:	Shinnery 14 Fed #10H	**North Reference:**	True
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)
9,164.75	45.47	270.00	9,118.49	0.00	-171.17	171.17	10.00	10.00	0.00
2nd BS LWR SD									
9,605.02	89.50	270.00	9,282.96	0.00	-567.96	567.96	10.00	10.00	0.00
EOC - Hold I:89.5* @ A:270*									
13,657.22	89.50	270.00	9,318.32	0.00	-4,620.00	4,620.00	0.00	0.00	0.00
PBHL - TD (S14F#10H)									

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 (S14F#10H) - plan hits target center - Point	0.00	0.00	9,318.32	0.00	-4,620.00	635,671.81	722,727.24	32° 44' 45.997 N	103° 44' 36.094 W

Formations

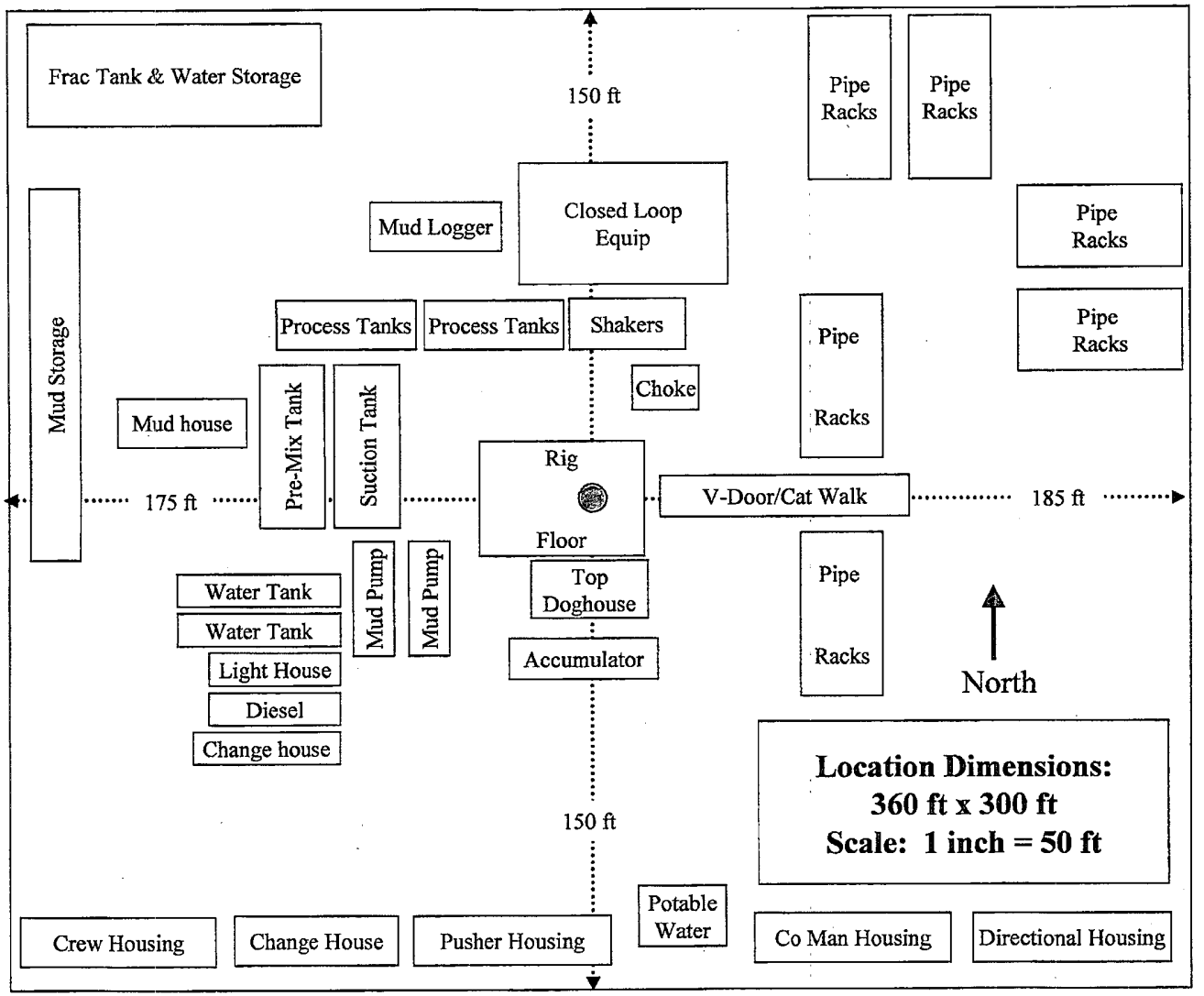
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,920.00	4,920.00	Delaware		-0.50	90.00
6,800.00	6,800.00	Bone Spring		-0.50	90.00
8,340.00	8,340.00	1st BS SD		-0.50	90.00
9,038.50	9,020.00	2nd BS SD		-0.50	90.00
9,164.75	9,117.00	2nd BS LWR SD		-0.50	90.00

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
8,710.02	8,710.02	0.00	0.00	KOP - Build 10*/100'
9,605.02	9,282.96	0.00	-567.96	EOC - Hold I:89.5* @ A:270*

Checked By: _____ Approved By: _____ Date: _____

Conventional Rig Location Layout



devon

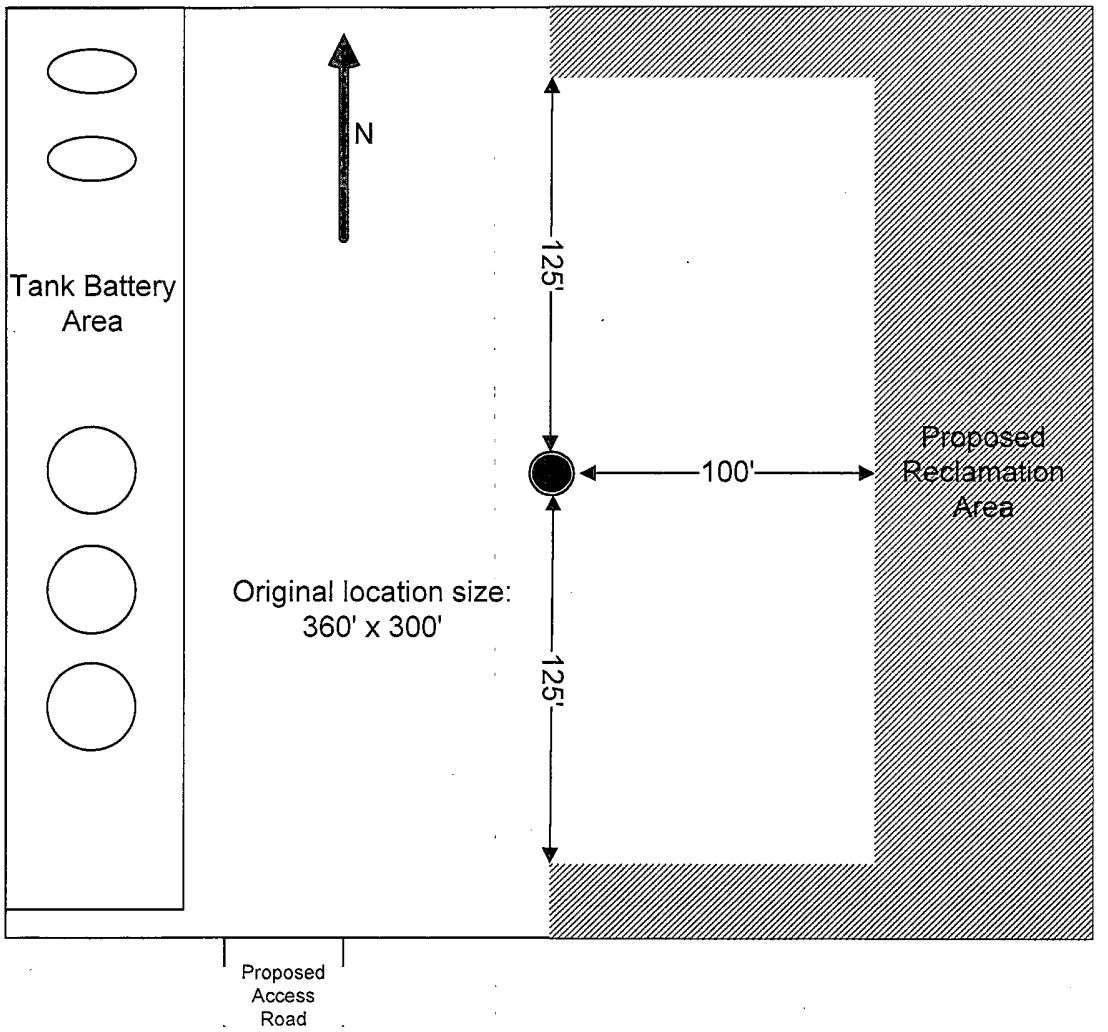
Proposed Interim Site Reclamation

Devon Energy Production Co.

Shinnery 14 Federal 10H
2,110' FNL & 330' FEL
Sec. 14 - T18S - R32E
Lea County, NM

Proposed Reclamation Area

1" : 60'



Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTERS
Devon Energy Production Company, LP
Shinnery 14 Federal 10H
Surface Location: 2110' FNL & 330' FEL, Unit H, Sec 25 T18S R31E, Lea, NM
Bottom hole Location: 1980' FNL & 330' FWL, Unit E, Sec 25 T18S R31E, 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.

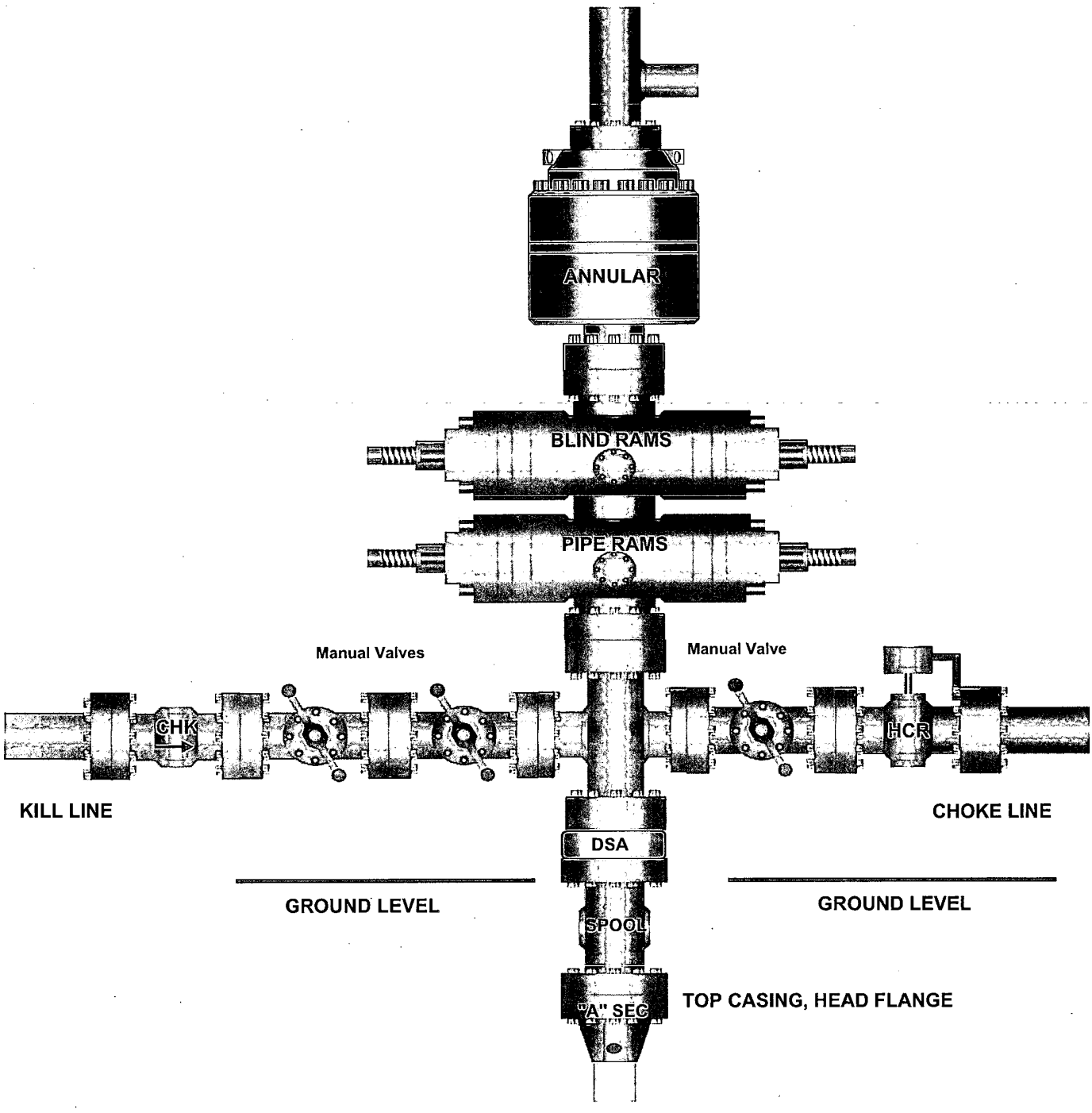
8. Will maintain a kelly cock attached to the kelly.

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

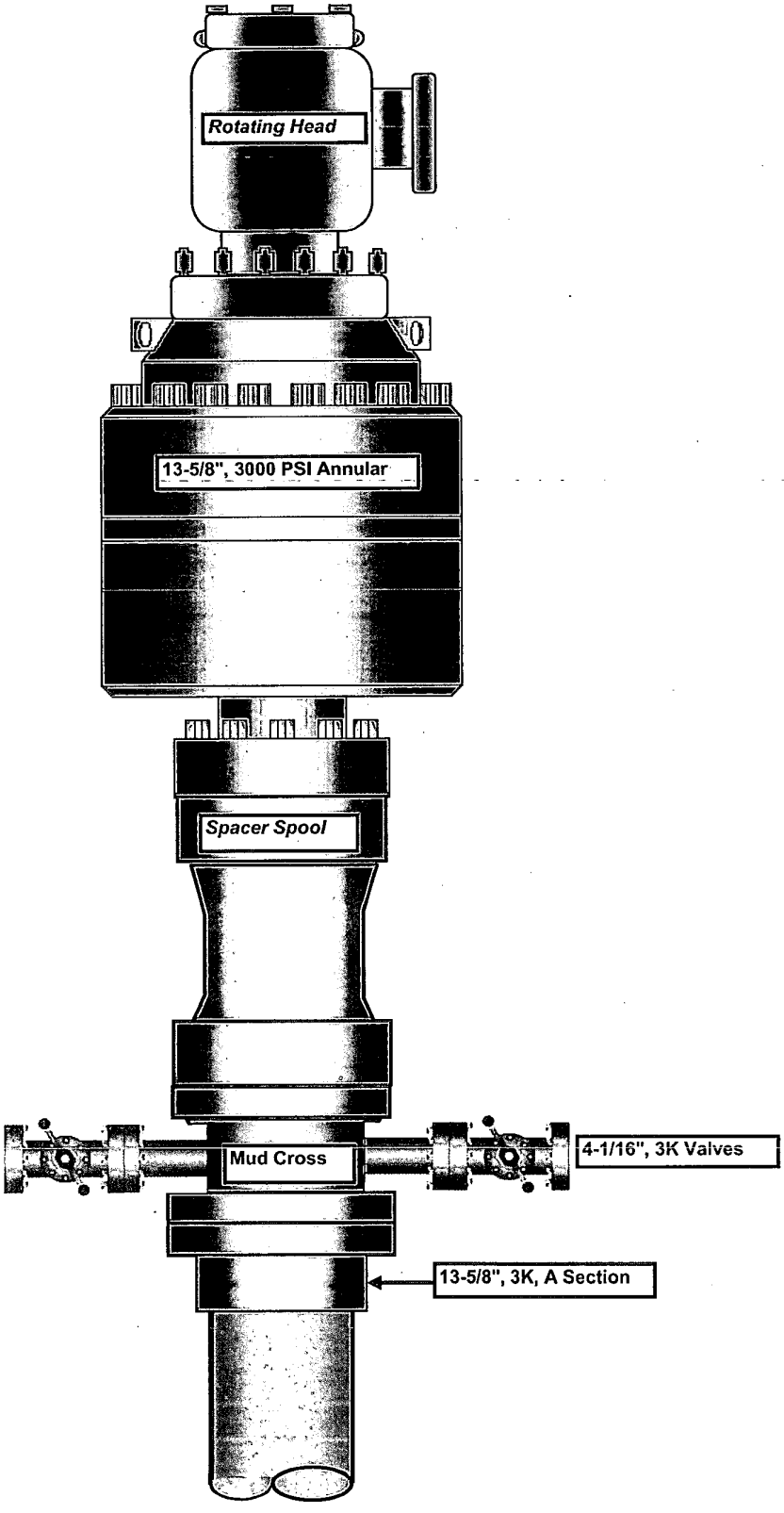
10. Hydraulic floor control for blowout preventer will be located as near in proximity to driller's controls as possible.

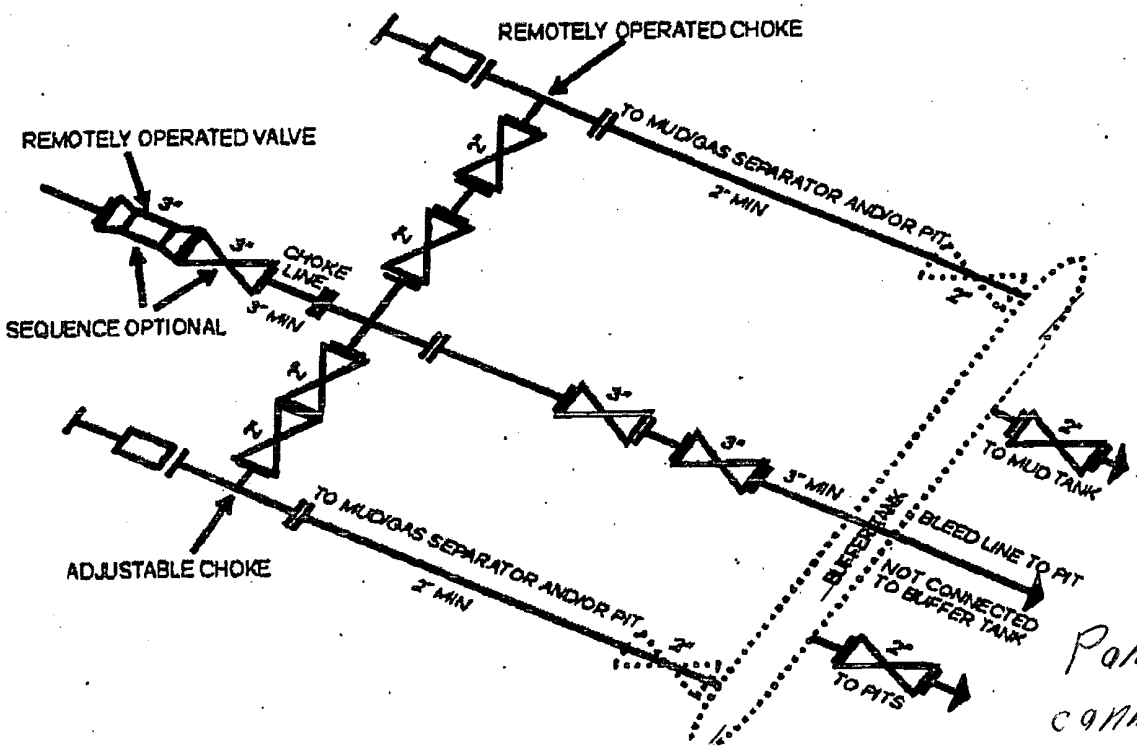
11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

13-5/8" x 5,000 psi BOP Stack



13-5/8" 3K Annular





Panic line cannot route to mud tank near rig.

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 is to supply an accurate choke manifold schematic and not the general example from Onshore Order #2