

PRIMARY MODE

**DEVON ENERGY**  
**ARTESIA**  
**S.E.N.M**  
**13 3/8 X 9 5/8**

QUOTE LAYOUT  
 F18648  
 REF: DM100161737  
 DM100151315

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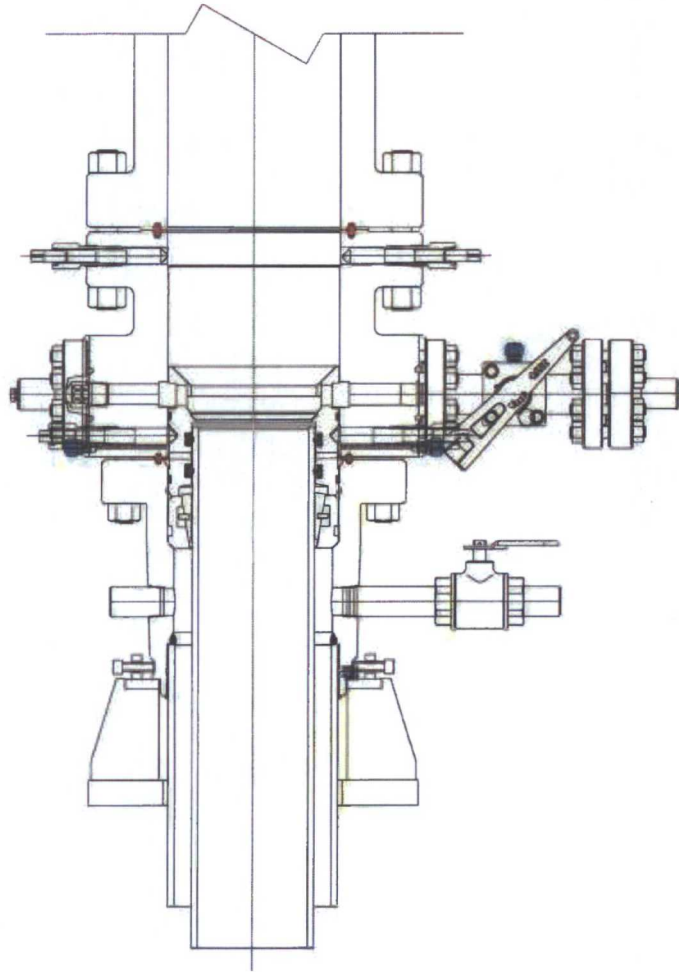
REVISIONS	DESCRIPTION
A 05-08-13	
B 1-22-14	
C 5-13-14	

SURFACE WELLHEAD LAYOUT  
 UNIHEAD, UH-1, SOW,  
 DEVON ENERGY, ODESSA

DRAWN BY	
K. VU	05-08-13
DRAFTING REVIEW	
Z. MARQUEZ	05-08-13
DESIGN REVIEW	
K. TAHA	05-08-13
APPROVED BY	
R. HAMILTON	05-08-13

**FMC Technologies**

DRAWING NUMBER  
**DM100161771-2A**



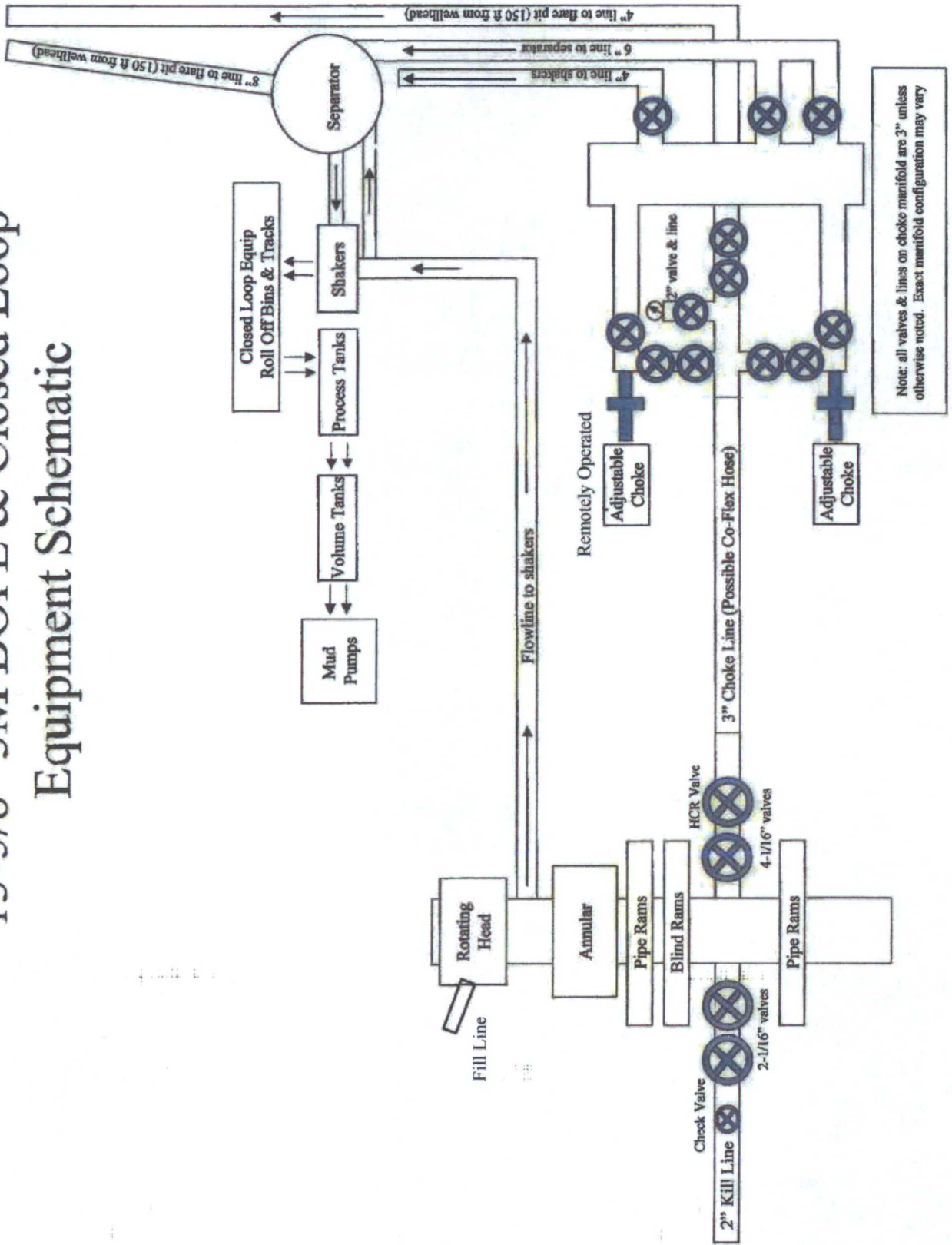
CONTINGENCY MODE

**DEVON ENERGY**  
**ARTESIA**  
**S.E.N.M**  
**13 3/8 X 9 5/8**

QUOTE LAYOUT  
 F18648  
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			<p>DRAFTING REVIEW</p> <p>Z. MARQUEZ 05-08-13</p>	
			<p>DESIGN REVIEW</p> <p>K. TAHA 05-08-13</p>	
			<p>APPROVED BY</p> <p>R. HAMILTON 05-08-13</p>	

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



## **NOTES REGARDING BLOWOUT PREVENTERS**

Devon Energy Production Company, L.P.  
**Cotton Draw Unit 264H**

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 filings will be in operable condition to withstand a minimum of 3000psi working pressure.
4. All fittings will be flanged.
5. A fill bore safety valve tested to a minimum of 3000psi 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.



Fluid Technology

ContiTech Beattie Corp.  
Website: [www.contitechbeattie.com](http://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 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.

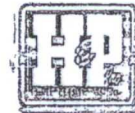
Should you have any questions or require any additional information/clarifications then please do not hesitate to contact us.

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,  
11535 Brittmoore Park Drive,  
Houston, TX 77041  
Phone: +1 (832) 327-0141  
Fax: +1 (832) 327-0148  
[www.contitechbeattie.com](http://www.contitechbeattie.com)



RIG 212



QUALITY DOCUMENT

PHOENIX RUBBER  
INDUSTRIAL LTD.

6728 Szeged, Budapesti út 10, Hungary • H-6701 Szeged, P. O. Box 152  
Phone: (3662) 566-737 • Fax: (3662) 566-738

SALES & MARKETING: H-1052 Budapest, Ráday u. 42-44, Hungary • H-1440 Budapest, P. O. Box 26  
Phone: (361) 456-4200 • Fax: (361) 217-2972, 456-4273 • www.taurusemerge.hu

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE				CERT. N°: 552	
PURCHASER: Phoenix Beattie Co.			P.O. N°: 1519FA-871		
PHOENIX RUBBER order N°: 170466		HOSE TYPE: 3" ID		Choke and Kill Hose	
HOSE SERIAL N°: 34128		NOMINAL / ACTUAL LENGTH: 11,43 m			
W.P. 68,96 MPa 10000 psi		T.P. 103,4 MPa 15000 psi		Duration: 60 min.	
<p>Pressure test with water at ambient temperature</p> <p style="text-align: center;">See attachment. (1 page)</p> <p>↑ 10 mm = 10 Min. → 10 mm = 25 MPa</p>					
COUPLINGS					
Type	Serial N°		Quality	Heat N°	
3" coupling with 4 1/16" Flange end	720 719		AISI 4130	C7626	
			AISI 4130	47357	
API Spec 16 C Temperature rate: "B"					
All metal parts are flawless					
WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.					
Date:	Inspector		Quality Control		
29. April. 2002.			PHOENIX RUBBER Industrial Ltd. Hose Inspection and PHOENIX RUBBER S.C.		







**DEVON ENERGY**  
 Project: Eddy County, NM (NAD-83)  
 Site: Cotton Draw Unit  
 Well: 264H  
 Wellbore: 264H OH  
 Design: Plan #1



Azimuths to Grid North  
 True North: -0.33°  
 Magnetic North: 7.07°  
 Magnetic Field  
 Strength: 48184.4nT  
 Dip Angle: 99.99°  
 Date: 9/11/2014  
 Model: BGGM2014

PROJECT DETAILS: Eddy County, NM (NAD-83)  
 Geodetic System: US State Plane 1983  
 Datum: North American Datum 1983  
 Ellipsoid: GRS 1980  
 Zone: New Mexico Eastern Zone

**DESIGN TARGET DETAILS**

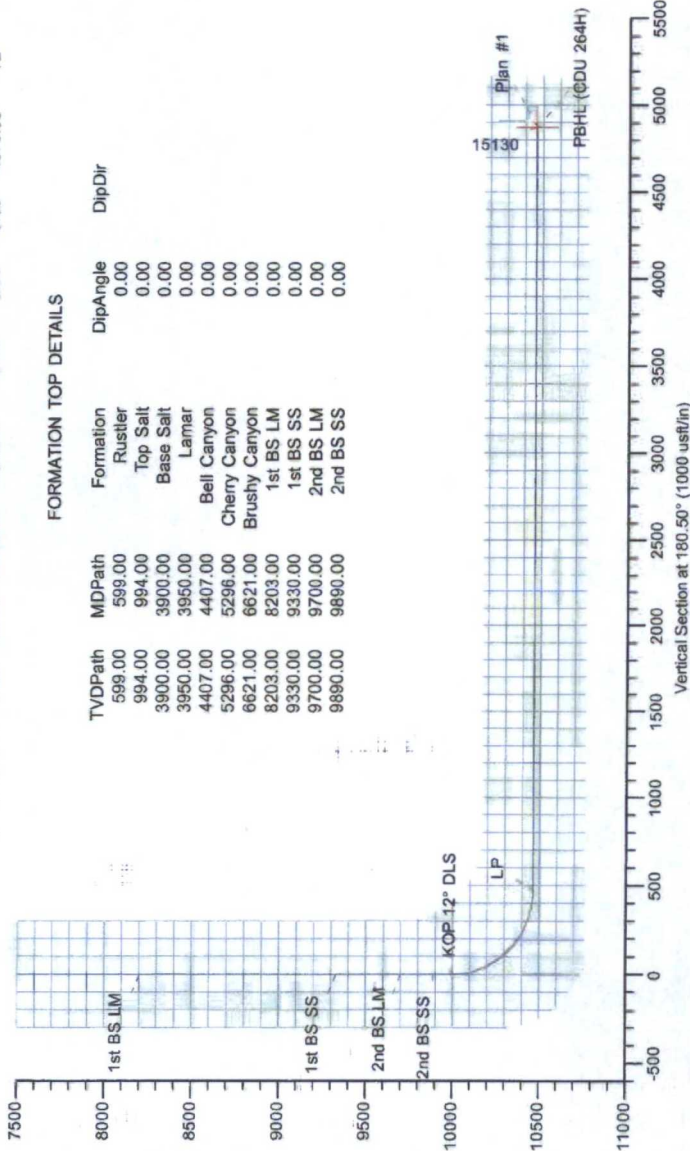
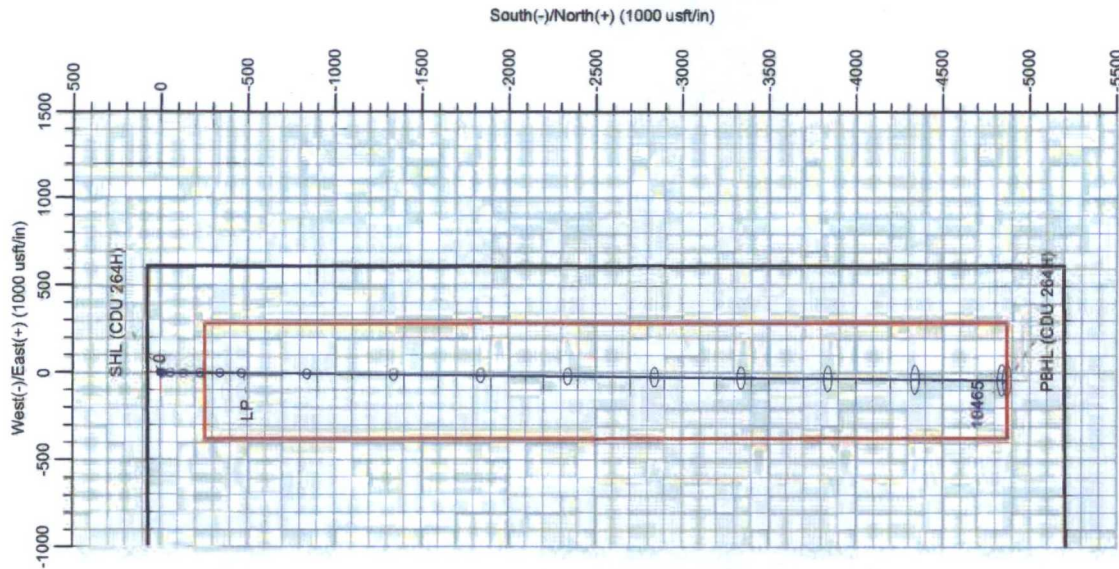
Name	TVD	+N/-S	+E/-W	Northing	Eastings	Latitude	Longitude
SHL (CDU 264H)	0.00	0.00	-42.21	414273.11	734956.95	32° 8' 14.532 N	103° 42' 28.085 W
PBHL (CDU 264H)	10465.00	-4870.18	-42.21	409402.93	734914.74	32° 7' 26.341 N	103° 42' 28.905 W

**SECTION DETAILS**

Sec	MD	Inc	Azi	TVD	+E/-W	Dleg	TFace	Vsect	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	9987.54	0.00	0.00	9987.54	0.00	0.00	0.00	0.00	KOP 12° DLS
3	10737.54	90.00	180.50	10465.00	-4.14	12.00	180.50	477.46	LP
4	15130.43	90.00	180.50	10465.00	-42.21	0.00	0.00	4870.36	TD

**FORMATION TOP DETAILS**

MDPath	MDPPath	Formation	DipAngle	DipDir
599.00	599.00	Rustler	0.00	
984.00	984.00	Top Salt	0.00	
3900.00	3900.00	Base Salt	0.00	
3950.00	3950.00	Lamar	0.00	
4407.00	4407.00	Bell Canyon	0.00	
5296.00	5296.00	Cherry Canyon	0.00	
6621.00	6621.00	Brushy Canyon	0.00	
8203.00	8203.00	1st BS LM	0.00	
9330.00	9330.00	1st BS SS	0.00	
9700.00	9700.00	2nd BS LM	0.00	
9890.00	9890.00	2nd BS SS	0.00	



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

Plan: Plan #1 (264H/264H OH)  
 Created By: Brady Deaver  
 Cotton Draw Unit  
 Date: 15:56, September 11 2014  
 Approved: \_\_\_\_\_  
 Date: \_\_\_\_\_

# **DEVON ENERGY**

**Eddy County, NM (NAD-83)**

**Cotton Draw Unit**

**264H**

**264H OH**

**Plan: Plan #1**

## **Standard Planning Report**

**11 September, 2014**

## LEAM Drilling Systems LLC Planning Report

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well 264H
<b>Company:</b>	DEVON ENERGY	<b>TVD Reference:</b>	H&P 223: 3424.2' GL + 25' RKB @ 3449.20usft (Original Well Elev)
<b>Project:</b>	Eddy County, NM (NAD-83)	<b>MD Reference:</b>	H&P 223: 3424.2' GL + 25' RKB @ 3449.20usft (Original Well Elev)
<b>Site:</b>	Cotton Draw Unit	<b>North Reference:</b>	Grid
<b>Well:</b>	264H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	264H OH		
<b>Design:</b>	Plan #1		

<b>Project</b>	Eddy County, NM (NAD-83)		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	New Mexico Eastern Zone		

<b>Site</b>	Cotton Draw Unit				
<b>Site Position:</b>		<b>Northing:</b>	419,194.51 usft	<b>Latitude:</b>	32° 9' 3.901 N
<b>From:</b>	Map	<b>Easting:</b>	722,955.98 usft	<b>Longitude:</b>	103° 44' 47.345 W
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b>	0.31 °

<b>Well</b>	264H, 2nd BS SS					
<b>Well Position</b>	<b>+N/-S</b>	-4,921.40 usft	<b>Northing:</b>	414,273.11 usft	<b>Latitude:</b>	32° 8' 14.532 N
	<b>+E/-W</b>	12,000.97 usft	<b>Easting:</b>	734,956.95 usft	<b>Longitude:</b>	103° 42' 28.085 W
<b>Position Uncertainty</b>		0.00 usft	<b>Wellhead Elevation:</b>	3,449.20 usft	<b>Ground Level:</b>	3,424.20 usft

<b>Wellbore</b>	264H OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b>	<b>Dip Angle</b>	<b>Field Strength</b>
	BGGM2014	9/11/2014	(°) 7.41	(°) 59.99	(nT) 48,184

<b>Design</b>	Plan #1				
<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00	
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>	
	(usft)	(usft)	(usft)	(°)	
	0.00	0.00	0.00	180.50	

<b>Plan Sections</b>										
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	
9,987.54	0.00	0.00	9,987.54	0.00	0.00	0.00	0.00	0.00	0.00	
10,737.54	90.00	180.50	10,465.00	-477.45	-4.14	12.00	12.00	0.00	180.50	
15,130.43	90.00	180.50	10,465.00	-4,870.18	-42.21	0.00	0.00	0.00	0.00	PBHL (CDU 264H)

**LEAM Drilling Systems LLC**  
 Planning Report

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<b>Company:</b>	DEVON ENERGY	<b>TVD Reference:</b>	H&P 223: 3424.2' GL + 25' RKB @ 3449.20usft (Original Well Elev)
<b>Project:</b>	Eddy County, NM (NAD-83)	<b>MD Reference:</b>	H&P 223: 3424.2' GL + 25' RKB @ 3449.20usft (Original Well Elev)
<b>Site:</b>	Cotton Draw Unit	<b>North Reference:</b>	Grid
<b>Well:</b>	264H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	264H OH		
<b>Design:</b>	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	0.00
<b>SHL (CDU 264H)</b>										
100.00	0.00	0.00	100.00	0.00	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	0.00
300.00	0.00	0.00	300.00	0.00	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	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
599.00	0.00	0.00	599.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Rustler</b>										
600.00	0.00	0.00	600.00	0.00	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	0.00
800.00	0.00	0.00	800.00	0.00	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	0.00
994.00	0.00	0.00	994.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Top Salt</b>										
1,000.00	0.00	0.00	1,000.00	0.00	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	0.00
1,200.00	0.00	0.00	1,200.00	0.00	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	0.00
1,400.00	0.00	0.00	1,400.00	0.00	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	0.00
1,600.00	0.00	0.00	1,600.00	0.00	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	0.00
1,800.00	0.00	0.00	1,800.00	0.00	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	0.00
2,000.00	0.00	0.00	2,000.00	0.00	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	0.00
2,200.00	0.00	0.00	2,200.00	0.00	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	0.00
2,400.00	0.00	0.00	2,400.00	0.00	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	0.00
2,600.00	0.00	0.00	2,600.00	0.00	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	0.00
2,800.00	0.00	0.00	2,800.00	0.00	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	0.00
3,000.00	0.00	0.00	3,000.00	0.00	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	0.00
3,200.00	0.00	0.00	3,200.00	0.00	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	0.00
3,400.00	0.00	0.00	3,400.00	0.00	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	0.00
3,600.00	0.00	0.00	3,600.00	0.00	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	0.00
3,800.00	0.00	0.00	3,800.00	0.00	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	0.00
<b>Base Salt</b>										
3,950.00	0.00	0.00	3,950.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Lamar</b>										
4,000.00	0.00	0.00	4,000.00	0.00	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	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**LEAM Drilling Systems LLC**  
 Planning Report

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<b>Well:</b>	264H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	264H OH		
<b>Design:</b>	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)	
4,300.00	0.00	0.00	4,300.00	0.00	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	0.00
4,407.00	0.00	0.00	4,407.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Bell Canyon</b>										
4,500.00	0.00	0.00	4,500.00	0.00	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	0.00
4,700.00	0.00	0.00	4,700.00	0.00	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	0.00
4,900.00	0.00	0.00	4,900.00	0.00	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	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,296.00	0.00	0.00	5,296.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Cherry Canyon</b>										
5,300.00	0.00	0.00	5,300.00	0.00	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	0.00
5,500.00	0.00	0.00	5,500.00	0.00	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	0.00
5,700.00	0.00	0.00	5,700.00	0.00	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	0.00
5,900.00	0.00	0.00	5,900.00	0.00	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	0.00
6,100.00	0.00	0.00	6,100.00	0.00	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	0.00
6,300.00	0.00	0.00	6,300.00	0.00	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	0.00
6,500.00	0.00	0.00	6,500.00	0.00	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	0.00
6,621.00	0.00	0.00	6,621.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Brushy Canyon</b>										
6,700.00	0.00	0.00	6,700.00	0.00	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	0.00
6,900.00	0.00	0.00	6,900.00	0.00	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	0.00
7,100.00	0.00	0.00	7,100.00	0.00	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	0.00
7,300.00	0.00	0.00	7,300.00	0.00	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	0.00
7,500.00	0.00	0.00	7,500.00	0.00	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	0.00
7,700.00	0.00	0.00	7,700.00	0.00	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	0.00
7,900.00	0.00	0.00	7,900.00	0.00	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	0.00
8,100.00	0.00	0.00	8,100.00	0.00	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	0.00
8,203.00	0.00	0.00	8,203.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>1st BS LM</b>										
8,300.00	0.00	0.00	8,300.00	0.00	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	0.00
8,500.00	0.00	0.00	8,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,600.00	0.00	0.00	8,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**LEAM Drilling Systems LLC**  
**Planning Report**

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well 264H
<b>Company:</b>	DEVON ENERGY	<b>TVD Reference:</b>	H&P 223: 3424.2' GL + 25' RKB @ 3449.20usft (Original Well Elev)
<b>Project:</b>	Eddy County, NM (NAD-83)	<b>MD Reference:</b>	H&P 223: 3424.2' GL + 25' RKB @ 3449.20usft (Original Well Elev)
<b>Site:</b>	Cotton Draw Unit	<b>North Reference:</b>	Grid
<b>Well:</b>	264H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	264H OH		
<b>Design:</b>	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)	
8,700.00	0.00	0.00	8,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,800.00	0.00	0.00	8,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,900.00	0.00	0.00	8,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,000.00	0.00	0.00	9,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,100.00	0.00	0.00	9,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,200.00	0.00	0.00	9,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,300.00	0.00	0.00	9,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,330.00	0.00	0.00	9,330.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>1st BS SS</b>										
9,400.00	0.00	0.00	9,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,500.00	0.00	0.00	9,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,600.00	0.00	0.00	9,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,700.00	0.00	0.00	9,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>2nd BS LM</b>										
9,800.00	0.00	0.00	9,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,890.00	0.00	0.00	9,890.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>2nd BS SS</b>										
9,900.00	0.00	0.00	9,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,987.54	0.00	0.00	9,987.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>KOP 12° DLS</b>										
10,000.00	1.50	180.50	10,000.00	-0.16	0.00	0.16	12.00	12.00	12.00	0.00
10,025.00	4.50	180.50	10,024.96	-1.47	-0.01	1.47	12.00	12.00	12.00	0.00
10,050.00	7.50	180.50	10,049.82	-4.08	-0.04	4.08	12.00	12.00	12.00	0.00
10,075.00	10.50	180.50	10,074.51	-7.99	-0.07	7.99	12.00	12.00	12.00	0.00
10,100.00	13.50	180.50	10,098.96	-13.18	-0.11	13.18	12.00	12.00	12.00	0.00
10,125.00	16.50	180.50	10,123.11	-19.65	-0.17	19.65	12.00	12.00	12.00	0.00
10,150.00	19.50	180.50	10,146.88	-27.37	-0.24	27.37	12.00	12.00	12.00	0.00
10,175.00	22.50	180.50	10,170.22	-36.33	-0.31	36.33	12.00	12.00	12.00	0.00
10,200.00	25.50	180.50	10,193.06	-46.50	-0.40	46.50	12.00	12.00	12.00	0.00
10,225.00	28.50	180.50	10,215.33	-57.84	-0.50	57.84	12.00	12.00	12.00	0.00
10,250.00	31.50	180.50	10,236.98	-70.34	-0.61	70.34	12.00	12.00	12.00	0.00
10,275.00	34.50	180.50	10,257.95	-83.95	-0.73	83.95	12.00	12.00	12.00	0.00
10,300.00	37.50	180.50	10,278.17	-98.64	-0.85	98.65	12.00	12.00	12.00	0.00
10,325.00	40.50	180.50	10,297.60	-114.37	-0.99	114.37	12.00	12.00	12.00	0.00
10,350.00	43.50	180.50	10,316.17	-131.09	-1.14	131.10	12.00	12.00	12.00	0.00
10,375.00	46.50	180.50	10,333.85	-148.77	-1.29	148.77	12.00	12.00	12.00	0.00
10,400.00	49.50	180.50	10,350.58	-167.34	-1.45	167.35	12.00	12.00	12.00	0.00
10,425.00	52.50	180.50	10,366.31	-186.77	-1.62	186.77	12.00	12.00	12.00	0.00
10,450.00	55.50	180.50	10,381.01	-206.99	-1.79	207.00	12.00	12.00	12.00	0.00
10,475.00	58.50	180.50	10,394.62	-227.95	-1.98	227.96	12.00	12.00	12.00	0.00
10,500.00	61.50	180.50	10,407.12	-249.60	-2.16	249.61	12.00	12.00	12.00	0.00
10,525.00	64.50	180.50	10,418.47	-271.87	-2.36	271.88	12.00	12.00	12.00	0.00
10,550.00	67.50	180.50	10,428.64	-294.70	-2.55	294.71	12.00	12.00	12.00	0.00
10,575.00	70.50	180.50	10,437.60	-318.04	-2.76	318.05	12.00	12.00	12.00	0.00
10,600.00	73.50	180.50	10,445.33	-341.81	-2.96	341.82	12.00	12.00	12.00	0.00
10,625.00	76.50	180.50	10,451.80	-365.95	-3.17	365.97	12.00	12.00	12.00	0.00
10,650.00	79.50	180.50	10,457.00	-390.40	-3.38	390.42	12.00	12.00	12.00	0.00
10,675.00	82.50	180.50	10,460.91	-415.09	-3.60	415.11	12.00	12.00	12.00	0.00
10,700.00	85.50	180.50	10,463.53	-439.95	-3.81	439.97	12.00	12.00	12.00	0.00
10,725.00	88.50	180.50	10,464.84	-464.91	-4.03	464.93	12.00	12.00	12.00	0.00
10,737.54	90.00	180.50	10,465.00	-477.45	-4.14	477.46	12.00	12.00	12.00	0.00

**LEAM Drilling Systems LLC**  
**Planning Report**

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 264H
Company:	DEVON ENERGY	TVD Reference:	H&P 223: 3424.2' GL + 25' RKB @ 3449.20usft (Original Well Elev)
Project:	Eddy County, NM (NAD-83)	MD Reference:	H&P 223: 3424.2' GL + 25' RKB @ 3449.20usft (Original Well Elev)
Site:	Cotton Draw Unit	North Reference:	Grid
Well:	264H	Survey Calculation Method:	Minimum Curvature
Wellbore:	264H 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)
LP									
10,800.00	90.00	180.50	10,465.00	-539.91	-4.68	539.93	0.00	0.00	0.00
10,900.00	90.00	180.50	10,465.00	-639.91	-5.55	639.93	0.00	0.00	0.00
11,000.00	90.00	180.50	10,465.00	-739.90	-6.41	739.93	0.00	0.00	0.00
11,100.00	90.00	180.50	10,465.00	-839.90	-7.28	839.93	0.00	0.00	0.00
11,200.00	90.00	180.50	10,465.00	-939.89	-8.15	939.93	0.00	0.00	0.00
11,300.00	90.00	180.50	10,465.00	-1,039.89	-9.01	1,039.93	0.00	0.00	0.00
11,400.00	90.00	180.50	10,465.00	-1,139.89	-9.88	1,139.93	0.00	0.00	0.00
11,500.00	90.00	180.50	10,465.00	-1,239.88	-10.75	1,239.93	0.00	0.00	0.00
11,600.00	90.00	180.50	10,465.00	-1,339.88	-11.61	1,339.93	0.00	0.00	0.00
11,700.00	90.00	180.50	10,465.00	-1,439.88	-12.48	1,439.93	0.00	0.00	0.00
11,800.00	90.00	180.50	10,465.00	-1,539.87	-13.35	1,539.93	0.00	0.00	0.00
11,900.00	90.00	180.50	10,465.00	-1,639.87	-14.21	1,639.93	0.00	0.00	0.00
12,000.00	90.00	180.50	10,465.00	-1,739.86	-15.08	1,739.93	0.00	0.00	0.00
12,100.00	90.00	180.50	10,465.00	-1,839.86	-15.95	1,839.93	0.00	0.00	0.00
12,200.00	90.00	180.50	10,465.00	-1,939.86	-16.81	1,939.93	0.00	0.00	0.00
12,300.00	90.00	180.50	10,465.00	-2,039.85	-17.68	2,039.93	0.00	0.00	0.00
12,400.00	90.00	180.50	10,465.00	-2,139.85	-18.55	2,139.93	0.00	0.00	0.00
12,500.00	90.00	180.50	10,465.00	-2,239.85	-19.41	2,239.93	0.00	0.00	0.00
12,600.00	90.00	180.50	10,465.00	-2,339.84	-20.28	2,339.93	0.00	0.00	0.00
12,700.00	90.00	180.50	10,465.00	-2,439.84	-21.15	2,439.93	0.00	0.00	0.00
12,800.00	90.00	180.50	10,465.00	-2,539.83	-22.01	2,539.93	0.00	0.00	0.00
12,900.00	90.00	180.50	10,465.00	-2,639.83	-22.88	2,639.93	0.00	0.00	0.00
13,000.00	90.00	180.50	10,465.00	-2,739.83	-23.75	2,739.93	0.00	0.00	0.00
13,100.00	90.00	180.50	10,465.00	-2,839.82	-24.61	2,839.93	0.00	0.00	0.00
13,200.00	90.00	180.50	10,465.00	-2,939.82	-25.48	2,939.93	0.00	0.00	0.00
13,300.00	90.00	180.50	10,465.00	-3,039.82	-26.35	3,039.93	0.00	0.00	0.00
13,400.00	90.00	180.50	10,465.00	-3,139.81	-27.21	3,139.93	0.00	0.00	0.00
13,500.00	90.00	180.50	10,465.00	-3,239.81	-28.08	3,239.93	0.00	0.00	0.00
13,600.00	90.00	180.50	10,465.00	-3,339.80	-28.95	3,339.93	0.00	0.00	0.00
13,700.00	90.00	180.50	10,465.00	-3,439.80	-29.81	3,439.93	0.00	0.00	0.00
13,800.00	90.00	180.50	10,465.00	-3,539.80	-30.68	3,539.93	0.00	0.00	0.00
13,900.00	90.00	180.50	10,465.00	-3,639.79	-31.55	3,639.93	0.00	0.00	0.00
14,000.00	90.00	180.50	10,465.00	-3,739.79	-32.41	3,739.93	0.00	0.00	0.00
14,100.00	90.00	180.50	10,465.00	-3,839.79	-33.28	3,839.93	0.00	0.00	0.00
14,200.00	90.00	180.50	10,465.00	-3,939.78	-34.15	3,939.93	0.00	0.00	0.00
14,300.00	90.00	180.50	10,465.00	-4,039.78	-35.01	4,039.93	0.00	0.00	0.00
14,400.00	90.00	180.50	10,465.00	-4,139.77	-35.88	4,139.93	0.00	0.00	0.00
14,500.00	90.00	180.50	10,465.00	-4,239.77	-36.75	4,239.93	0.00	0.00	0.00
14,600.00	90.00	180.50	10,465.00	-4,339.77	-37.61	4,339.93	0.00	0.00	0.00
14,700.00	90.00	180.50	10,465.00	-4,439.76	-38.48	4,439.93	0.00	0.00	0.00
14,800.00	90.00	180.50	10,465.00	-4,539.76	-39.35	4,539.93	0.00	0.00	0.00
14,900.00	90.00	180.50	10,465.00	-4,639.76	-40.21	4,639.93	0.00	0.00	0.00
15,000.00	90.00	180.50	10,465.00	-4,739.75	-41.08	4,739.93	0.00	0.00	0.00
15,100.00	90.00	180.50	10,465.00	-4,839.75	-41.95	4,839.93	0.00	0.00	0.00
15,130.43	90.00	180.50	10,465.00	-4,870.18	-42.21	4,870.36	0.00	0.00	0.00
TD - PBHL (CDU 264H)									

**LEAM Drilling Systems LLC**  
**Planning Report**

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 264H
Company:	DEVON ENERGY	TVD Reference:	H&P 223: 3424.2' GL + 25' RKB @ 3449.20usft (Original Well Elev)
Project:	Eddy County, NM (NAD-83)	MD Reference:	H&P 223: 3424.2' GL + 25' RKB @ 3449.20usft (Original Well Elev)
Site:	Cotton Draw Unit	North Reference:	Grid
Well:	264H	Survey Calculation Method:	Minimum Curvature
Wellbore:	264H OH		
Design:	Plan #1		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
SHL (CDU 264H)	0.00	0.00	0.00	0.00	0.00	414,273.11	734,956.95	32° 8' 14.532 N	103° 42' 28.085 W
- plan hits target center									
- Point									
PBHL (CDU 264H)	0.00	0.00	10,465.00	-4,870.18	-42.21	409,402.93	734,914.74	32° 7' 26.341 N	103° 42' 28.905 W
- plan hits target center									
- Point									

Formations							
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction		
(usft)	(usft)			(°)	(°)		
599.00	599.00	Rustler		0.00			
994.00	994.00	Top Salt		0.00			
3,900.00	3,900.00	Base Salt		0.00			
3,950.00	3,950.00	Lamar		0.00			
4,407.00	4,407.00	Bell Canyon		0.00			
5,296.00	5,296.00	Cherry Canyon		0.00			
6,621.00	6,621.00	Brushy Canyon		0.00			
8,203.00	8,203.00	1st BS LM		0.00			
9,330.00	9,330.00	1st BS SS		0.00			
9,700.00	9,700.00	2nd BS LM		0.00			
9,890.00	9,890.00	2nd BS SS		0.00			

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(usft)	(usft)	+N-S	+E-W		
		(usft)	(usft)		
9,987.54	9,987.54	0.00	0.00	KOP 12° DLS	
10,737.54	10,465.00	-477.45	-4.14	LP	
15,130.43	10,465.00	-4,870.18	-42.21	TD	