ATS-10-810

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Form 3160-3 (February 2005) **Split Estate**

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. **LC-029489C**
	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. #5H / 302214 **Cockburn G Federal ~~2H~~**
2. Name of Operator **Devon Energy Production Co., LP** <6137>	9. API Well No. 30-025-39961
3a. Address **20 North Broadway OKC, OK 73102**	3b. Phone No. (include area code) **(405)~~-236-3511~~ 228-8973**
	10. Field and Pool, or Exploratory ~~**Bone Spring**~~ Mescalero Escarpe <45793>
4. Location of Well (Report location clearly and in accordance with any State requirements.*) At surface **NWSW 1650' FSL & 330' FWL Unit L** At proposed prod. zone **NWNW 330' FNL & 940' FWL Unit D**	11. Sec., T. R. M. or Blk. and Survey or Area **Sec 10 T18S R33E**
14. Distance in miles and direction from nearest town or post office* **Approximately 7 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 **120 ac**	17. Spacing Unit dedicated to this well **120 acres**
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. **See attached map**	19. Proposed Depth MAX TVD 9243 **TVD 9,004' MD 12,366'** BHL	20. BLM/BIA Bond No. on file **CO-1104**
21. Elevations (Show whether DF, KDB, RT, GL, etc.) **3957' GL**	22. Approximate date work will start* **01/10/2011**	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 [signature]	Name (Printed/Typed) **Spence Laird**	Date **09/21/2010**
Title **Regulatory Analyst**		
Approved by (Signature) /s/ Don Peterson	Name (Printed/Typed) /s/ Don Peterson	Date NOV 2 3 2010
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)

Capitan Controlled Water Basin

KZ 11/30/10

Witness Surface & Intermediate Casing

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Approval Subject to General Requirements & 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 and Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

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Form C-102
Revised July 16, 2010

Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-39961	45793	Mescalero Escarpe BONE SPRING

Property Code	Property Name	Well Number
302214	COCKBURN "G" FEDERAL	2H 5H

OGRID No.	Operator Name	Elevation
6137	DEVON ENERGY PRODUCTION COMPANY, L.P.	3957'

Surface Location

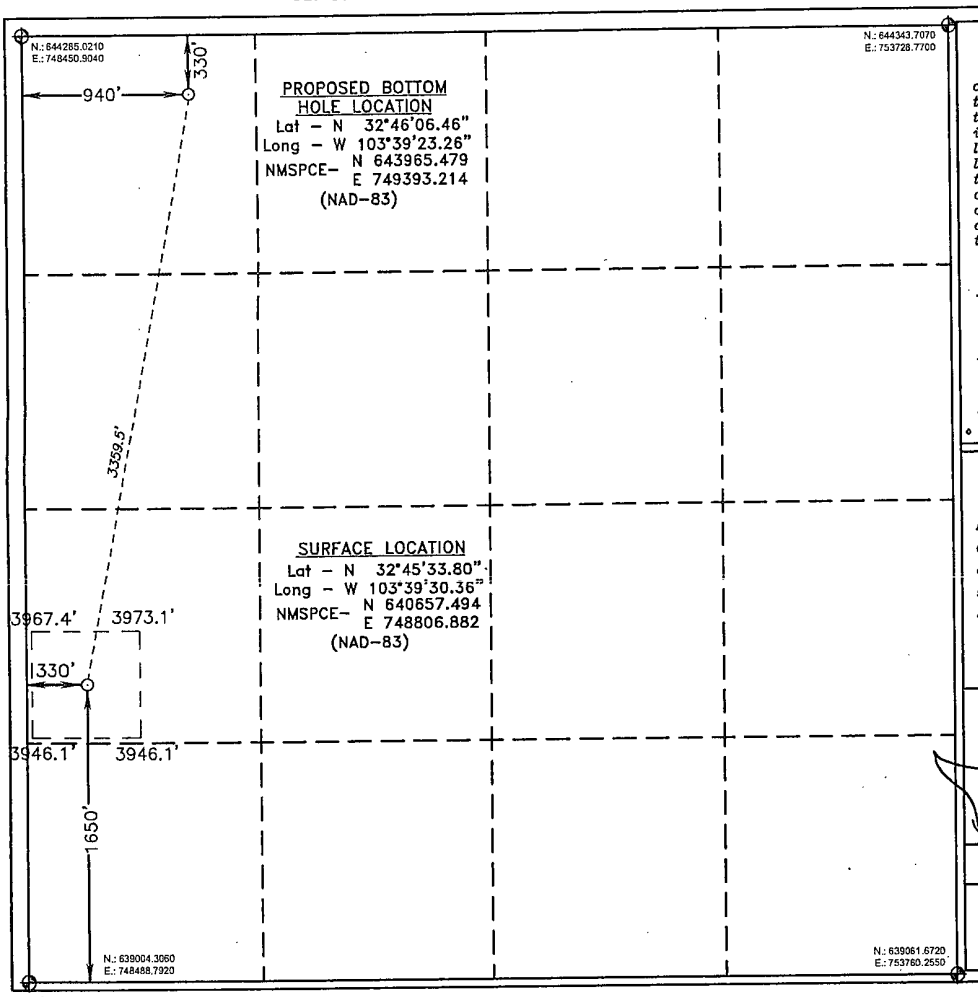
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	10	18 S	33 E		1650	SOUTH	330	WEST	LEA

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
D	10	18 S	33 E		330	NORTH	940	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
120			

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



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 9/20/10 Date

SPENCE LAIRD
Printed Name

spence.laird@dvn.com
Email Address

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 supervison, and that the same is true and correct to the best of my belief.

SEPTEMBER 2010
Date Surveyed

Signature & Seal of Professional Surveyor

NEW MEXICO 7977 REGISTERED PROFESSIONAL LAND SURVEYOR

W.O. No. 23398

Certificate No. Gary L. Jones 7977

BASIN SURVEYS 23398

DRILLING PROGRAM

Devon Energy Production Company, LP
Cockburn G Fed 2H ~~2H~~ 4H
Surface Location: 1650' FSL & 330' FWL Unit L, Sec 10 T18S R33E, Lea, NM
Bottom hole Location: 330' FNL & 940' FWL, Unit D, Sec 10 T18S R33E, Lea, NM

1. Geologic Name of Surface Formation

a. Bone Spring

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

a.	Quatemary	20'	Water
b.	Rustler	1548'	Water
c.	Salado	1778'	Water
d.	Tansil	2899'	Oil
e.	Yates	3008'	Oil
f.	Seven Rivers	3490'	Oil
g.	Queen	4250'	Oil
h.	Grayburg	4318'	Oil
i.	Cherry Canyon	5059'	Oil
j.	Brushy Canyon	5982'	Oil
k.	1st Bone Spring LM	6879'	Oil
l.	1st BS Upper Sd	8271'	Oil
m.	2nd BS Lower LM	8549'	Oil
n.	2nd Bone Spring SS	8902'	Oil
o.	2nd Bone Spring SS Target	9298'	Oil

Projected entry point: 8904' Estimated BHP/BHT: 4600 psi 130 deg

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 ~~1600'~~ 1625' and circulating cement back to surface. The fresh water sands will be protected by setting 9 5/8" casing at 2900' 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'-~~1600'~~ 1625'	13 3/8"	0'-~~1600'~~ 1625'	54.5#	STC	J-55
12 ¼"	~~1600'~~ 1625'-2900'	9 5/8"	0'-2900'	36#	LTC	J-55
8 ¾"	2900' -9400'	5 ½"	0-9400'	17#	LTC	P-110
8 ¾"	9400'- 12900'	5 ½"	9400'-12900'	17#	BTC	P-110

Design Parameter Factors:

Casing Size	Collapse Design Factor	Burst Design Factor	Tension Design Factor
13 3/8"	5.35	9.90	15.35
9 5/8"	1.63	2.54	4.07
5 ½"	1.30	1.61	2.00
5 ½"	1.30	1.61	2.00

4. Cement Program:

NOTE: All cement volumes have a minimum of 25% excess included.

a. 13 3/8" Surface

Lead: 910 sacks (35:65) 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: 350 sacks Premium Plus C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 56.3% Fresh Water
Yield: 1.35 cf/sack.

b. 9 5/8" Intermediate

Lead: 555 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: 1.97 cf/sack. TOC @ surface.

Tail: 300 sacks 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: 1.35 cf/sack.

c. 5 1/2" Production

1 St Stage

Lead: 760 sacks 35:65:6 Poz Class H + 0.2% bwoc Sodium Metasilicate + 1.4% bwoc FL-62
Yield: 2.00 cf/sack.

Tail: 1,130 sacks 50:50 Poz Class H
Yield: 1.28 cuft/sack

DV TOOL at ~5500'

2nd Stage

Lead: 420 sacks (35:65) Poz Class C Cement + 0.125 lbs/sack Cello Flake + 3 6% bwoc Bentonite + 0.4% bwoc FL-52A + 99.3% Fresh Water
Yield: 1.94 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:	~~2,800'~~ 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:

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 5,000 psi. The BOP on the 13 3/8" casing will be a 3000 psi Hydril annular and will be utilized as a 2000 psi BOP. Prior to drilling out the 9 5/8" intermediate shoe, the ram stack will be nippled up with 4.5" pipe rams installed. All tests will be performed by independent testers. **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.** Annular 2500 psi.

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' – ~~1600'~~	8.4-9.0	32-34	NC	Fresh Water
~~1600'~~ – 2900'	10.0	28-30	NC	Brine
2900'–12900'	8.6-9.0	28	NC-12	Fresh Water/Brine

See COA

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 may 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 130°.

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: Cockburn Fed #2H
Well: Cochburn Fed #2H
Wellbore: Lateral #1
Design: Design #1

CUDD 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	8672.73	0.00	0.00	8672.73	0.00	0.00	0.00	0.00	0.00	
3	9622.73	95.00	10.84	9243.51	611.78	117.13	10.00	10.84	622.90	
4	12366.18	95.00	10.84	9004.40	3296.04	631.02	0.00	0.00	3355.91	PBHL - TD (CF#2H)

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

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL - TD (CF#2H)	9004.40	3296.04	631.02	643975.66	749423.44	32° 46' 6.580 N	103° 39' 22.902 W	Point

ANNOTATIONS

TVD	MD	Annotation
8672.73	8672.73	KOP - Build 10°/100'
9243.51	9622.73	EOC - Hold I:95° @ A:10.84°

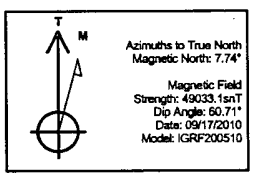
PROJECT DETAILS: Lea Co., New Mexico (Nad 83)

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

WELL DETAILS: Cochburn Fed #2H

Ground Level:
3950.00
WELL @ 3960.00ft (Original Well Elev)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	640675.67	748813.45	32° 45' 33.967 N	103° 39' 30.293 W	

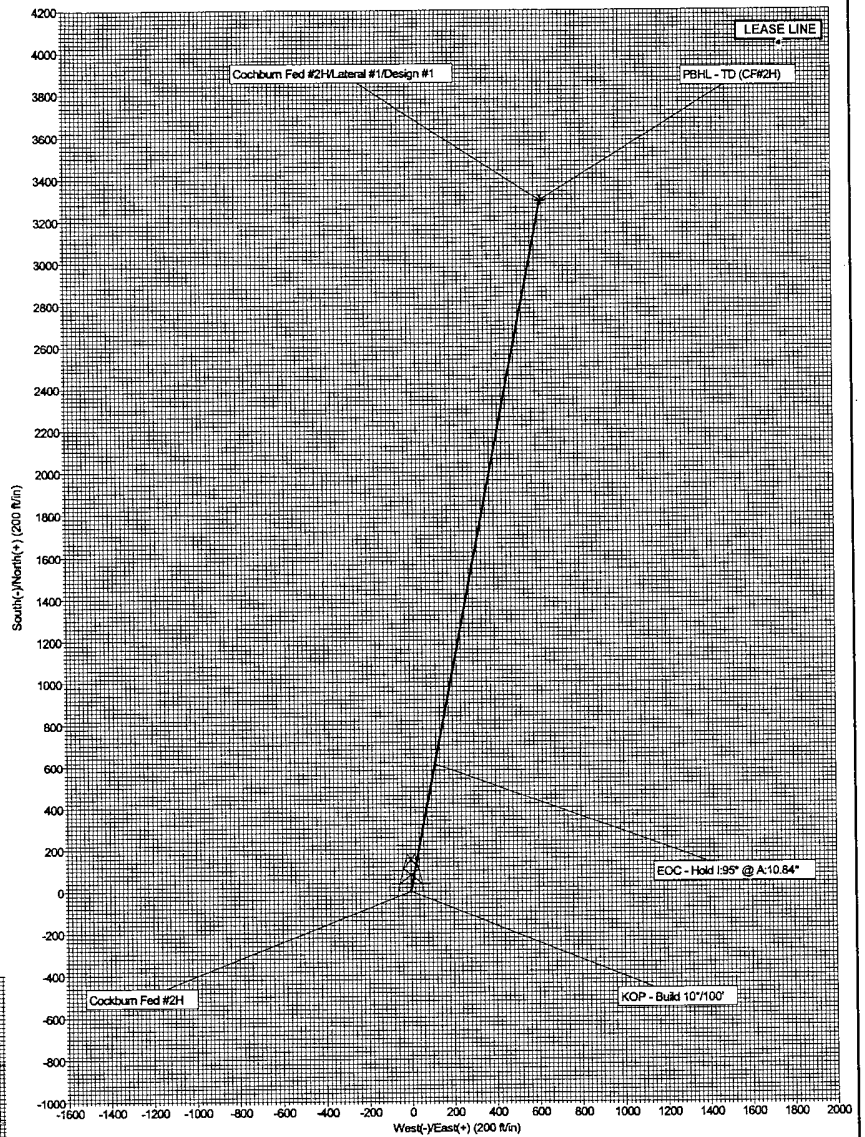


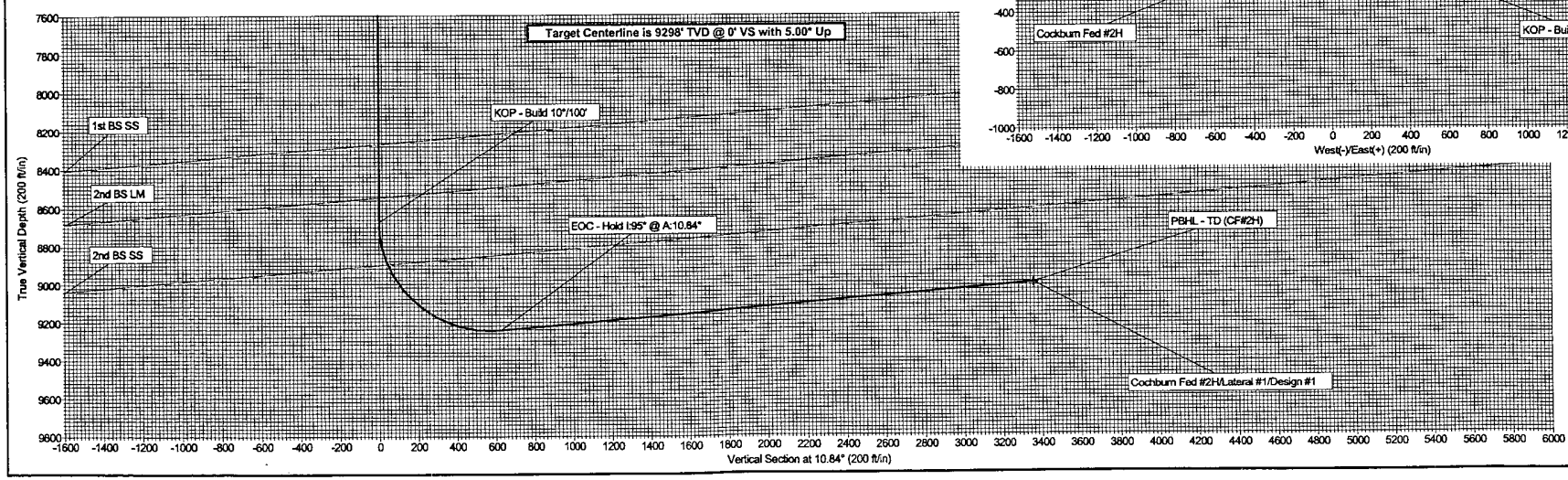
Azimuths to True North
Magnetic North: 7.74°

Magnetic Field
Strength: 49033.1snT
Dip Angle: 60.71°
Date: 09/17/2010
Model: IGRF200510

Plan: Design #1 (Cochburn Fed #2H/Lateral #1)

Created By: Mike Starkey Date: 10:23, September 17 2010
Checked: _____ Date: _____
Reviewed: _____ Date: _____
Approved: _____ Date: _____





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Devon Energy

Lea Co., New Mexico (Nad 83)
Cockburn Fed #2H
Cochburn Fed #2H

Lateral #1

Plan: Design #1

Standard Survey Report

17 September, 2010

CUDD
DRILLING & MEASUREMENT
SERVICES

Company:	Devon Energy	**Local Co-ordinate Reference:**	Site Cockburn Fed #2H
Project:	Lea Co., New Mexico (Nad 83)	**TVD Reference:**	WELL @ 3960.00ft (Original Well Elev)
Site:	Cockburn Fed #2H	**MD Reference:**	WELL @ 3960.00ft (Original Well Elev)
Well:	Cochburn Fed #2H	**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 Cockburn Fed #2H, Sec 10, T-18S, R-33E

Site Position:		**Northing:**	640,675.67 ft	**Latitude:**	32° 45' 33.967 N
From:	Map	**Easting:**	748,813.45 ft	**Longitude:**	103° 39' 30.293 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	"	**Grid Convergence:**	0.37 °

Well Cochburn Fed #2H

Well Position	**+N/-S**	0.00 ft	**Northing:**	640,675.67 ft	**Latitude:**	32° 45' 33.967 N
	+E/-W	0.00 ft	**Easting:**	748,813.45 ft	**Longitude:**	103° 39' 30.293 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	3,960.00 ft	**Ground Level:**	3,950.00 ft

Wellbore Lateral #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	09/17/10	7.74	60.71	49,033

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	10.84

Survey Tool Program **Date** 09/17/10

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	8,500.00	Design #1 (Lateral #1)	NS-GYRO-MS	North sensing gyrocompassing m/s
8,500.00	12,366.18	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
20.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00
Quaternary									
1,548.00	0.00	0.00	1,548.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler Dol									
1,778.00	0.00	0.00	1,778.00	0.00	0.00	0.00	0.00	0.00	0.00
Salado Salt									
2,899.00	0.00	0.00	2,899.00	0.00	0.00	0.00	0.00	0.00	0.00
Tansil Dol									
3,008.00	0.00	0.00	3,008.00	0.00	0.00	0.00	0.00	0.00	0.00
Yates SS									

Company:	Devon Energy	**Local Co-ordinate Reference:**	Site Cockburn Fed #2H
Project:	Lea Co., New Mexico (Nad 83)	**TVD Reference:**	WELL @ 3960.00ft (Original Well Elev)
Site:	Cockburn Fed #2H	**MD Reference:**	WELL @ 3960.00ft (Original Well Elev)
Well:	Cochburn Fed #2H	**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)
3,490.00	0.00	0.00	3,490.00	0.00	0.00	0.00	0.00	0.00	0.00
Seven Rivers									
4,250.00	0.00	0.00	4,250.00	0.00	0.00	0.00	0.00	0.00	0.00
Queen SS									
4,318.00	0.00	0.00	4,318.00	0.00	0.00	0.00	0.00	0.00	0.00
Grayburg									
5,059.00	0.00	0.00	5,059.00	0.00	0.00	0.00	0.00	0.00	0.00
Cherry Canyon									
5,982.00	0.00	0.00	5,982.00	0.00	0.00	0.00	0.00	0.00	0.00
Brushy Canyon									
6,879.00	0.00	0.00	6,879.00	0.00	0.00	0.00	0.00	0.00	0.00
1st BS LM									
8,271.00	0.00	0.00	8,271.00	0.00	0.00	0.00	0.00	0.00	0.00
1st BS SS									
8,549.00	0.00	0.00	8,549.00	0.00	0.00	0.00	0.00	0.00	0.00
2nd BS LM									
8,672.73	0.00	0.00	8,672.73	0.00	0.00	0.00	0.00	0.00	0.00
KOP - Build 10°/100'									
8,904.29	23.16	10.84	8,898.03	45.33	8.68	46.16	10.00	10.00	0.00
2nd BS SS									
9,622.73	95.00	10.84	9,243.51	611.78	117.13	622.90	10.00	10.00	0.00
EOC - Hold I:95° @ A:10.84°									
12,366.18	95.00	10.84	9,004.40	3,296.04	631.02	3,355.91	0.00	0.00	0.00
PBHL - TD (CF#2H)									

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 (CF#2H) - plan hits target center - Point	0.00	0.37	9,004.40	3,296.04	631.02	643,975.66	749,423.44	32° 46' 6.580 N	103° 39' 22.902 W

Company:	Devon Energy	**Local Co-ordinate Reference:**	Site Cockburn Fed #2H
Project:	Lea Co., New Mexico (Nad 83)	**TVD Reference:**	WELL @ 3960.00ft (Original Well Elev)
Site:	Cockburn Fed #2H	**MD Reference:**	WELL @ 3960.00ft (Original Well Elev)
Well:	Cochburn Fed #2H	**North Reference:**	True
Wellbore:	Lateral #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Design #1	**Database:**	EDM 2003.21 Single User Db

Formations

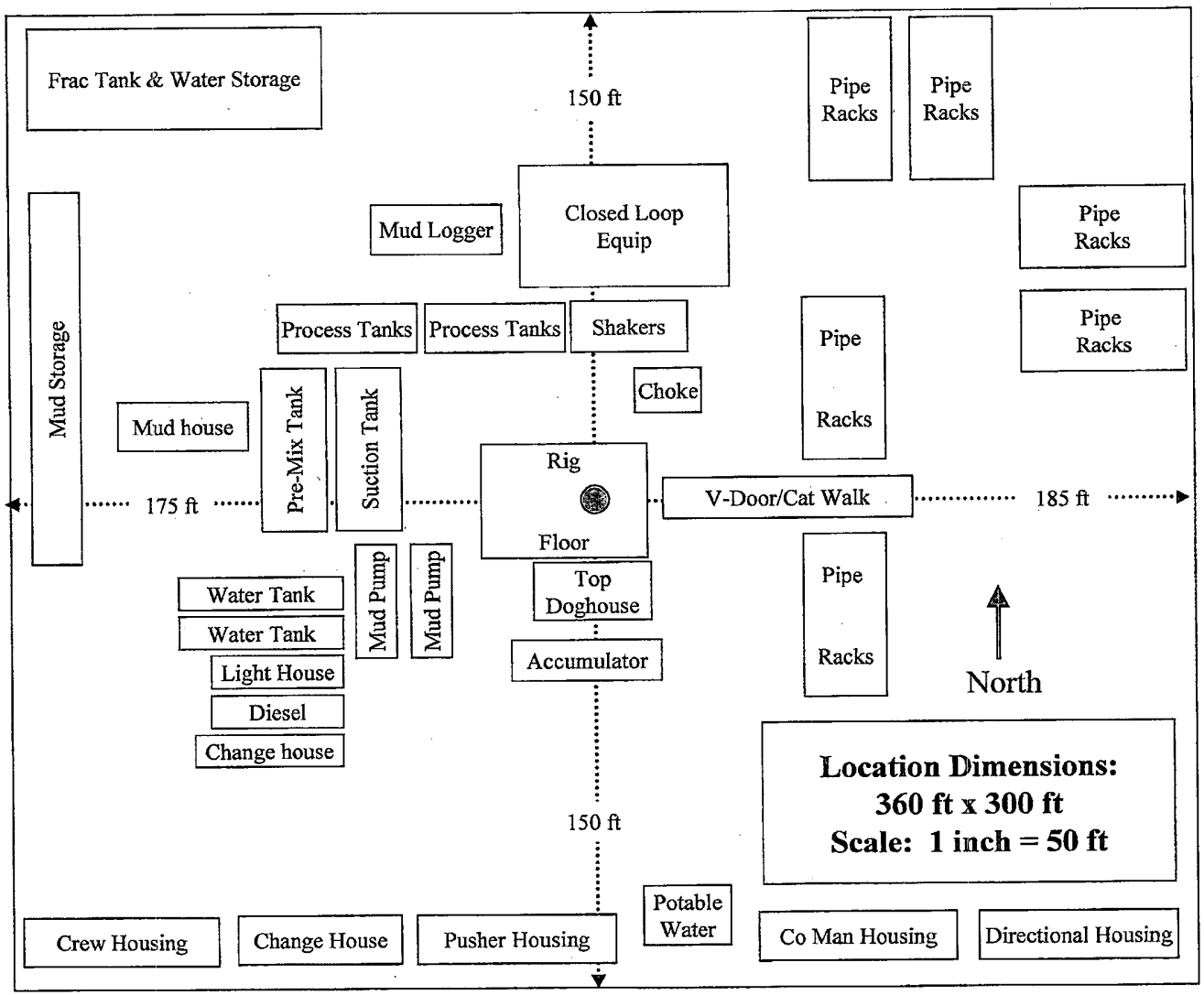
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
20.00	20.00	Quaternary		-5.00	
1,548.00	1,548.00	Rustler Dol		-5.00	
1,778.00	1,778.00	Salado Salt		-5.00	
2,899.00	2,899.00	Tansil Dol		-5.00	
3,008.00	3,008.00	Yates SS		-5.00	
3,490.00	3,490.00	Seven Rivers		-5.00	
4,250.00	4,250.00	Queen SS		-5.00	
4,318.00	4,318.00	Grayburg		-5.00	
5,059.00	5,059.00	Cherry Canyon		-5.00	
5,982.00	5,982.00	Brushy Canyon		-5.00	
6,879.00	6,879.00	1st BS LM		-5.00	
8,271.00	8,271.00	1st BS SS		-5.00	
8,549.00	8,549.00	2nd BS LM		-5.00	
8,904.29	8,902.00	2nd BS SS		-5.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
8,672.73	8,672.73	0.00	0.00	KOP - Build 10°/100'
9,622.73	9,243.51	611.78	117.13	EOC - Hold I:95° @ A:10.84°

Checked By: _____ Approved By: _____ Date: _____

Conventional Rig Location Layout



devon

Proposed Interim Site Reclamation

Devon Energy Production Co.

Cockburn "G" Federal 2H

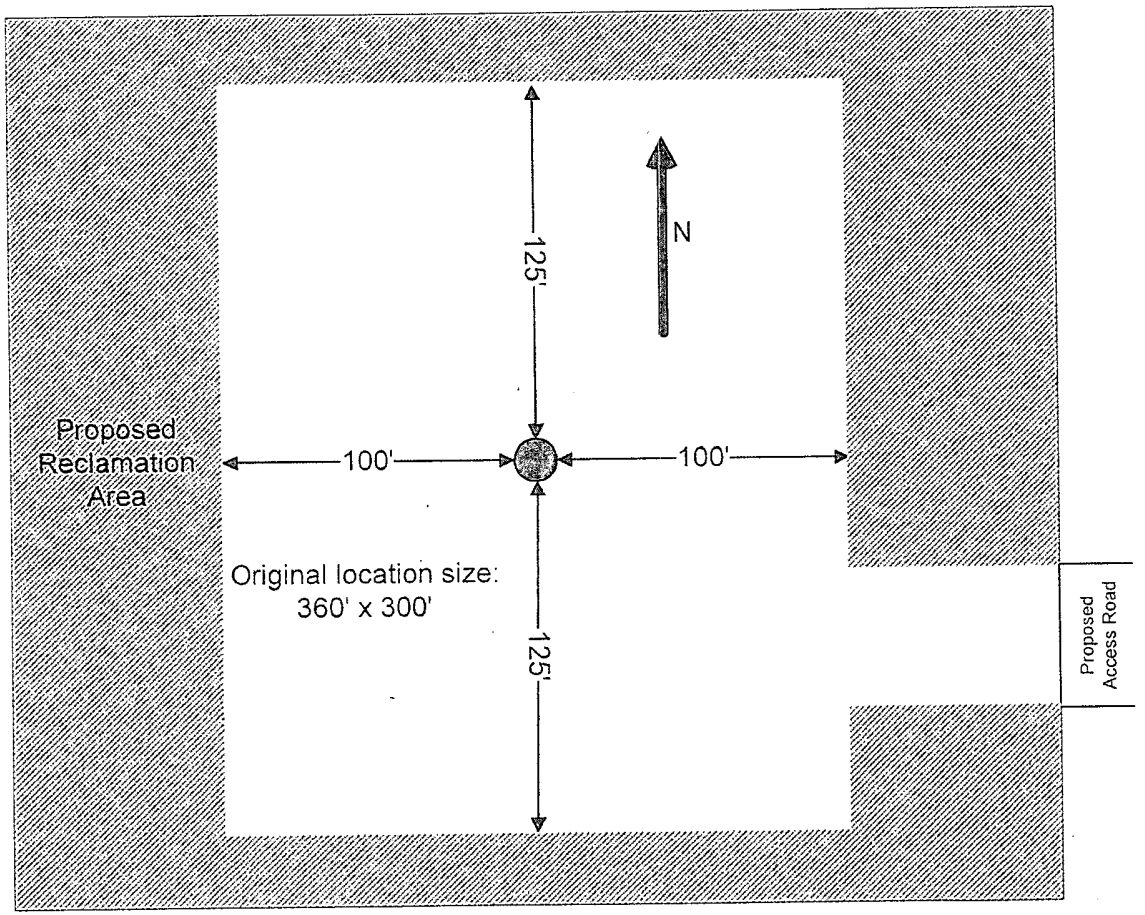
1,650' FSL & 330' FWL

Sec. 10 - T18S - R33E

Lea County, NM

Proposed Reclamation Area

1" : 60'



Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTERS
Devon Energy Production Company, LP
Cockburn G Fed 2H
Surface Location: 1650' FSL & 330' FWL Unit L, Sec 10 T18S R33E, Lea, NM
Bottom hole Location: 330' FNL & 940' FWL, Unit D, Sec 10 T18S R33E, 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.

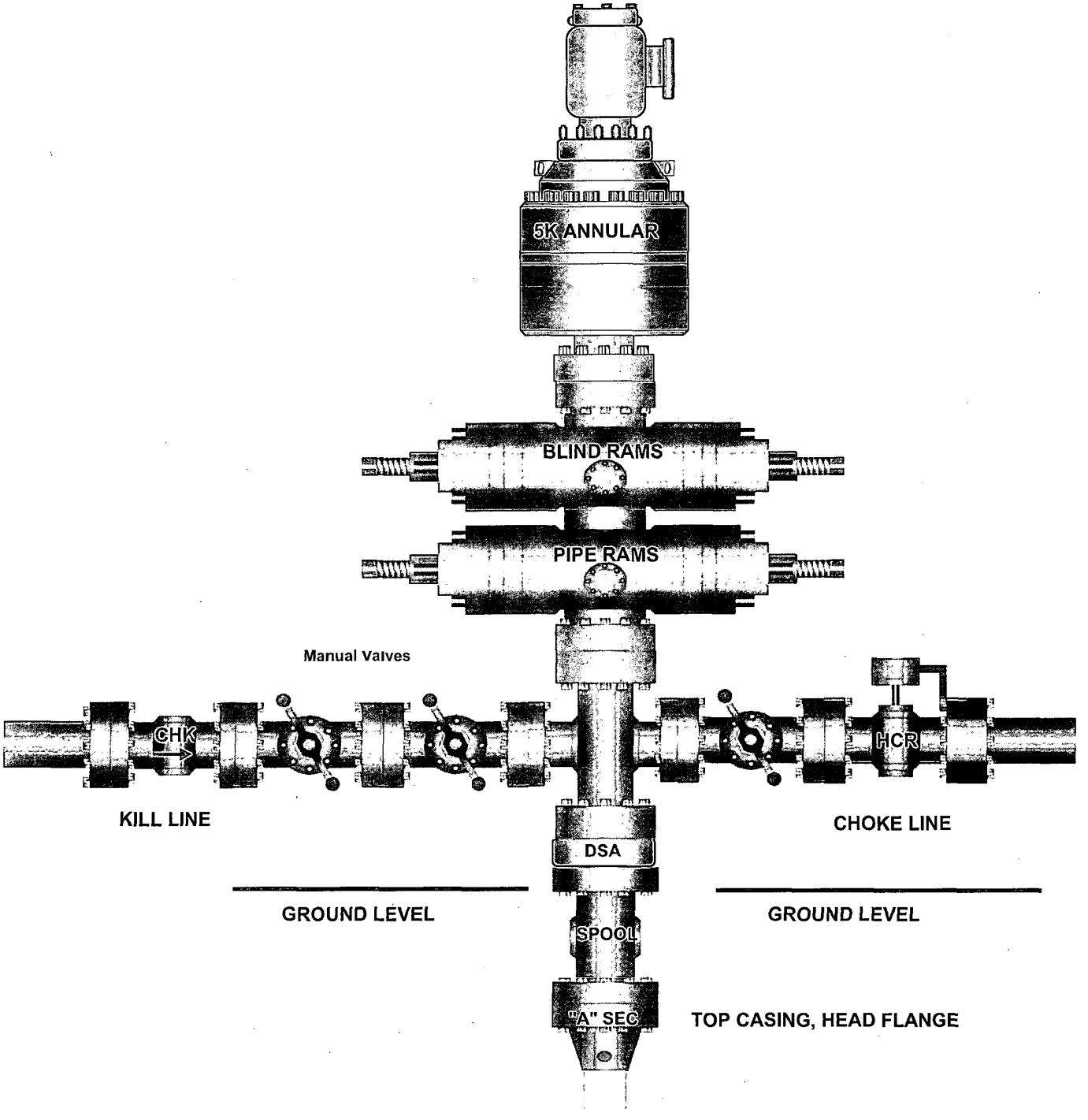
8. Will maintain a kelly cock attached to the kelly.

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

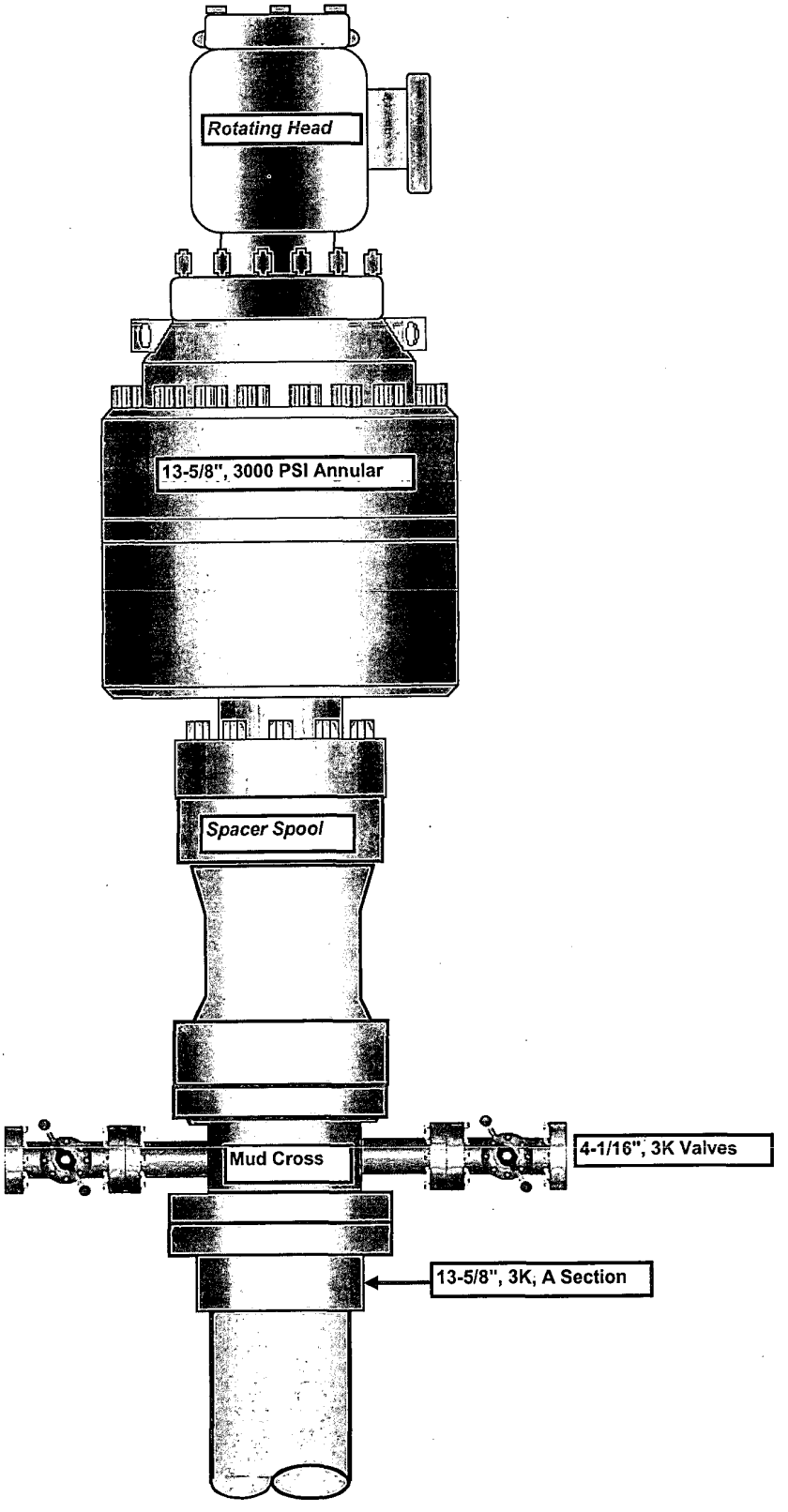
10. Hydraulic floor control for blowout preventer will be located as near in proximity to driller's controls as possible.

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



5,000 PSI CHOKE MANIFOLD