HOBBS OCD

JUL 23 2013

13-632

OCD Hobbs

Form 3160-3
(March 2012)

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMNM 100568

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. (40039)
MEAN GREEN 23 FED 1H

2. Name of Operator Devon Energy Production Company, L.P. (6137)

9. API Well No.
30-025-41392

3a. Address
333 W. Sheridan Ave.
Oklahoma City, OK 73102

3b. Phone No. *(include area code)*
405-552-7848

10. Field and Pool, or Exploratory (97597)
DELAWARE; JABALINA SOUTHWEST

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface 25 FSL & 330 FEL Unit P PP: 25 FSL & 330 FEL
At proposed prod. zone 330 FNL & 330 FEL Unit A

11. Sec., T. R. M. or Blk. and Survey or Area
23-26S-34E

14. Distance in miles and direction from nearest town or post office*
Approximately 15 miles southwest of Jal, NM

12. County or Parish
Lea County

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
1,920 acres

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.
50' from Mean Green 26 Fed 1H

19. Proposed Depth
TVD: 9,110' MD: 13,794'

20. BLM/BIA Bond No. on file
CO-1104 & NMB-000801

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3,223.0' GL

22. Approximate date work will start*
05/31/2013

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)* David H. Cook
Date 3/25/2013

Title
Regulatory Specialist

Approved by *(Signature)* /s/George MacDonell
Name *(Printed/Typed)*
Date JUL 16 2013

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.

(Continued on page 2)

*(Instructions on page 2)

Carlsbad Controlled Water Basin

KZ
07/26/13

Approval Subject to General Requirements & Special Stipulations Attached

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

JUL 31 2013

DRILLING PROGRAM

Devon Energy Production Company, LP

Mean Green 23 Fed 1H

Surface Location: 25 FSL & 330 FEL, Unit P, Sec 23 T26S R34E, Lea, NM
Bottom Hole Location: 330 FNL & 330 FEL, Unit A, Sec 23 T26S R34E, Lea, NM

1. Geologic Name of Surface Formation

a. Quaternary

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

a.	Fresh Water	180'	
b.	Rustler	960'	
c.	Salado	1,100'	
d.	Top of Salt	1,290'	
e.	Castile	3,460'	
f.	Base of Salt	5,042'	
g.	Delaware	5,321'	Oil/Gas
h.	Bell Canyon	5,357'	Oil
i.	Cherry Canyon	6,365'	Oil
j.	Brushy Canyon	7,946'	Oil
	Total Depth	13,794' MD	9,110' TVD

3. Casing Program: (All casing is new and API approved.)

Hole Size	Hole Interval	OD Csg	Casing Interval	Weight	Collar	Grade
17-1/2"	0 – 1,000 1060'	13-3/8"	0 – 1,000	48#	STC	H-40
12-1/4"	1,000 – 5,300	9-5/8"	0 – 5,300	40#	LTC	HCK-55
8-3/4"	5,300 – 8,300	5-1/2"	0 – 8,300	17#	LTC	HCP-110
8-3/4"	8,300 – 13,794	5-1/2"	9,087 – 13,794 8300?	17#	BTC	HCP-110

MAXIMUM LATERAL TVD 9,110'

Design Parameter Factors:

Casing Size	Collapse Design Factor	Burst Design Factor	Tension Design Factor
13-3/8", 48#, H-40, ST&C	1.65	3.70	6.71
9-5/8" 40# HCK-55 LTC	1.51	1.25	2.92
5-1/2" 17# HCP-110 LTC	1.75	2.49	1.91
5-1/2" 17# HCP-110 BTC	1.92	2.74	6.19

Cement Program: (cement volumes Surface 100%/ Intermediate 50% Production based on at least 25% excess):

13 3/8" Surface

Lead: **200 sx** Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sx Poly-E-Flake + 4% bwoc Bentonite + 70.1% Fresh Water, 13.5 ppg, **Yield:** 1.75 cf/sx

See COA **TOC @ surface**

Tail: **258 sx** Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sx Poly-E-Flake + 63.1% Fresh Water, 14.8 ppg, **Yield:** 1.35 cf/sx

9-5/8" Intermediate

Lead: **1020 sx** (65:35) Class C Cement:Poz (Fly Ash): + 5% bwow Sodium Chloride + 0.125 lbs/sx Poly-E-Flake + 6% bwoc Bentonite + 70.9% Fresh Water, 12.9 ppg, **Yield**: 2.04 cf/sx

TOC @ surface

Tail: **430 sx** Class C Cement + 0.125 lbs/sx Poly-E-Flake + 63.5% Water, 14.8 ppg, **Yield**: 1.33 cf/sx

5-1/2" Production

Lead: 975 sx (65:35) Class H Cement:Poz (Fly Ash) + 6% bwoc Bentonite + 0.2% bwoc HR-601 + 74.1% Fresh Water, 12.5 ppg, **Yield**: 1.95 cf/sx

Tail: **1300 sx** (50:50) Class H Cement:Poz (Fly Ash) + 1 lb/sk Sodium Chloride + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.1% bwoc HR-601 + 2% bwoc Bentonite + 58.8% Fresh Water, 14.5 ppg, **Yield**: 1.22 cf/sx

TOC @ 4800 ft

The above cement volumes could be revised pending the caliper measurement from the open hole logs.

4. Pressure Control Equipment

A 3M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the surface casing shoe. The BOP system used to drill the intermediate hole will be tested per BLM Onshore Oil and Gas Order 2.

A 3M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the intermediate casing shoe. The BOP system used to drill the production hole will be tested per BLM Onshore Oil and Gas Order 2.

The pipe rams 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 annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 3,000 psi WP.

See COA Devon requests a variance to use a flexible line with flanged ends between the BOP and the choke manifold (choke line). The line will be kept as straight as possible with minimal turns.

5. Proposed Mud Circulation System

Depth	Mud Wt.	Visc	Fluid Loss	Type System
0 – ~~1,000~~ 1060'	8.4-9.0	30-34	NC	FW
See COA ~~1,000~~ – 5,300	9.8-10.0	28-32	NC	Brine
5,300 – 13,794	8.6-9.0	28-32	N12	FW

The necessary mud products for weight addition and fluid loss control will be on location at all times. Visual mud monitoring equipment will be in place to detect volume changes indicating loss or gain of circulating fluid volume. If abnormal pressures are encountered, electronic/mechanical mud monitoring equipment will be installed.

6. **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.

See COA

7. **Logging, Coring, and Testing Program:**
   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.

8. **Potential Hazards:**
   a. No abnormal pressures or temperatures are expected. There is no known presence of H2S in this area. 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 4,000 psi and Estimated BHT 145°. No H2S is anticipated to be encountered.

9. **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 20 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 ENERGY

Project: Lea County, NM (NAD-83)
Site: Mean Green 23 Fed
Well: 1H
Wellbore: OH
Design: Plan #1

Azimuths to Grid North
True North: -0.48°
Magnetic North: 6.82°

Magnetic Field
Strength: 48336.5snT
Dip Angle: 59.98°
Date: 03/12/2013
Model: IGRF2010

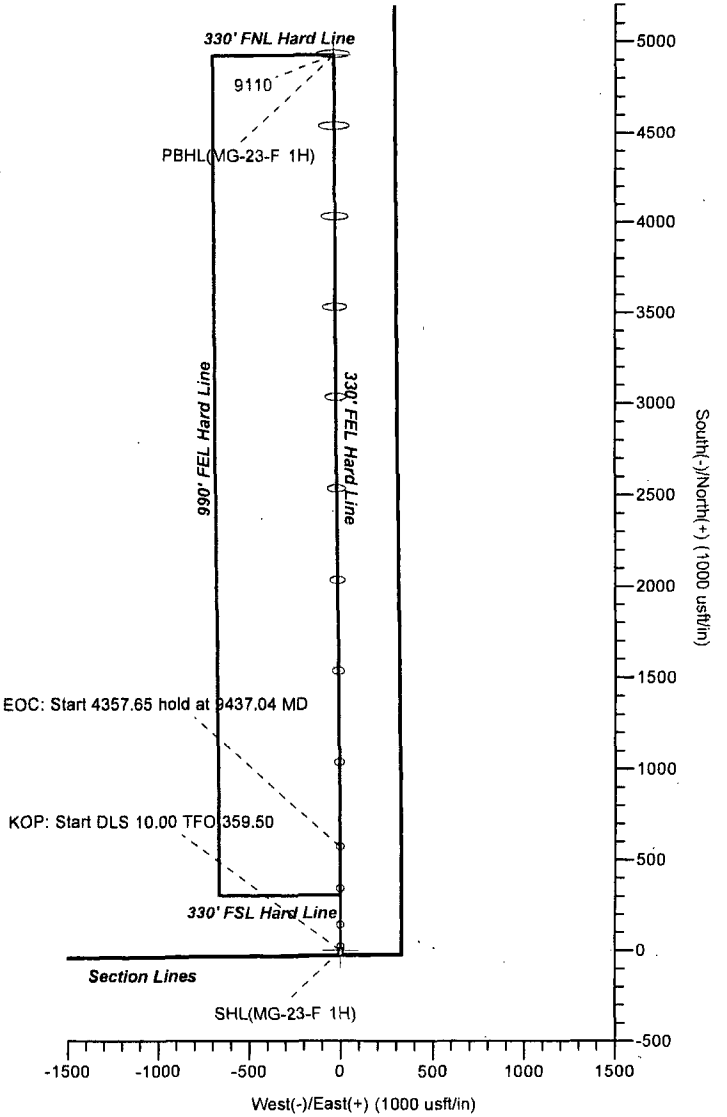
devon

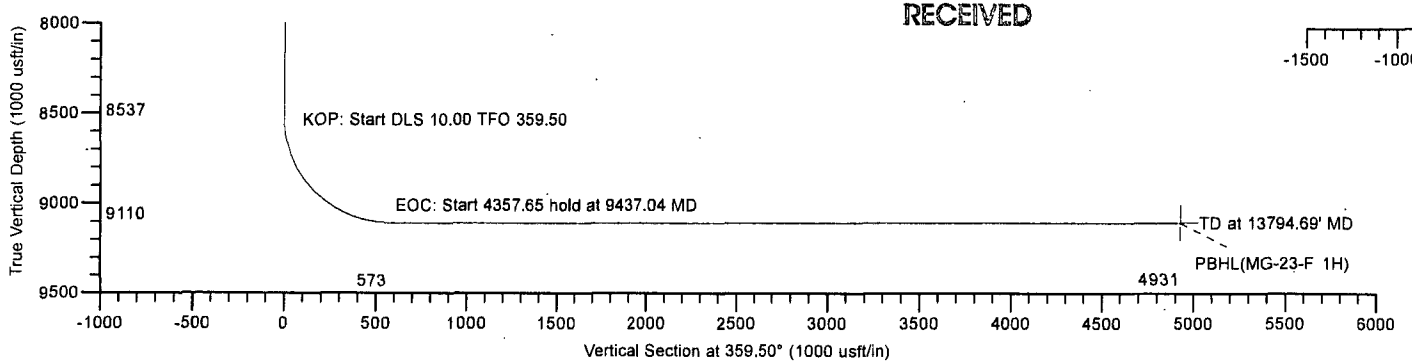
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
SHL(MG-23-F 1H)	0.00	0.00	0.00	372787.16	820302.13	32° 1' 18.040 N	103° 25' 59.582 W
PBHL(MG-23-F 1H)	9110.00	4930.42	-42.91	377717.58	820259.22	32° 2' 6.831 N	103° 25' 59.603 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	8537.04	0.00	0.00	8537.04	0.00	0.00	0.00	0.00	0.00	KOP: Start DLS 10.00 TFO 359.50
3	9437.04	90.00	359.50	9110.00	572.94	-4.99	10.00	359.50	572.96	EOC: Start 4357.65 hold at 9437.04 MD
4	13794.69	90.00	359.50	9110.00	4930.42	-42.91	0.00	0.00	4930.61	TD at 13794.69' MD





LEAM Drilling Systems LLC

LEAM DRILLING SYSTEMS LLC
2010 East Davis, Conroe, Texas 77301
Phone: 936/756-7577, Fax 936/756-7595

Plan: Plan #1 (1H/OH)
Mean Green 23 Fed
Created By: Tyler Carlson Date: 16:01, March 12 2013
Date: _____
Approved: _____ Date: _____

LEAM Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well 1H
Company:	DEVON ENERGY	**TVD Reference:**	GE 3223' + KB 25' @ 3248.00usft (Original Well Elev)
Project:	Lea County, NM (NAD-83)	**MD Reference:**	GE 3223' + KB 25' @ 3248.00usft (Original Well Elev)
Site:	Mean Green 23 Fed	**North Reference:**	Grid
Well:	1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project Lea County, NM (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 Mean Green 23 Fed

Site Position:		**Northing:**	372,787.16 usft	**Latitude:**	32° 1' 18.040 N
From:	Map	**Easting:**	820,302.13 usft	**Longitude:**	103° 25' 59.582 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.48 °

Well 1H

Well Position	**+N/-S**	0.00 usft	**Northing:**	372,787.16 usft	**Latitude:**	32° 1' 18.040 N
	+E/-W	0.00 usft	**Easting:**	820,302.13 usft	**Longitude:**	103° 25' 59.582 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		**Ground Level:**	3,223.00 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	03/12/13	7.29	59.98	48,336

Design Plan #1

Audit Notes:

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

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	359.50

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8,537.04	0.00	0.00	8,537.04	0.00	0.00	0.00	0.00	0.00	0.00	
9,437.04	90.00	359.50	9,110.00	572.94	-4.99	10.00	10.00	-0.06	359.50	
13,794.69	90.00	359.50	9,110.00	4,930.42	-42.91	0.00	0.00	0.00	0.00	PBHL(MG-23-F 1H)

LEAM Drilling Systems LLC

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Well:	1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00

LEAM Drilling Systems LLC

Planning Report

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Company:	DEVON ENERGY	**TVD Reference:**	GE 3223' + KB 25' @ 3248.00usft (Original Well Elev)
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Site:	Mean Green 23 Fed	**North Reference:**	Grid
Well:	1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	0.00	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00
8,100.00	0.00	0.00	8,100.00	0.00	0.00	0.00	0.00	0.00	0.00
8,200.00	0.00	0.00	8,200.00	0.00	0.00	0.00	0.00	0.00	0.00
8,300.00	0.00	0.00	8,300.00	0.00	0.00	0.00	0.00	0.00	0.00
8,400.00	0.00	0.00	8,400.00	0.00	0.00	0.00	0.00	0.00	0.00
8,500.00	0.00	0.00	8,500.00	0.00	0.00	0.00	0.00	0.00	0.00
8,537.04	0.00	0.00	8,537.04	0.00	0.00	0.00	0.00	0.00	0.00
KOP: Start DLS 10.00 TFO 359.50									
8,550.00	1.30	359.50	8,550.00	0.15	0.00	0.15	10.00	10.00	0.00
8,600.00	6.30	359.50	8,599.87	3.46	-0.03	3.46	10.00	10.00	0.00
8,650.00	11.30	359.50	8,649.27	11.10	-0.10	11.10	10.00	10.00	0.00
8,700.00	16.30	359.50	8,697.81	23.02	-0.20	23.02	10.00	10.00	0.00
8,750.00	21.30	359.50	8,745.13	39.12	-0.34	39.12	10.00	10.00	0.00
8,800.00	26.30	359.50	8,790.87	59.29	-0.52	59.29	10.00	10.00	0.00
8,850.00	31.30	359.50	8,834.67	83.36	-0.73	83.37	10.00	10.00	0.00
8,900.00	36.30	359.50	8,876.21	111.17	-0.97	111.17	10.00	10.00	0.00
8,950.00	41.30	359.50	8,915.16	142.48	-1.24	142.49	10.00	10.00	0.00
9,000.00	46.30	359.50	8,951.24	177.07	-1.54	177.08	10.00	10.00	0.00
9,050.00	51.30	359.50	8,984.17	214.68	-1.87	214.69	10.00	10.00	0.00
9,100.00	56.30	359.50	9,013.69	255.01	-2.22	255.02	10.00	10.00	0.00
9,150.00	61.30	359.50	9,039.59	297.76	-2.59	297.77	10.00	10.00	0.00
9,200.00	66.30	359.50	9,061.66	342.61	-2.98	342.62	10.00	10.00	0.00
9,250.00	71.30	359.50	9,079.74	389.21	-3.39	389.22	10.00	10.00	0.00
9,300.00	76.30	359.50	9,093.69	437.20	-3.81	437.22	10.00	10.00	0.00

LEAM Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 1H
Company:	DEVON ENERGY	TVD Reference:	GE 3223' + KB 25' @ 3248.00usft (Original Well Elev)
Project:	Lea County, NM (NAD-83)	MD Reference:	GE 3223' + KB 25' @ 3248.00usft (Original Well Elev)
Site:	Mean Green 23 Fed	North Reference:	Grid
Well:	1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,350.00	81.30	359.50	9,103.40	486.23	-4.23	486.25	10.00	10.00	0.00
9,400.00	86.30	359.50	9,108.80	535.92	-4.66	535.94	10.00	10.00	0.00
9,437.04	90.00	359.50	9,110.00	572.94	-4.99	572.96	10.00	10.00	0.00
EOC: Start 4357.65 hold at 9437.04 MD									
9,500.00	90.00	359.50	9,110.00	635.89	-5.53	635.92	0.00	0.00	0.00
9,600.00	90.00	359.50	9,110.00	735.89	-6.40	735.92	0.00	0.00	0.00
9,700.00	90.00	359.50	9,110.00	835.88	-7.27	835.92	0.00	0.00	0.00
9,800.00	90.00	359.50	9,110.00	935.88	-8.15	935.92	0.00	0.00	0.00
9,900.00	90.00	359.50	9,110.00	1,035.88	-9.02	1,035.92	0.00	0.00	0.00
10,000.00	90.00	359.50	9,110.00	1,135.87	-9.89	1,135.92	0.00	0.00	0.00
10,100.00	90.00	359.50	9,110.00	1,235.87	-10.76	1,235.92	0.00	0.00	0.00
10,200.00	90.00	359.50	9,110.00	1,335.87	-11.63	1,335.92	0.00	0.00	0.00
10,300.00	90.00	359.50	9,110.00	1,435.86	-12.50	1,435.92	0.00	0.00	0.00
10,400.00	90.00	359.50	9,110.00	1,535.86	-13.37	1,535.92	0.00	0.00	0.00
10,500.00	90.00	359.50	9,110.00	1,635.85	-14.24	1,635.92	0.00	0.00	0.00
10,600.00	90.00	359.50	9,110.00	1,735.85	-15.11	1,735.92	0.00	0.00	0.00
10,700.00	90.00	359.50	9,110.00	1,835.85	-15.98	1,835.92	0.00	0.00	0.00
10,800.00	90.00	359.50	9,110.00	1,935.84	-16.85	1,935.92	0.00	0.00	0.00
10,900.00	90.00	359.50	9,110.00	2,035.84	-17.72	2,035.92	0.00	0.00	0.00
11,000.00	90.00	359.50	9,110.00	2,135.83	-18.59	2,135.92	0.00	0.00	0.00
11,100.00	90.00	359.50	9,110.00	2,235.83	-19.46	2,235.92	0.00	0.00	0.00
11,200.00	90.00	359.50	9,110.00	2,335.83	-20.33	2,335.92	0.00	0.00	0.00
11,300.00	90.00	359.50	9,110.00	2,435.82	-21.20	2,435.92	0.00	0.00	0.00
11,400.00	90.00	359.50	9,110.00	2,535.82	-22.07	2,535.92	0.00	0.00	0.00
11,500.00	90.00	359.50	9,110.00	2,635.82	-22.94	2,635.92	0.00	0.00	0.00
11,600.00	90.00	359.50	9,110.00	2,735.81	-23.81	2,735.92	0.00	0.00	0.00
11,700.00	90.00	359.50	9,110.00	2,835.81	-24.68	2,835.92	0.00	0.00	0.00
11,800.00	90.00	359.50	9,110.00	2,935.80	-25.55	2,935.92	0.00	0.00	0.00
11,900.00	90.00	359.50	9,110.00	3,035.80	-26.42	3,035.92	0.00	0.00	0.00
12,000.00	90.00	359.50	9,110.00	3,135.80	-27.29	3,135.92	0.00	0.00	0.00
12,100.00	90.00	359.50	9,110.00	3,235.79	-28.16	3,235.92	0.00	0.00	0.00
12,200.00	90.00	359.50	9,110.00	3,335.79	-29.03	3,335.92	0.00	0.00	0.00
12,300.00	90.00	359.50	9,110.00	3,435.79	-29.90	3,435.92	0.00	0.00	0.00
12,400.00	90.00	359.50	9,110.00	3,535.78	-30.77	3,535.92	0.00	0.00	0.00
12,500.00	90.00	359.50	9,110.00	3,635.78	-31.64	3,635.92	0.00	0.00	0.00
12,600.00	90.00	359.50	9,110.00	3,735.77	-32.51	3,735.92	0.00	0.00	0.00
12,700.00	90.00	359.50	9,110.00	3,835.77	-33.38	3,835.92	0.00	0.00	0.00
12,800.00	90.00	359.50	9,110.00	3,935.77	-34.25	3,935.92	0.00	0.00	0.00
12,900.00	90.00	359.50	9,110.00	4,035.76	-35.12	4,035.92	0.00	0.00	0.00
13,000.00	90.00	359.50	9,110.00	4,135.76	-35.99	4,135.92	0.00	0.00	0.00
13,100.00	90.00	359.50	9,110.00	4,235.76	-36.86	4,235.92	0.00	0.00	0.00
13,200.00	90.00	359.50	9,110.00	4,335.75	-37.73	4,335.92	0.00	0.00	0.00
13,300.00	90.00	359.50	9,110.00	4,435.75	-38.60	4,435.92	0.00	0.00	0.00
13,400.00	90.00	359.50	9,110.00	4,535.74	-39.48	4,535.92	0.00	0.00	0.00
13,500.00	90.00	359.50	9,110.00	4,635.74	-40.35	4,635.92	0.00	0.00	0.00
13,600.00	90.00	359.50	9,110.00	4,735.74	-41.22	4,735.92	0.00	0.00	0.00
13,700.00	90.00	359.50	9,110.00	4,835.73	-42.09	4,835.92	0.00	0.00	0.00
13,794.69	90.00	359.50	9,110.00	4,930.42	-42.91	4,930.61	0.00	0.00	0.00
TD at 13794.69' MD									

LEAM Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 1H
Company:	DEVON ENERGY	TVD Reference:	GE 3223' + KB 25' @ 3248.00usft (Original Well Elev)
Project:	Lea County, NM (NAD-83)	MD Reference:	GE 3223' + KB 25' @ 3248.00usft (Original Well Elev)
Site:	Mean Green 23 Fed	North Reference:	Grid
Well:	1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL(MG-23-F 1H) - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	372,787.16	820,302.13	32° 1' 18.040 N	103° 25' 59.582 W
PBHL(MG-23-F 1H) - plan hits target center - Point	0.00	0.00	9,110.00	4,930.42	-42.91	377,717.58	820,259.22	32° 2' 6.831 N	103° 25' 59.603 W

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
8,537.04	8,537.04	0.00	0.00	KOP: Start DLS 10.00 TFO 359.50
9,437.04	9,110.00	572.94	-4.99	EOC: Start 4357.65 hold at 9437.04 MD
13,794.69	9,110.00	4,930.42	-42.91	TD at 13794.69' MD

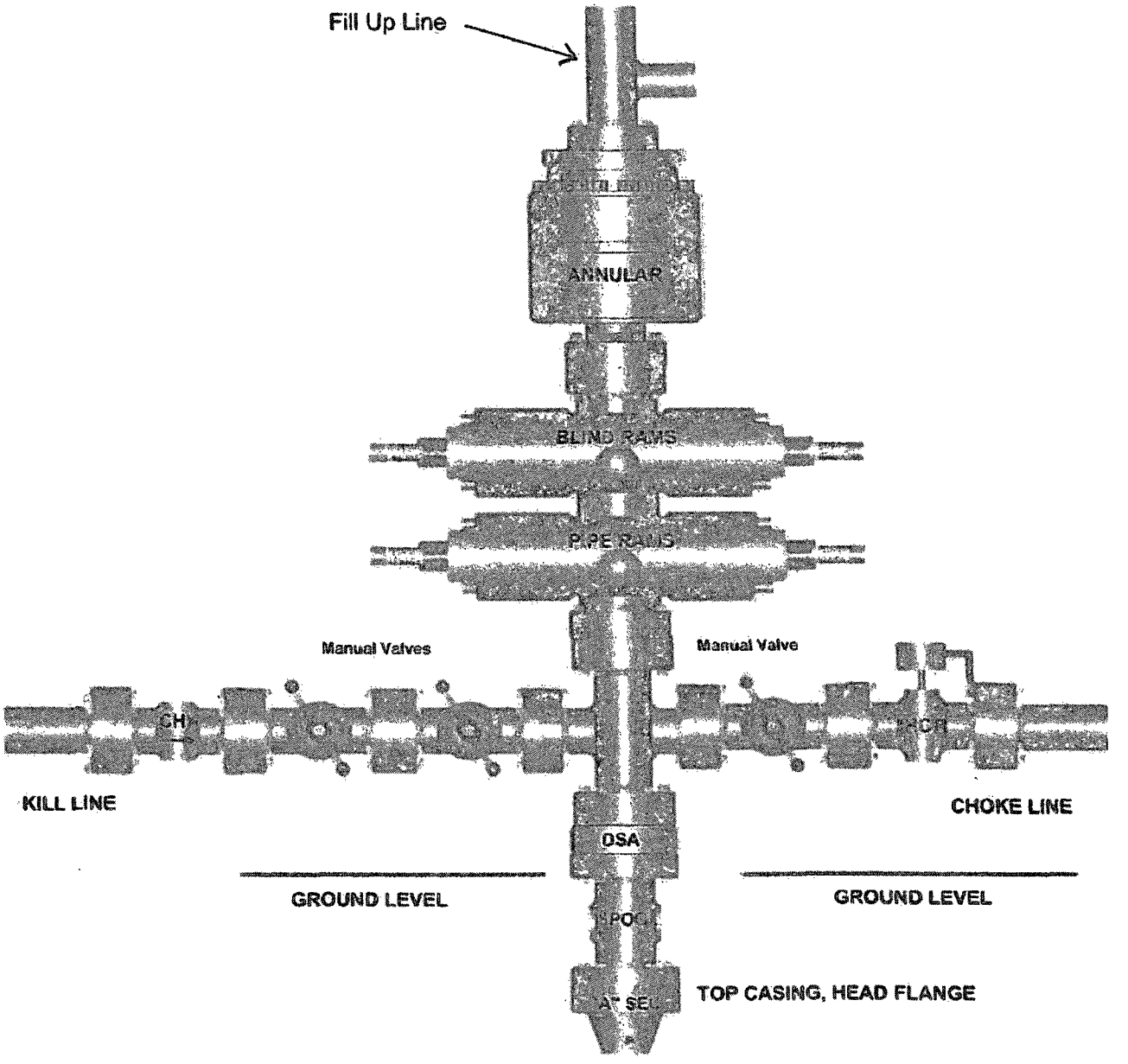
NOTES REGARDING BLOWOUT PREVENTERS

Devon Energy Production Company, LP
Mean Green 23 Fed 1H

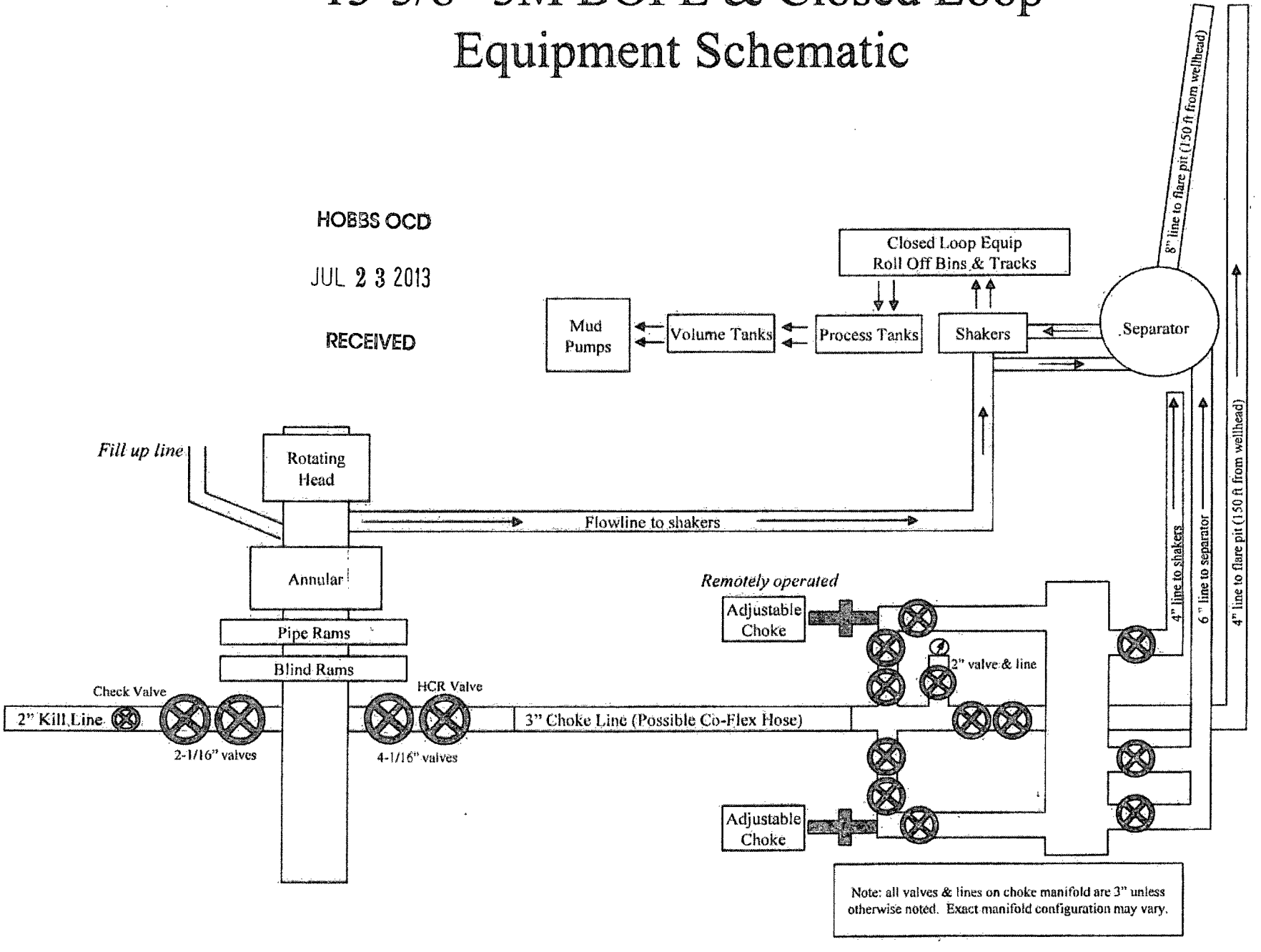
Surface Location: 25 FSL & 330 FEL, Unit P, Sec 23 T26S R34E, Lea, NM
Bottom Hole Location: 330 FNL & 330 FEL, Unit A, Sec 23 T26S R34E, Lea, NM

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 3000 psi working pressure.
4. All fittings will be flanged.
5. A full bore safety valve tested to a minimum 3000 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 3,000 psi BOP Stack



13-5/8" 3M BOPE & Closed Loop Equipment Schematic



H&P 416

Continental CONTITECH

Fluid Technology

Quality Document

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE				CERT. N°:	1713	
PURCHASER:	ContiTech Beattie Co.			P.O. N°:	002808	
CONTITECH ORDER N°:	426127	HOSE TYPE:	3" ID	Choke and Kill Hose		
HOSE SERIAL N°:	53622	NOMINAL / ACTUAL LENGTH:		10,67 m		
W.P. 68,96 MPa	10000 psi	T.P. 103,4 MPa	15000 psi	Duration:	60	min.

Pressure test with water at ambient temperature

HOBBS OCD

JUL 2 3 2013

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See attachment. (1 page)

↑ 10 mm = 10 Min.

→ 10 mm = 25 MPa

COUPLINGS Type	Serial N°	Quality	Heat N°
3" coupling with	5503 2029	AISI 4130	N1590P
4 1/16" Flange end		AISI 4130	27566

INFOCHIP INSTALLED

API Spec 16 C
Temperature rate:"B"

All metal parts are flawless

Hose conform to NACE MR 01-75

WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER INSPECTED AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.

STATEMENT OF CONFORMITY: We hereby certify that the above items/equipment supplied by us are in conformity with the terms, conditions and specifications of the above Purchaser Order and that these items/equipment were fabricated inspected and tested in accordance with the referenced standards, codes and specifications and meet the relevant acceptance criteria and design requirements.

COUNTRY OF ORIGIN HUNGARY/EU

Date:	Inspector	Quality Control
25. August. 2008		ContiTech Rubber Industrial Kft. Quality Control Dept.

ATTACHMENT OF QUALITY CONTROL INSPECTION AND TEST CERTIFICATE No 1711,1713
Page: 1/1

H&P 416

HOBBS OCD

JUL 2 3 2013

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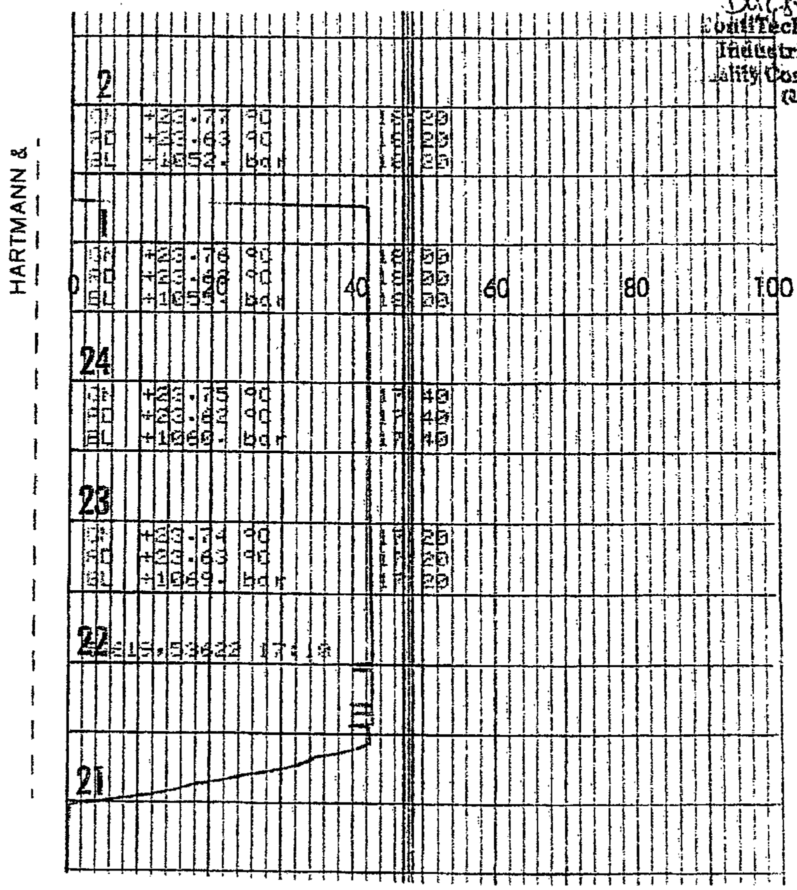
ContiTech Rubber
Industrial Kft.
Quality Control Dept.
(1)



Continental CONTITECH

Fluid Technology

ContiTech Beattie Corp.
Website: www.contitechbeattie.com

Monday, June 14, 2010

RE: Drilling & Production Hoses
Lifting & Safety Equipment

HOBBS OCD

JUL 23 2013

RECEIVED

To Helmerich & Payne,

A Continental ContiTech hose assembly can perform as intended and suitable for the application regardless of whether the hose is secured or unsecured in its configuration. As a manufacturer of High Pressure Hose Assemblies for use in Drilling & Production, we do offer the corresponding lifting and safety equipment, this has the added benefit of easing the lifting and handling of each hose assembly whilst affording hose longevity by ensuring correct handling methods and procedures as well as securing the hose in the unlikely event of a failure; but in no way does the lifting and safety equipment affect the performance of the hoses providing the hoses have been handled and installed correctly. It is good practice to use lifting & safety equipment but not mandatory.

Should you have any questions or require any additional information/clarifications then please do not hesitate to contact us.

ContiTech Beattie is part of the Continental AG Corporation and can offer the full support resources associated with a global organization.

Best regards,

Robin Hodgson
Sales Manager
ContiTech Beattie Corp

ContiTech Beattie Corp,
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Houston, TX 77041
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