

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

OCD HOBBS
HOBBS

JUN 27 2013

RECEIVED

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

1a. Type of work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NMNM 100568	
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator Devon Energy Production Company, L.P.		7. If Unit or CA Agreement, Name and No.	
3a. Address 333 W. Sheridan Ave. Oklahoma City, OK 73102		8. Lease Name and Well No. 39988 MEAN GREEN 26 FED 1H	
3b. Phone No. (include area code) 405-552-7848		9. API Well No. 30-025-41246	
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 25 FNL & 330 FEL Unit A PP: 25 FNL & 330 FEL At proposed prod. zone 330 FSL & 330 FEL Unit P		10. Pool or Exploratory Tabalina BRUSHY CANYON, DELAWARE SW	
14. Distance in miles and direction from nearest town or post office* Approximately 15 miles southwest of Jal, NM		11. Sec., T. R. M. or Blk. and Survey or Area 26-26S-34E	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 330'		12. County or Parish Lea County	
16. No. of acres in lease 1,920 acres		13. State NM	
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: 9,110' MD: 13,735'		20. BLM/BIA Bond No. on file CO-1104 & NMB-000801	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3,222.9' GL		22. Approximate date work will start*	
23. Estimated duration 45 days		24. Attachments	

UNORTHODOX
LOCATION

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- 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/ James Stovall	Name (Printed/Typed) /s/ James Stovall	Date JUN 24 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

Approval Subject to General Requirements
& Special Stipulations Attached

COPY

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

JUL 08 2013

DRILLING PROGRAM
Devon Energy Production Company, LP
Mean Green 26 Fed 1H

Surface Location: 25 FNL & 330 FEL, Unit A, Sec 26 T26S R34E, Lea, NM
Bottom Hole Location: 330 FSL & 330 FEL, Unit P, Sec 26 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 13,735' MD 9,110' TVD

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

see COA

<u>Hole Size</u>	<u>Hole Interval</u>	<u>OD Csg</u>	<u>Casing Interval</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>
17-1/2"	0 – 2,000'	13-3/8"	0 – 2,000'	54.5#	STC	J-55
12-1/4"	2,000 – 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 – 13,735	5-1/2"	9,087 – 13,735	17#	BTC	HCP-110

MAXIMUM LATERAL TVD 9,110'

Design Parameter Factors:

<u>Casing Size</u>	<u>Collapse Design Factor</u>	<u>Burst Design Factor</u>	<u>Tension Design Factor</u>
13-3/8", 54.5#, J-55, ST&C	1.21	2.92	8.34

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: 400 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**

TOC @ surface

Tail: 515 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, 12.5 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

*See
COA*

Depth	Mud Wt.	Visc	Fluid Loss	Type System
0 - 2,000 ^{1066'}	8.4-9.0	30-34	NC	FW
2,000 - 5,300	9.8-10.0	28-32	NC	Brine
5,300 - 13,735	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 Kelly cock will be in the drill string at all times.
- A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
- 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 4000 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

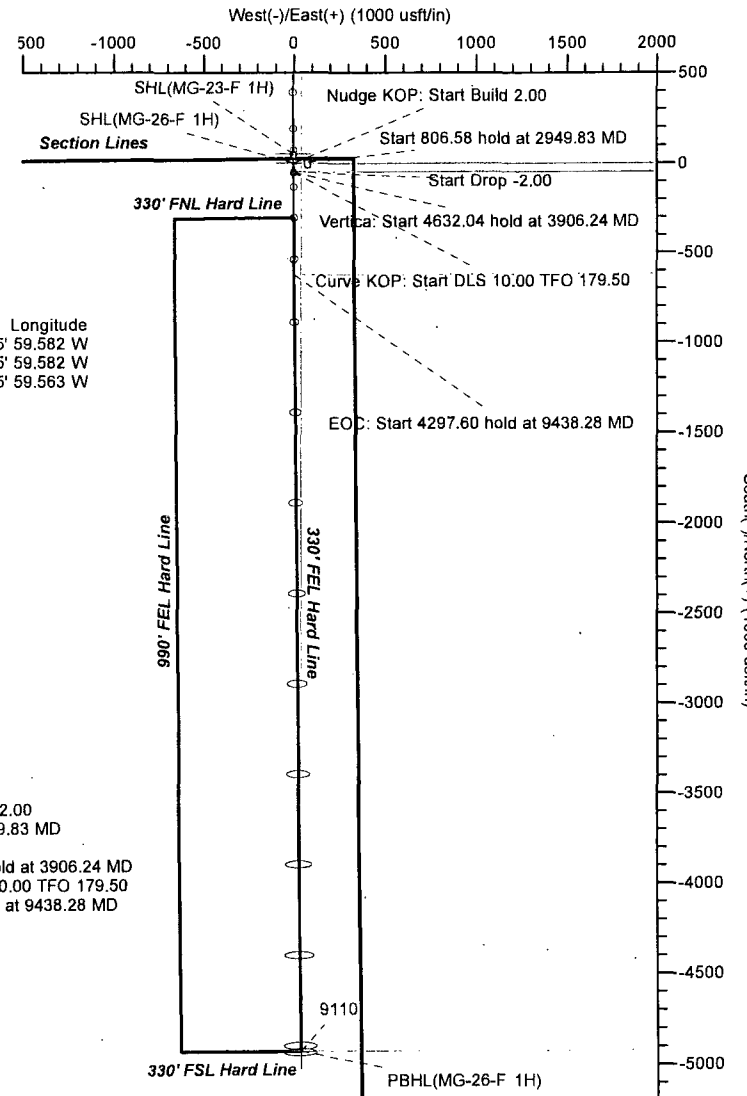
Project: Lea County, NM (NAD-83)
 Site: Mean Green
 Well: 26 Fed 1H
 Wellbore: OH
 Design: Plan #1



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

Magnetic Field
 Strength: 48336.1snT
 Dip Angle: 59.98°
 Date: 03/13/2013
 Model: IGRF2010

devon

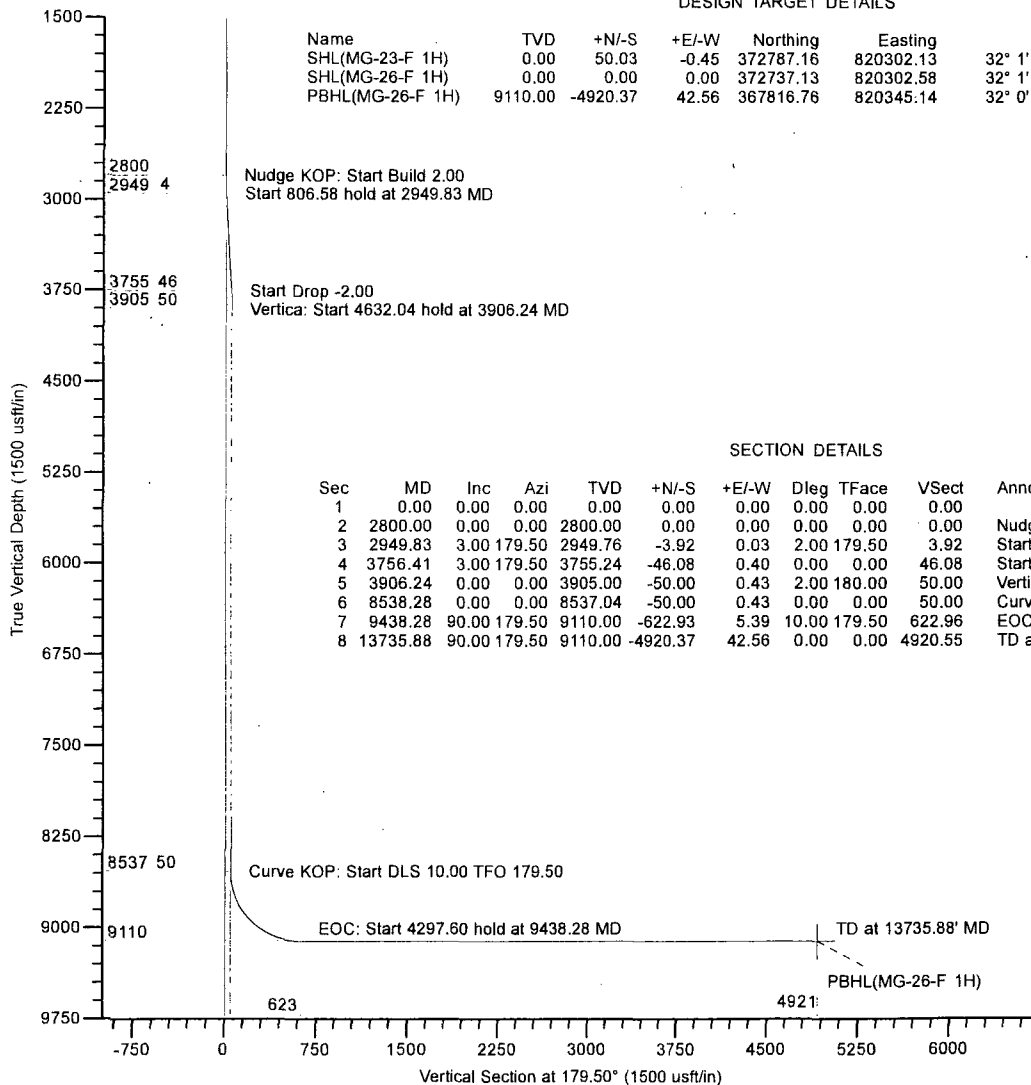


DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
SHL(MG-23-F 1H)	0.00	50.03	-0.45	372787.16	820302.13	32° 1' 18.040 N	103° 25' 59.582 W
SHL(MG-26-F 1H)	0.00	0.00	0.00	372737.13	820302.58	32° 1' 17.545 N	103° 25' 59.582 W
PBHL(MG-26-F 1H)	9110.00	-4920.37	42.56	367816.76	820345.14	32° 0' 28.853 N	103° 25' 59.563 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSeet	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	2800.00	0.00	0.00	2800.00	0.00	0.00	0.00	0.00	0.00	Nudge KOP: Start Build 2.00
3	2949.83	3.00	179.50	2949.76	-3.92	0.03	2.00	179.50	3.92	Start 806.58 hold at 2949.83 MD
4	3756.41	3.00	179.50	3755.24	-46.08	0.40	0.00	0.00	46.08	Start Drop -2.00
5	3906.24	0.00	0.00	3905.00	-50.00	0.43	2.00	180.00	50.00	Vertical: Start 4632.04 hold at 3906.24 MD
6	8538.28	0.00	0.00	8537.04	-50.00	0.43	0.00	0.00	50.00	Curve KOP: Start DLS 10.00 TFO 179.50
7	9438.28	90.00	179.50	9110.00	-622.93	5.39	10.00	179.50	622.96	EOC: Start 4297.60 hold at 9438.28 MD
8	13735.88	90.00	179.50	9110.00	-4920.37	42.56	0.00	0.00	4920.55	TD at 13735.88' MD



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

Plan: Plan #1 (26 Fed 1H/OH)
 Mean Green
 Created By: Tyler Carlson Date: 10/47, March 13 2013
 Date: _____
 Approved: _____ Date: _____

LEAM Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 26 Fed 1H
Company:	DEVON ENERGY	TVD Reference:	GE 3223' + KB 25' @ 3248.00usft (Permitting)
Project:	Lea County, NM (NAD-83)	MD Reference:	GE 3223' + KB 25' @ 3248.00usft (Permitting)
Site:	Mean Green	North Reference:	Gnd
Well:	26 Fed 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		
Site Position:		Northing:	372,787.15 usft
From:	Map	Easting:	820,302.13 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 1' 18.040 N
		Longitude:	103° 25' 59.582 W
		Grid Convergence:	0.48 °

Well:	26 Fed 1H					
Well Position	+N/-S	-50.02 usft	Northing:	372,737.13 usft	Latitude:	32° 1' 17.545 N
	+E/-W	0.45 usft	Easting:	820,302.58 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	03/13/13	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	179.50

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	(°)	
0.00	0.00	0.00	0.00	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	
2,949.83	3.00	179.50	2,949.76	-3.92	0.03	2.00	2.00	0.00	179.50	
3,756.41	3.00	179.50	3,755.24	-46.08	0.40	0.00	0.00	0.00	0.00	
3,906.24	0.00	0.00	3,905.00	-50.00	0.43	2.00	-2.00	0.00	180.00	
8,538.28	0.00	0.00	8,537.04	-50.00	0.43	0.00	0.00	0.00	0.00	
9,438.28	90.00	179.50	9,110.00	-622.93	5.39	10.00	10.00	19.94	179.50	
13,735.88	90.00	179.50	9,110.00	-4,920.37	42.56	0.00	0.00	0.00	0.00	PBHL(MG-26-F 1H)

LEAM Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well: 26 Fed: 1H
Company:	DEVON ENERGY	TVD Reference:	GE 3223 + KB 25 @ 3248.00usft (Permitting)
Project:	Lea County NM (NAD-83)	MD Reference:	GE 3223 + KB 25 @ 3248.00usft (Permitting)
Site:	Mean Green	North Reference:	Grid
Well:	26 Fed: 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
Nudge KOP: Start Build 2.00									
2,900.00	2.00	179.50	2,899.98	-1.75	0.02	1.75	2.00	2.00	0.00
2,949.83	3.00	179.50	2,949.76	-3.92	0.03	3.92	2.00	2.00	0.00
Start 806.58 hold at 2949.83 MD									
3,000.00	3.00	179.50	2,999.86	-6.54	0.06	6.54	0.00	0.00	0.00
3,100.00	3.00	179.50	3,099.73	-11.77	0.10	11.77	0.00	0.00	0.00
3,200.00	3.00	179.50	3,199.59	-16.99	0.15	17.00	0.00	0.00	0.00
3,300.00	3.00	179.50	3,299.45	-22.22	0.19	22.22	0.00	0.00	0.00
3,400.00	3.00	179.50	3,399.32	-27.45	0.24	27.45	0.00	0.00	0.00
3,500.00	3.00	179.50	3,499.18	-32.68	0.28	32.68	0.00	0.00	0.00
3,600.00	3.00	179.50	3,599.04	-37.90	0.33	37.91	0.00	0.00	0.00
3,700.00	3.00	179.50	3,698.91	-43.13	0.37	43.13	0.00	0.00	0.00
3,756.41	3.00	179.50	3,755.24	-46.08	0.40	46.08	0.00	0.00	0.00
Start Drop 2.00									
3,800.00	2.12	179.50	3,798.78	-48.03	0.41	48.03	2.00	-2.00	0.00
3,906.24	0.00	0.00	3,905.00	-50.00	0.43	50.00	2.00	-2.00	0.00
Vertical Start 4632.04 hold at 3906.24 MD									
4,000.00	0.00	0.00	3,998.76	-50.00	0.43	50.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,098.76	-50.00	0.43	50.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,198.76	-50.00	0.43	50.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,298.76	-50.00	0.43	50.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,398.76	-50.00	0.43	50.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,498.76	-50.00	0.43	50.00	0.00	0.00	0.00

LEAM Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well: 26 Fed. 1H
Company:	DEVON ENERGY	TVD Reference:	GE 3223' + KB 25' @ 3248.00usft (Permitting)
Project:	Lea County NM (NAD:83)	MD Reference:	GE 3223' + KB 25' @ 3248.00usft (Permitting)
Site:	Mean Green	North Reference:	-Grid
Well:	26 Fed. 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)
4,600.00	0.00	0.00	4,598.76	-50.00	0.43	50.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,698.76	-50.00	0.43	50.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,798.76	-50.00	0.43	50.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,898.76	-50.00	0.43	50.00	0.00	0.00	0.00
5,000.00	0.00	0.00	4,998.76	-50.00	0.43	50.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,098.76	-50.00	0.43	50.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,198.76	-50.00	0.43	50.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,298.76	-50.00	0.43	50.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,398.76	-50.00	0.43	50.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,498.76	-50.00	0.43	50.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,598.76	-50.00	0.43	50.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,698.76	-50.00	0.43	50.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,798.76	-50.00	0.43	50.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,898.76	-50.00	0.43	50.00	0.00	0.00	0.00
6,000.00	0.00	0.00	5,998.76	-50.00	0.43	50.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,098.76	-50.00	0.43	50.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,198.76	-50.00	0.43	50.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,298.76	-50.00	0.43	50.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,398.76	-50.00	0.43	50.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,498.76	-50.00	0.43	50.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,598.76	-50.00	0.43	50.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,698.76	-50.00	0.43	50.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,798.76	-50.00	0.43	50.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,898.76	-50.00	0.43	50.00	0.00	0.00	0.00
7,000.00	0.00	0.00	6,998.76	-50.00	0.43	50.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,098.76	-50.00	0.43	50.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,198.76	-50.00	0.43	50.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,298.76	-50.00	0.43	50.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,398.76	-50.00	0.43	50.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,498.76	-50.00	0.43	50.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,598.76	-50.00	0.43	50.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,698.76	-50.00	0.43	50.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,798.76	-50.00	0.43	50.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,898.76	-50.00	0.43	50.00	0.00	0.00	0.00
8,000.00	0.00	0.00	7,998.76	-50.00	0.43	50.00	0.00	0.00	0.00
8,100.00	0.00	0.00	8,098.76	-50.00	0.43	50.00	0.00	0.00	0.00
8,200.00	0.00	0.00	8,198.76	-50.00	0.43	50.00	0.00	0.00	0.00
8,300.00	0.00	0.00	8,298.76	-50.00	0.43	50.00	0.00	0.00	0.00
8,400.00	0.00	0.00	8,398.76	-50.00	0.43	50.00	0.00	0.00	0.00
8,500.00	0.00	0.00	8,498.76	-50.00	0.43	50.00	0.00	0.00	0.00
8,538.28	0.00	0.00	8,537.04	-50.00	0.43	50.00	0.00	0.00	0.00
Curve KOP: Start DLS 10.00 TFO 179.50									
8,550.00	1.17	179.50	8,548.76	-50.12	0.43	50.12	10.00	10.00	0.00
8,600.00	6.17	179.50	8,598.64	-53.32	0.46	53.32	10.00	10.00	0.00
8,650.00	11.17	179.50	8,648.05	-60.85	0.53	60.86	10.00	10.00	0.00
8,700.00	16.17	179.50	8,696.62	-72.67	0.63	72.67	10.00	10.00	0.00
8,750.00	21.17	179.50	8,743.98	-88.67	0.77	88.67	10.00	10.00	0.00
8,800.00	26.17	179.50	8,789.75	-108.74	0.94	108.74	10.00	10.00	0.00
8,850.00	31.17	179.50	8,833.61	-132.72	1.15	132.72	10.00	10.00	0.00
8,900.00	36.17	179.50	8,875.21	-160.43	1.39	160.44	10.00	10.00	0.00
8,950.00	41.17	179.50	8,914.23	-191.66	1.66	191.67	10.00	10.00	0.00
9,000.00	46.17	179.50	8,950.39	-226.18	1.96	226.19	10.00	10.00	0.00

LEAM Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well: 26 Fed 1H
Company:	DEVON ENERGY	TVD Reference:	GE 3223 + KB 25' @ 3248.00usft (Permitting)
Project:	Lea County NM (NAD-83)	MD Reference:	GE 3223 + KB 25' @ 3248.00usft (Permitting)
Site:	Mean Green	North Reference:	Grid
Well:	26 Fed 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)	
9,050.00	51.17	179.50	8,983.39	-263.71	2.28	263.72	10.00	10.00	0.00	
9,100.00	56.17	179.50	9,013.00	-303.98	2.63	303.99	10.00	10.00	0.00	
9,150.00	61.17	179.50	9,038.99	-346.67	3.00	346.69	10.00	10.00	0.00	
9,200.00	66.17	179.50	9,061.16	-391.47	3.39	391.49	10.00	10.00	0.00	
9,250.00	71.17	179.50	9,079.34	-438.03	3.79	438.05	10.00	10.00	0.00	
9,300.00	76.17	179.50	9,093.39	-486.00	4.20	486.01	10.00	10.00	0.00	
9,350.00	81.17	179.50	9,103.21	-535.00	4.63	535.02	10.00	10.00	0.00	
9,400.00	86.17	179.50	9,108.72	-584.68	5.06	584.70	10.00	10.00	0.00	
9,438.28	90.00	179.50	9,110.00	-622.93	5.39	622.96	10.00	10.00	0.00	
EOC Start 4297.60 hold at 9438.28 MD										
9,500.00	90.00	179.50	9,110.00	-684.65	5.92	684.68	0.00	0.00	0.00	
9,600.00	90.00	179.50	9,110.00	-784.65	6.79	784.68	0.00	0.00	0.00	
9,700.00	90.00	179.50	9,110.00	-884.64	7.65	884.68	0.00	0.00	0.00	
9,800.00	90.00	179.50	9,110.00	-984.64	8.52	984.68	0.00	0.00	0.00	
9,900.00	90.00	179.50	9,110.00	-1,084.64	9.38	1,084.68	0.00	0.00	0.00	
10,000.00	90.00	179.50	9,110.00	-1,184.63	10.25	1,184.68	0.00	0.00	0.00	
10,100.00	90.00	179.50	9,110.00	-1,284.63	11.11	1,284.68	0.00	0.00	0.00	
10,200.00	90.00	179.50	9,110.00	-1,384.62	11.98	1,384.68	0.00	0.00	0.00	
10,300.00	90.00	179.50	9,110.00	-1,484.62	12.84	1,484.68	0.00	0.00	0.00	
10,400.00	90.00	179.50	9,110.00	-1,584.62	13.71	1,584.68	0.00	0.00	0.00	
10,500.00	90.00	179.50	9,110.00	-1,684.61	14.57	1,684.68	0.00	0.00	0.00	
10,600.00	90.00	179.50	9,110.00	-1,784.61	15.44	1,784.68	0.00	0.00	0.00	
10,700.00	90.00	179.50	9,110.00	-1,884.61	16.30	1,884.68	0.00	0.00	0.00	
10,800.00	90.00	179.50	9,110.00	-1,984.60	17.17	1,984.68	0.00	0.00	0.00	
10,900.00	90.00	179.50	9,110.00	-2,084.60	18.03	2,084.68	0.00	0.00	0.00	
11,000.00	90.00	179.50	9,110.00	-2,184.59	18.90	2,184.68	0.00	0.00	0.00	
11,100.00	90.00	179.50	9,110.00	-2,284.59	19.76	2,284.68	0.00	0.00	0.00	
11,200.00	90.00	179.50	9,110.00	-2,384.59	20.63	2,384.68	0.00	0.00	0.00	
11,300.00	90.00	179.50	9,110.00	-2,484.58	21.49	2,484.68	0.00	0.00	0.00	
11,400.00	90.00	179.50	9,110.00	-2,584.58	22.36	2,584.68	0.00	0.00	0.00	
11,500.00	90.00	179.50	9,110.00	-2,684.58	23.22	2,684.68	0.00	0.00	0.00	
11,600.00	90.00	179.50	9,110.00	-2,784.57	24.09	2,784.68	0.00	0.00	0.00	
11,700.00	90.00	179.50	9,110.00	-2,884.57	24.95	2,884.68	0.00	0.00	0.00	
11,800.00	90.00	179.50	9,110.00	-2,984.56	25.82	2,984.68	0.00	0.00	0.00	
11,900.00	90.00	179.50	9,110.00	-3,084.56	26.68	3,084.68	0.00	0.00	0.00	
12,000.00	90.00	179.50	9,110.00	-3,184.56	27.55	3,184.68	0.00	0.00	0.00	
12,100.00	90.00	179.50	9,110.00	-3,284.55	28.41	3,284.68	0.00	0.00	0.00	
12,200.00	90.00	179.50	9,110.00	-3,384.55	29.28	3,384.68	0.00	0.00	0.00	
12,300.00	90.00	179.50	9,110.00	-3,484.55	30.14	3,484.68	0.00	0.00	0.00	
12,400.00	90.00	179.50	9,110.00	-3,584.54	31.01	3,584.68	0.00	0.00	0.00	
12,500.00	90.00	179.50	9,110.00	-3,684.54	31.87	3,684.68	0.00	0.00	0.00	
12,600.00	90.00	179.50	9,110.00	-3,784.53	32.74	3,784.68	0.00	0.00	0.00	
12,700.00	90.00	179.50	9,110.00	-3,884.53	33.60	3,884.68	0.00	0.00	0.00	
12,800.00	90.00	179.50	9,110.00	-3,984.53	34.47	3,984.68	0.00	0.00	0.00	
12,900.00	90.00	179.50	9,110.00	-4,084.52	35.33	4,084.68	0.00	0.00	0.00	
13,000.00	90.00	179.50	9,110.00	-4,184.52	36.20	4,184.68	0.00	0.00	0.00	
13,100.00	90.00	179.50	9,110.00	-4,284.52	37.06	4,284.68	0.00	0.00	0.00	
13,200.00	90.00	179.50	9,110.00	-4,384.51	37.92	4,384.68	0.00	0.00	0.00	
13,300.00	90.00	179.50	9,110.00	-4,484.51	38.79	4,484.68	0.00	0.00	0.00	
13,400.00	90.00	179.50	9,110.00	-4,584.50	39.65	4,584.68	0.00	0.00	0.00	
13,500.00	90.00	179.50	9,110.00	-4,684.50	40.52	4,684.68	0.00	0.00	0.00	
13,600.00	90.00	179.50	9,110.00	-4,784.50	41.38	4,784.68	0.00	0.00	0.00	

LEAM Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 26 Fed 1H
Company:	DEVON ENERGY	TVD Reference:	GE 3223' + KB 25' @ 3248.00usft (Permitting)
Project:	Lea County, NM (NAD-83)	MD Reference:	GE 3223' + KB 25' @ 3248.00usft (Permitting)
Site:	Mean Green	North Reference:	Grid
Well:	26 Fed 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)	
13,700.00	90.00	179.50	9,110.00	-4,884.49	42.25	4,884.68	0.00	0.00	0.00	
13,735.88	90.00	179.50	9,110.00	-4,920.37	42.56	4,920.55	0.00	0.00	0.00	
TD at 13735.88' MD										

Design Targets										
Target Name	hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL(MG-26-F 1H)	- plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	372,737.13	820,302.58	32° 1' 17.545 N	103° 25' 59.582 W
PBHL(MG-26-F 1H)	- plan hits target center - Point	0.00	0.00	9,110.00	-4,920.37	42.56	367,816.76	820,345.14	32° 0' 28.853 N	103° 25' 59.563 W

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Local Coordinates	
2,800.00	2,800.00	0.00	0.00	Nudge KOP: Start Build 2.00	
2,949.83	2,949.76	-3.92	0.03	Start 806.58 hold at 2949.83 MD	
3,756.41	3,755.24	-46.08	0.40	Start Drop -2.00	
3,906.24	3,905.00	-50.00	0.43	Vertica: Start 4632.04 hold at 3906.24 MD	
8,538.28	8,537.04	-50.00	0.43	Curve KOP: Start DLS 10.00 TFO 179.50	
9,438.28	9,110.00	-622.93	5.39	EOC: Start 4297.60 hold at 9438.28 MD	
13,735.88	9,110.00	-4,920.37	42.56	TD at 13735.88' MD	

DEVON ENERGY

Project: Lea County, NM (NAD-83)

Site: Mean Green

Well: 26 Fed 1H

Wellbore: OH

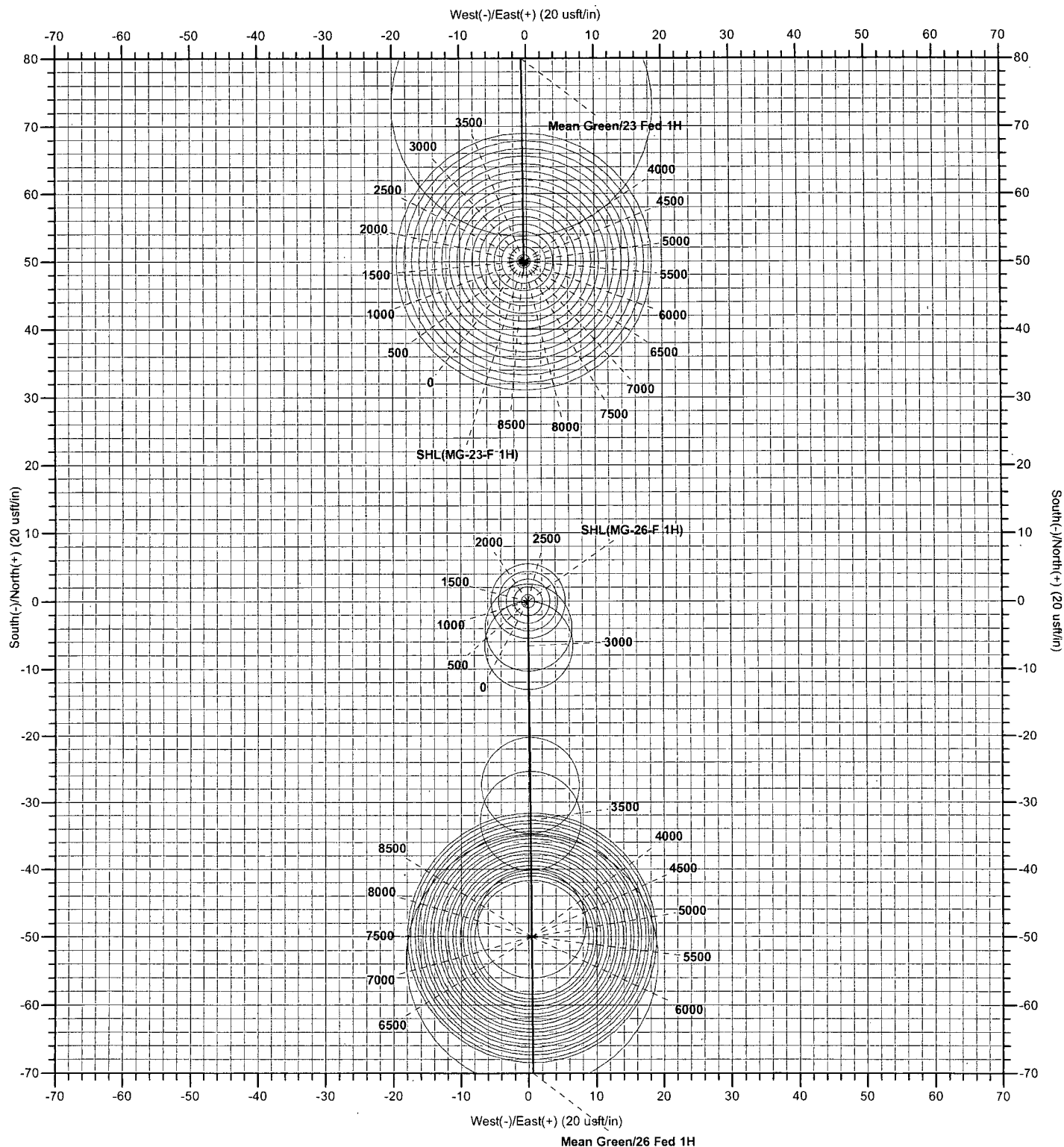
Design: Plan #1



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

Magnetic Field
Strength: 48336.1snT
Dip Angle: 59.98°
Date: 03/13/2013
Model: IGRF2010

devon



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

Plan: Plan #1 (26 Fed 1H/OH)
Mean Green
Created By: Tyler Carlson Date: 10:48, March 13 2013
Date: _____
Approved: _____ Date: _____

LEAM Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 26 Fed 1H
Project:	Lea County NM (NAD-83)	TVD Reference:	GE 3223 - KB 25' @ 3248.00usft (Permitting)
Reference Site:	Mean Green	MD Reference:	GE 3223 - KB 25' @ 3248.00usft (Permitting)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	26 Fed 1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Reference	Plan #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.00usft	Error Model:	ISCWSA
Depth Range:	0.00 to 13,735.88usft	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 2,000,000.00 usft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	03/13/13		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	13,735.88	Plan #1 (OH)	LEAM MWD	MWD - Standard	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Mean Green						
23 Fed 1H - OH - Plan #1	2,800.00	2,800.00	50.02	37.72	4.065 CC, ES	
23 Fed 1H - OH - Plan #1	8,500.00	8,498.76	100.02	62.60	2.672 SF	

Offset Design														Offset Site Error:		0.00 usft
Survey Program: 0-LEAM MWD														Offset Well Error:		0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning			
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor				
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	N/S (usft)	E/W (usft)	(usft)	(usft)	(usft)					
0.00	0.00	0.00	0.00	0.00	0.00	-0.52	50.02	-0.45	50.02							
100.00	100.00	100.00	100.00	0.08	0.08	-0.52	50.02	-0.45	50.02	49.86	0.17	296.752				
200.00	200.00	200.00	200.00	0.31	0.31	-0.52	50.02	-0.45	50.02	49.41	0.62	80.933				
300.00	300.00	300.00	300.00	0.53	0.53	-0.52	50.02	-0.45	50.02	48.96	1.07	46.856				
400.00	400.00	400.00	400.00	0.76	0.76	-0.52	50.02	-0.45	50.02	48.51	1.52	32.973				
500.00	500.00	500.00	500.00	0.98	0.98	-0.52	50.02	-0.45	50.02	48.06	1.97	25.436				
600.00	600.00	600.00	600.00	1.21	1.21	-0.52	50.02	-0.45	50.02	47.61	2.42	20.704				
700.00	700.00	700.00	700.00	1.43	1.43	-0.52	50.02	-0.45	50.02	47.16	2.87	17.456				
800.00	800.00	800.00	800.00	1.66	1.66	-0.52	50.02	-0.45	50.02	46.71	3.32	15.089				
900.00	900.00	900.00	900.00	1.88	1.88	-0.52	50.02	-0.45	50.02	46.26	3.76	13.287				
1,000.00	1,000.00	1,000.00	1,000.00	2.11	2.11	-0.52	50.02	-0.45	50.02	45.81	4.21	11.870				
1,100.00	1,100.00	1,100.00	1,100.00	2.33	2.33	-0.52	50.02	-0.45	50.02	45.36	4.66	10.726				
1,200.00	1,200.00	1,200.00	1,200.00	2.56	2.56	-0.52	50.02	-0.45	50.02	44.91	5.11	9.783				
1,300.00	1,300.00	1,300.00	1,300.00	2.78	2.78	-0.52	50.02	-0.45	50.02	44.46	5.56	8.993				
1,400.00	1,400.00	1,400.00	1,400.00	3.01	3.01	-0.52	50.02	-0.45	50.02	44.01	6.01	8.320				
1,500.00	1,500.00	1,500.00	1,500.00	3.23	3.23	-0.52	50.02	-0.45	50.02	43.56	6.46	7.741				
1,600.00	1,600.00	1,600.00	1,600.00	3.46	3.46	-0.52	50.02	-0.45	50.02	43.11	6.91	7.238				
1,700.00	1,700.00	1,700.00	1,700.00	3.68	3.68	-0.52	50.02	-0.45	50.02	42.66	7.36	6.796				
1,800.00	1,800.00	1,800.00	1,800.00	3.91	3.91	-0.52	50.02	-0.45	50.02	42.21	7.81	6.405				
1,900.00	1,900.00	1,900.00	1,900.00	4.13	4.13	-0.52	50.02	-0.45	50.02	41.76	8.26	6.056				
2,000.00	2,000.00	2,000.00	2,000.00	4.35	4.35	-0.52	50.02	-0.45	50.02	41.32	8.71	5.744				
2,100.00	2,100.00	2,100.00	2,100.00	4.58	4.58	-0.52	50.02	-0.45	50.02	40.87	9.16	5.462				
2,200.00	2,200.00	2,200.00	2,200.00	4.80	4.80	-0.52	50.02	-0.45	50.02	40.42	9.61	5.206				

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

LEAM Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 26 Fed 1H
Project:	Lea County, NM (NAD-83)	TVD Reference:	GE 3223 + KB 25' @ 3248.00usft (Permitting)
Reference Site:	Mean Green	MD Reference:	GE 3223 + KB 25' @ 3248.00usft (Permitting)
Site Error:	0:00 usft	North Reference:	Grid
Reference Well:	26 Fed 1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0:00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design Mean Green - 23 Fed 1H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: O-LEAM MWD													Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Distance		Minimum Separation		Separation Factor		Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre N/S (usft)	Offset Wellbore Centre E/W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
2,300.00	2,300.00	2,300.00	2,300.00	5.03	5.03	-0.52	50.02	-0.45	50.02	39.97	10.06	4.974		
2,400.00	2,400.00	2,400.00	2,400.00	5.25	5.25	-0.52	50.02	-0.45	50.02	39.52	10.51	4.761		
2,500.00	2,500.00	2,500.00	2,500.00	5.48	5.48	-0.52	50.02	-0.45	50.02	39.07	10.96	4.565		
2,600.00	2,600.00	2,600.00	2,600.00	5.70	5.70	-0.52	50.02	-0.45	50.02	38.62	11.41	4.366		
2,700.00	2,700.00	2,700.00	2,700.00	5.93	5.93	-0.52	50.02	-0.45	50.02	38.17	11.86	4.219		
2,800.00	2,800.00	2,800.00	2,800.00	6.15	6.15	-0.52	50.02	-0.45	50.02	37.72	12.31	4.065 CC, ES		
2,900.00	2,899.98	2,899.98	2,899.98	6.35	6.38	179.98	50.02	-0.45	51.77	39.05	12.72	4.070		
3,000.00	2,999.86	2,999.86	2,999.86	6.52	6.60	179.98	50.02	-0.45	56.56	43.46	13.10	4.316		
3,100.00	3,099.73	3,099.73	3,099.73	6.69	6.83	179.98	50.02	-0.45	61.79	48.29	13.50	4.577		
3,200.00	3,199.59	3,199.59	3,199.59	6.87	7.05	179.98	50.02	-0.45	67.02	53.12	13.90	4.821		
3,300.00	3,299.45	3,299.45	3,299.45	7.05	7.28	179.99	50.02	-0.45	72.25	57.94	14.30	5.051		
3,400.00	3,399.32	3,399.32	3,399.32	7.23	7.50	179.99	50.02	-0.45	77.48	62.77	14.71	5.267		
3,500.00	3,499.18	3,499.18	3,499.18	7.42	7.72	179.99	50.02	-0.45	82.70	67.59	15.12	5.471		
3,600.00	3,599.04	3,599.04	3,599.04	7.61	7.95	179.99	50.02	-0.45	87.93	72.40	15.53	5.663		
3,700.00	3,698.91	3,698.91	3,698.91	7.81	8.17	179.99	50.02	-0.45	93.16	77.22	15.94	5.844		
3,800.00	3,798.78	3,798.78	3,798.78	8.01	8.40	179.99	50.02	-0.45	98.06	81.68	16.37	5.989		
3,900.00	3,898.76	3,898.76	3,898.76	8.22	8.62	179.99	50.02	-0.45	100.02	83.21	16.81	5.950		
4,000.00	3,998.76	3,998.76	3,998.76	8.42	8.85	-0.51	50.02	-0.45	100.02	82.74	17.28	5.787		
4,100.00	4,098.76	4,098.76	4,098.76	8.64	9.07	-0.51	50.02	-0.45	100.02	82.29	17.73	5.641		
4,200.00	4,198.76	4,198.76	4,198.76	8.86	9.30	-0.51	50.02	-0.45	100.02	81.85	18.18	5.503		
4,300.00	4,298.76	4,298.76	4,298.76	9.08	9.52	-0.51	50.02	-0.45	100.02	81.40	18.62	5.371		
4,400.00	4,398.76	4,398.76	4,398.76	9.30	9.75	-0.51	50.02	-0.45	100.02	80.96	19.07	5.246		
4,500.00	4,498.76	4,498.76	4,498.76	9.52	9.97	-0.51	50.02	-0.45	100.02	80.51	19.51	5.126		
4,600.00	4,598.76	4,598.76	4,598.76	9.74	10.20	-0.51	50.02	-0.45	100.02	80.06	19.96	5.011		
4,700.00	4,698.76	4,698.76	4,698.76	9.96	10.42	-0.51	50.02	-0.45	100.02	79.62	20.41	4.902		
4,800.00	4,798.76	4,798.76	4,798.76	10.18	10.65	-0.51	50.02	-0.45	100.02	79.17	20.85	4.797		
4,900.00	4,898.76	4,898.76	4,898.76	10.41	10.87	-0.51	50.02	-0.45	100.02	78.72	21.30	4.696		
5,000.00	4,998.76	4,998.76	4,998.76	10.63	11.10	-0.51	50.02	-0.45	100.02	78.28	21.75	4.599		
5,100.00	5,098.76	5,098.76	5,098.76	10.85	11.32	-0.51	50.02	-0.45	100.02	77.83	22.19	4.507		
5,200.00	5,198.76	5,198.76	5,198.76	11.07	11.54	-0.51	50.02	-0.45	100.02	77.38	22.64	4.418		
5,300.00	5,298.76	5,298.76	5,298.76	11.29	11.77	-0.51	50.02	-0.45	100.02	76.94	23.09	4.332		
5,400.00	5,398.76	5,398.76	5,398.76	11.51	11.99	-0.51	50.02	-0.45	100.02	76.49	23.54	4.250		
5,500.00	5,498.76	5,498.76	5,498.76	11.73	12.22	-0.51	50.02	-0.45	100.02	76.04	23.98	4.171		
5,600.00	5,598.76	5,598.76	5,598.76	11.96	12.44	-0.51	50.02	-0.45	100.02	75.59	24.43	4.094		
5,700.00	5,698.76	5,698.76	5,698.76	12.18	12.67	-0.51	50.02	-0.45	100.02	75.15	24.88	4.021		
5,800.00	5,798.76	5,798.76	5,798.76	12.40	12.89	-0.51	50.02	-0.45	100.02	74.70	25.33	3.950		
5,900.00	5,898.76	5,898.76	5,898.76	12.62	13.12	-0.51	50.02	-0.45	100.02	74.25	25.77	3.881		
6,000.00	5,998.76	5,998.76	5,998.76	12.85	13.34	-0.51	50.02	-0.45	100.02	73.80	26.22	3.815		
6,100.00	6,098.76	6,098.76	6,098.76	13.07	13.57	-0.51	50.02	-0.45	100.02	73.36	26.67	3.751		
6,200.00	6,198.76	6,198.76	6,198.76	13.29	13.79	-0.51	50.02	-0.45	100.02	72.91	27.12	3.689		
6,300.00	6,298.76	6,298.76	6,298.76	13.51	14.02	-0.51	50.02	-0.45	100.02	72.46	27.56	3.629		
6,400.00	6,398.76	6,398.76	6,398.76	13.74	14.24	-0.51	50.02	-0.45	100.02	72.01	28.01	3.571		
6,500.00	6,498.76	6,498.76	6,498.76	13.96	14.47	-0.51	50.02	-0.45	100.02	71.56	28.46	3.515		
6,600.00	6,598.76	6,598.76	6,598.76	14.18	14.69	-0.51	50.02	-0.45	100.02	71.12	28.91	3.460		
6,700.00	6,698.76	6,698.76	6,698.76	14.40	14.92	-0.51	50.02	-0.45	100.02	70.67	29.36	3.407		
6,800.00	6,798.76	6,798.76	6,798.76	14.63	15.14	-0.51	50.02	-0.45	100.02	70.22	29.80	3.356		
6,900.00	6,898.76	6,898.76	6,898.76	14.85	15.37	-0.51	50.02	-0.45	100.02	69.77	30.25	3.306		
7,000.00	6,998.76	6,998.76	6,998.76	15.07	15.59	-0.51	50.02	-0.45	100.02	69.32	30.70	3.258		
7,100.00	7,098.76	7,098.76	7,098.76	15.30	15.82	-0.51	50.02	-0.45	100.02	68.88	31.15	3.211		
7,200.00	7,198.76	7,198.76	7,198.76	15.52	16.04	-0.51	50.02	-0.45	100.02	68.43	31.60	3.166		
7,300.00	7,298.76	7,298.76	7,298.76	15.74	16.26	-0.51	50.02	-0.45	100.02	67.98	32.05	3.121		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

LEAM Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well: 26 Fed 1H
Project:	Lea County, NM (NAD-83)	TVD Reference:	GE-3223 - KB 25' @ 3248.00usft (Permitting)
Reference Site:	Mean Green	MD Reference:	GE-3223 - KB 25' @ 3248.00usft (Permitting)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	26 Fed 1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore:	OH	Database:	EDM-5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Mean Green - 23 Fed 1H - OH - Plan #1													Offset Site Error: 0.00 usft	
Survey Program: 0-LEAM.MWD													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
7,400.00	7,398.76	7,398.76	7,398.76	15.97	16.49	-0.51	50.02	-0.45	100.02	67.53	32.49	3.078		
7,500.00	7,498.76	7,498.76	7,498.76	16.19	16.71	-0.51	50.02	-0.45	100.02	67.08	32.94	3.036		
7,600.00	7,598.76	7,598.76	7,598.76	16.41	16.94	-0.51	50.02	-0.45	100.02	66.63	33.39	2.996		
7,700.00	7,698.76	7,698.76	7,698.76	16.64	17.16	-0.51	50.02	-0.45	100.02	66.19	33.84	2.956		
7,800.00	7,798.76	7,798.76	7,798.76	16.86	17.39	-0.51	50.02	-0.45	100.02	65.74	34.29	2.917		
7,900.00	7,898.76	7,898.76	7,898.76	17.08	17.61	-0.51	50.02	-0.45	100.02	65.29	34.74	2.879		
8,000.00	7,998.76	7,998.76	7,998.76	17.31	17.84	-0.51	50.02	-0.45	100.02	64.84	35.19	2.843		
8,100.00	8,098.76	8,098.76	8,098.76	17.53	18.06	-0.51	50.02	-0.45	100.02	64.39	35.63	2.807		
8,200.00	8,198.76	8,198.76	8,198.76	17.75	18.29	-0.51	50.02	-0.45	100.02	63.94	36.08	2.772		
8,300.00	8,298.76	8,298.76	8,298.76	17.98	18.51	-0.51	50.02	-0.45	100.02	63.49	36.53	2.738		
8,400.00	8,398.76	8,398.76	8,398.76	18.20	18.74	-0.51	50.02	-0.45	100.02	63.05	36.98	2.705		
8,500.00	8,498.76	8,498.76	8,498.76	18.42	18.96	-0.51	50.02	-0.45	100.02	62.60	37.43	2.672 SF		
8,507.53	8,506.29	8,506.29	8,506.29	18.44	18.98	179.99	50.02	-0.45	100.06	62.64	37.42	2.674		
8,600.00	8,598.64	8,589.08	8,589.01	18.62	19.17	179.99	52.38	-0.47	106.15	68.56	37.59	2.824		
8,700.00	8,696.62	8,666.24	8,665.15	18.81	19.34	179.99	64.53	-0.58	140.77	104.01	36.75	3.830		
8,800.00	8,789.75	8,727.57	8,724.08	19.02	19.48	179.99	81.41	-0.72	201.18	166.37	34.81	5.780		
8,900.00	8,875.21	8,770.52	8,764.11	19.28	19.57	179.99	96.94	-0.86	280.33	248.50	31.83	8.806		
9,000.00	8,950.39	8,800.00	8,790.87	19.60	19.63	179.99	109.31	-0.97	371.49	343.53	27.96	13.285		
9,100.00	9,013.00	8,800.00	8,790.87	20.03	19.63	179.97	109.31	-0.97	469.22	445.82	23.40	20.051		
9,200.00	9,061.16	8,800.00	8,790.87	20.57	19.63	0.03	109.31	-0.97	569.09	550.60	18.49	30.774		
9,300.00	9,093.39	8,800.00	8,790.87	21.25	19.63	0.01	109.31	-0.97	667.79	653.98	13.81	48.348		
9,400.00	9,108.72	8,800.00	8,790.87	22.05	19.63	0.00	109.31	-0.97	763.35	752.69	10.65	71.671		
9,500.00	9,110.00	8,773.65	8,766.98	22.95	19.57	0.00	98.19	-0.87	854.72	844.13	10.58	80.766		
9,600.00	9,110.00	8,750.00	8,745.13	23.95	19.52	0.00	89.14	-0.79	946.94	935.86	11.08	85.429		
9,700.00	9,110.00	8,750.00	8,745.13	25.05	19.52	0.00	89.14	-0.79	1,039.93	1,028.31	11.62	89.466		
9,800.00	9,110.00	8,733.20	8,729.39	26.22	19.49	0.00	83.27	-0.74	1,133.75	1,121.55	12.20	92.947		
9,900.00	9,110.00	8,722.52	8,719.30	27.47	19.46	0.00	79.78	-0.71	1,228.26	1,215.46	12.80	95.978		
10,000.00	9,110.00	8,700.00	8,697.81	28.78	19.41	0.00	73.04	-0.65	1,323.54	1,310.12	13.42	98.634		
10,100.00	9,110.00	8,700.00	8,697.81	30.14	19.41	0.00	73.04	-0.65	1,418.91	1,404.85	14.05	100.957		
10,200.00	9,110.00	8,700.00	8,697.81	31.55	19.41	0.00	73.04	-0.65	1,514.87	1,500.17	14.70	103.026		
10,300.00	9,110.00	8,700.00	8,697.81	33.00	19.41	0.00	73.04	-0.65	1,611.33	1,595.97	15.36	104.878		
10,400.00	9,110.00	8,700.00	8,697.81	34.48	19.41	0.00	73.04	-0.65	1,708.20	1,692.16	16.03	106.541		
10,500.00	9,110.00	8,676.48	8,675.11	35.99	19.36	0.00	66.91	-0.60	1,804.77	1,788.06	16.71	108.013		
10,600.00	9,110.00	8,670.90	8,669.89	37.53	19.35	0.00	65.59	-0.59	1,901.94	1,884.54	17.39	109.360		
10,700.00	9,110.00	8,650.00	8,649.27	39.10	19.30	0.00	61.12	-0.55	1,999.60	1,981.52	18.08	110.604		
10,800.00	9,110.00	8,650.00	8,649.27	40.69	19.30	0.00	61.12	-0.55	2,097.04	2,078.27	18.77	111.711		
10,900.00	9,110.00	8,650.00	8,649.27	42.29	19.30	0.00	61.12	-0.55	2,194.70	2,175.24	19.47	112.729		
11,000.00	9,110.00	8,650.00	8,649.27	43.91	19.30	0.00	61.12	-0.55	2,292.57	2,272.40	20.17	113.667		
11,100.00	9,110.00	8,650.00	8,649.27	45.55	19.30	0.00	61.12	-0.55	2,390.62	2,369.74	20.87	114.535		
11,200.00	9,110.00	8,650.00	8,649.27	47.20	19.30	0.00	61.12	-0.55	2,488.82	2,467.24	21.58	115.340		
11,300.00	9,110.00	8,650.00	8,649.27	48.86	19.30	0.00	61.12	-0.55	2,587.15	2,564.87	22.29	116.088		
11,400.00	9,110.00	8,650.00	8,649.27	50.54	19.30	0.00	61.12	-0.55	2,685.62	2,662.62	23.00	116.785		
11,500.00	9,110.00	8,650.00	8,649.27	52.22	19.30	0.00	61.12	-0.55	2,784.19	2,760.48	23.71	117.436		
11,600.00	9,110.00	8,650.00	8,649.27	53.91	19.30	0.00	61.12	-0.55	2,882.85	2,858.43	24.42	118.046		
11,700.00	9,110.00	8,650.00	8,649.27	55.61	19.30	0.00	61.12	-0.55	2,981.61	2,956.48	25.14	118.618		
11,800.00	9,110.00	8,627.28	8,626.91	57.32	19.25	0.00	57.11	-0.51	3,079.92	3,054.07	25.85	119.156		
11,900.00	9,110.00	8,624.89	8,624.54	59.04	19.25	0.00	56.74	-0.51	3,178.71	3,152.15	26.56	119.660		
12,000.00	9,110.00	8,622.62	8,622.30	60.76	19.24	0.00	56.40	-0.51	3,277.57	3,250.29	27.28	120.135		
12,100.00	9,110.00	8,600.00	8,599.87	62.48	19.19	0.00	53.48	-0.48	3,376.91	3,348.91	28.00	120.617		
12,200.00	9,110.00	8,600.00	8,599.87	64.21	19.19	0.00	53.48	-0.48	3,475.79	3,447.08	28.72	121.036		

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LEAM Drilling Systems LLC

Anticollision Report

Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well 26 Fed 1H
Project:	Lea County - NM (NAD 83)	TVD Reference:	GE 3223' + KB 25' @ 3248.00usft (Permitting)
Reference Site:	Mean Green	MD Reference:	GE 3223' + KB 25' @ 3248.00usft (Permitting)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	26 Fed 1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at:	2.00 sigma
Reference Wellbore:	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design: Mean Green - 23 Fed 1H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0 - LEAM MWD													Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Distance		Minimum		Separation		Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/S (usft)	+E/W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
12,300.00	9,110.00	8,600.00	8,599.87	65.95	19.19	0.00	53.48	-0.48	3,574.74	3,545.30	29.44	121.433		
12,400.00	9,110.00	8,600.00	8,599.87	67.69	19.19	0.00	53.48	-0.48	3,673.75	3,643.59	30.16	121.811		
12,500.00	9,110.00	8,600.00	8,599.87	69.43	19.19	0.00	53.48	-0.48	3,772.80	3,741.92	30.88	122.169		
12,600.00	9,110.00	8,600.00	8,599.87	71.18	19.19	0.00	53.48	-0.48	3,871.91	3,840.30	31.60	122.511		
12,700.00	9,110.00	8,600.00	8,599.87	72.94	19.19	0.00	53.48	-0.48	3,971.06	3,938.73	32.33	122.836		
12,800.00	9,110.00	8,600.00	8,599.87	74.69	19.19	0.00	53.48	-0.48	4,070.25	4,037.20	33.05	123.147		
12,900.00	9,110.00	8,600.00	8,599.87	76.45	19.19	0.00	53.48	-0.48	4,169.48	4,135.70	33.78	123.444		
13,000.00	9,110.00	8,600.00	8,599.87	78.21	19.19	0.00	53.48	-0.48	4,268.75	4,234.25	34.50	123.727		
13,100.00	9,110.00	8,600.00	8,599.87	79.97	19.19	0.00	53.48	-0.48	4,368.05	4,332.82	35.23	123.999		
13,200.00	9,110.00	8,600.00	8,599.87	81.74	19.19	0.00	53.48	-0.48	4,467.38	4,431.43	35.95	124.259		
13,300.00	9,110.00	8,600.00	8,599.87	83.51	19.19	0.00	53.48	-0.48	4,566.74	4,530.06	36.68	124.509		
13,400.00	9,110.00	8,600.00	8,599.87	85.28	19.19	0.00	53.48	-0.48	4,666.13	4,628.72	37.40	124.748		
13,500.00	9,110.00	8,600.00	8,599.87	87.05	19.19	0.00	53.48	-0.48	4,765.54	4,727.41	38.13	124.978		
13,600.00	9,110.00	8,600.00	8,599.87	88.83	19.19	0.00	53.48	-0.48	4,864.98	4,826.12	38.86	125.199		
13,700.00	9,110.00	8,600.00	8,599.87	90.60	19.19	0.00	53.48	-0.48	4,964.44	4,924.85	39.59	125.411		

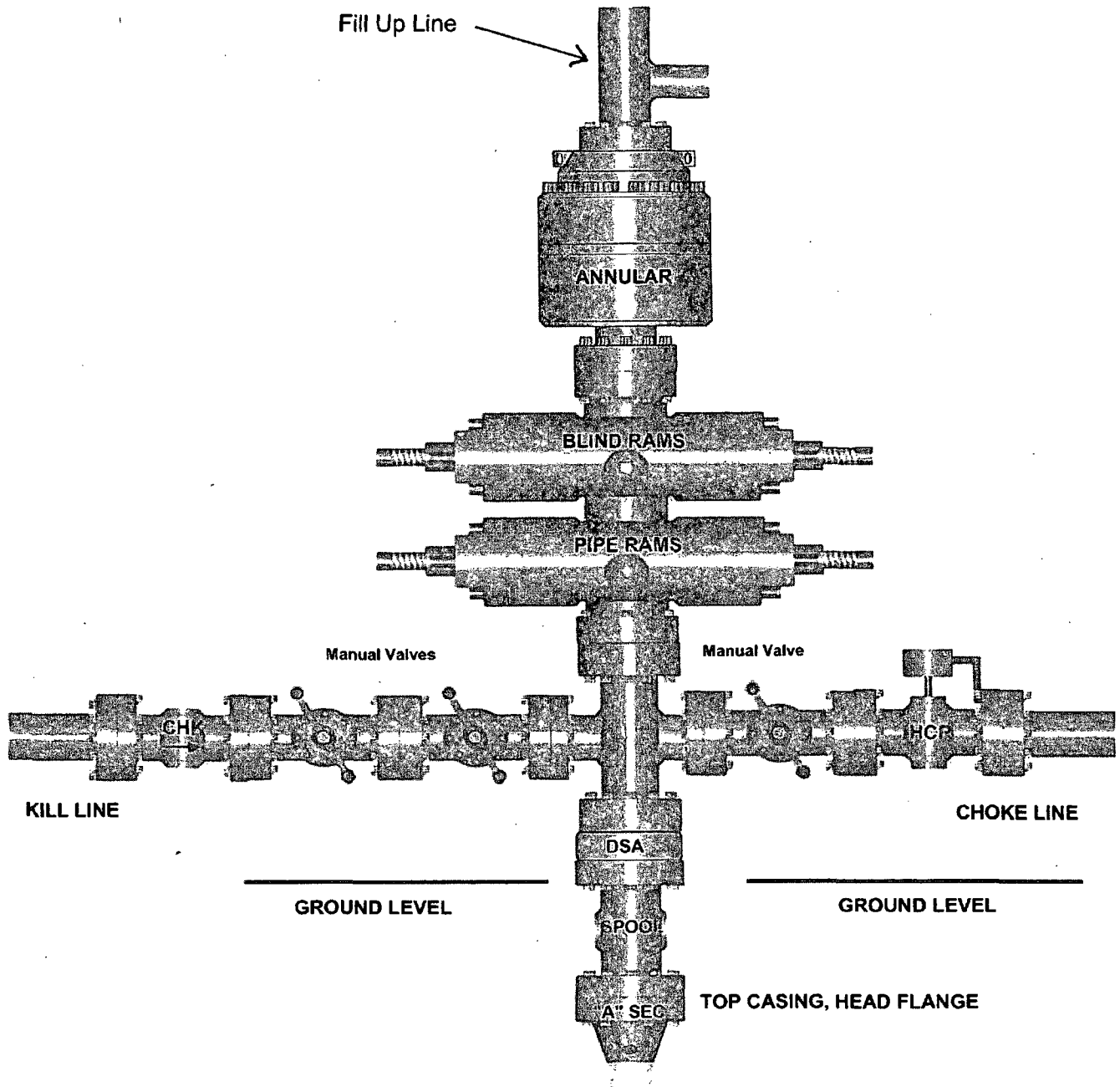
NOTES REGARDING BLOWOUT PREVENTERS

Devon Energy Production Company, LP
Mean Green 26 Fed 1H

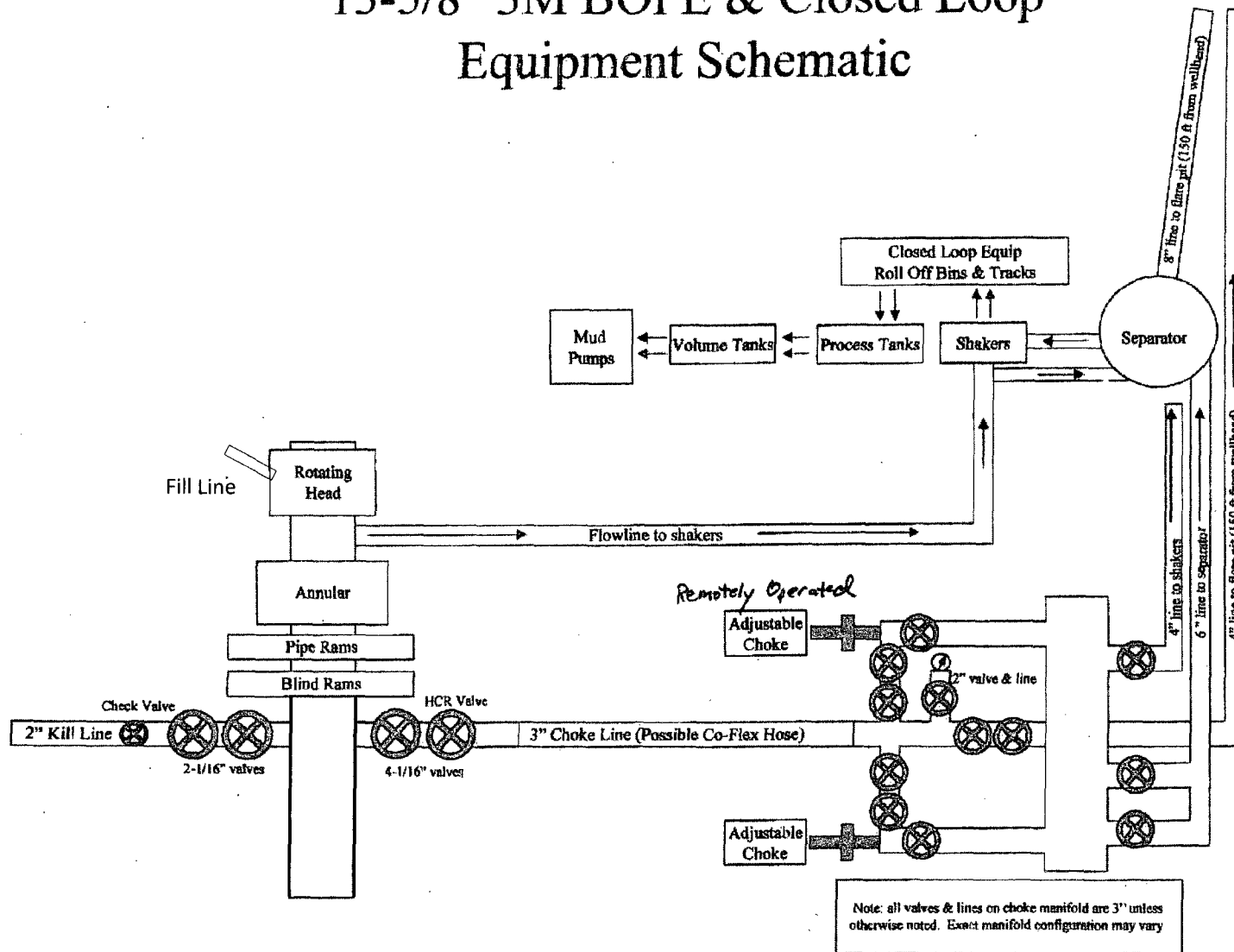
Surface Location: 25 FNL & 330 FEL, Unit A, Sec 26 T26S R34E, Lea, NM
Bottom Hole Location: 330 FSL & 330 FEL, Unit P, Sec 26 T26S R34E, Lea, NM

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





Fluid Technology

ContiTech Beattie Corp.

Webs: www.contitechbeattie.com

Monday, June 14, 2010

RE: Drilling & Production Hoses
Lifting & Safety Equipment

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 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 provided 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,
11535 Brittonmoore Park Drive,
Houston, TX 77041
Phone: +1 (832) 327-0141
Fax: +1 (832) 327-0148
www.ctc.com

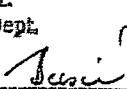


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Continental CONTITECH

Fluid Technology

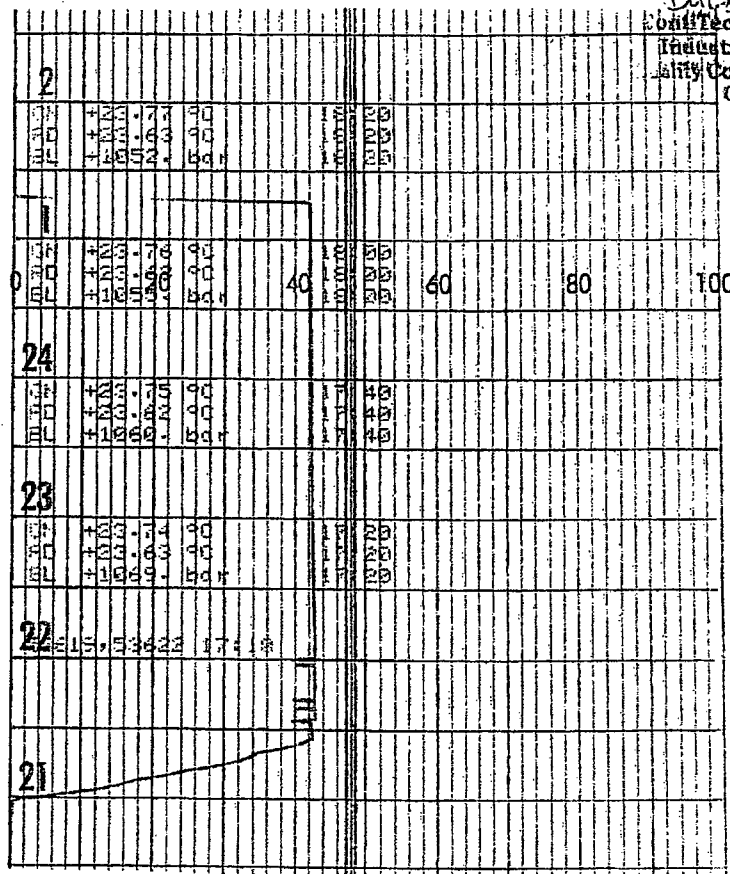
Quality Document

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					
See attachment. (1 page)					
↑ 10 mm = 10 Min. → 10 mm = 25 MPa					
COUPLINGS Type		Serial N°		Quality	
3" coupling with 4 1/16" Flange end		5503 2029		AISI 4130 AISI 4130	
				Heat N° N1590P 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: 25. August. 2008		Inspector		Quality Control ContiTech Rubber Industrial Kft. Quality Control Dept.  	

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HARTMANN &



ContiTech Rubber
Industrial Kft.
Quality Control Dept.
(2)