



**Devon Energy, Inc.**

Lea County (NAD83)

Butter Cup 36 State Com

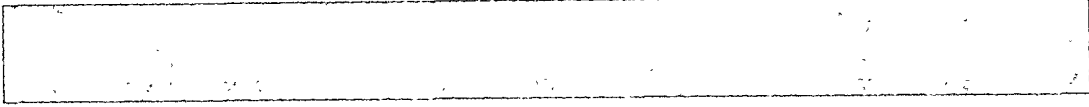
#2H

OH

Plan: Plan #2

## PathfinderX & Y Report

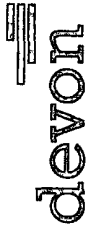
05 June, 2012



30025-40641

**PATHFINDER<sup>®</sup>**

A Schlumberger Company



Pathfinder  
PathfinderX & Y Report



Company:	Devon Energy, Inc.	Well #2H	Well #2H
Project:	Lea County (NAD83)	KB = 19 @ 3990.3usft (McVay B)	KB = 19 @ 3990.3usft (McVay B)
Site:	Butter Cup 36 State Com	Grid:	Minimum Curvature
Wellbore:	#2H	Survey Calculation Method:	EDM 5000.1 Single User Db
Design:	OH	Database:	
Plan #2			

Project: Lea County (NAD83)      System Datum: Mean Sea Level

Map System: US State Plane 1983

Geo Datum: North American Datum 1983

Map Zone: New Mexico Eastern Zone

Site: Butter Cup 36 State Com

Site Position: Northing: 618,740.200 usft      Latitude: 32.698

From: Easting: 790,603.400 usft      Longitude: -103.523

Position Uncertainty: Slot Radius: 13-3/16"      Grid Convergence: 0.44°

Well: #2H

Well Position: +N-S: 0.0 usft      Northing: 619,839.700 usft      Latitude: 32.701

+E-W: 0.0 usft      Easting: 790,544.800 usft      Longitude: -103.523

Position Uncertainty: Wellhead Elevation: usft      Ground Level: 3,971.3 usft

Wellbore: OH

Magnetics: Model Name: IGRF2010      Sample Date: 6/4/2012      Dip Angle: 60.61      Field Strength: 48,808

Declination: 7.48

Design: Plan #2

Audit Notes:

Version: Phase: PLAN      Tie On Depth: 0.0

Vertical Section: Depth From (TVD)      +N-S      +E-W      Direction

(usft)	(usft)	(usft)	(°)
0.0	0.0	0.0	84.76

Survey Tool Program: Date: 6/5/2012

From (usft): To (usft): Survey (Wellbore)

0.0      15,531.4      Plan #2 (OH)      Pathfinder      Pathfinder MWD



Pathfinder  
PathfinderX & Y Report



Company: Devon Energy, Inc.  
 Project: Lea County (NAD83)  
 Site: Butter Cup 36 State Com  
 Well: #2H  
 Wellbore: OH  
 Design: Plan #2

Local Co-ordinate Reference: Well #2H  
 TVD Reference: KB = 19 @ 3990.3usft (McVay 8)  
 MD Reference: KB = 19 @ 3990.3usft (McVay 8)  
 North Reference: Grid  
 Survey Calculation Method: Minimum Curvature  
 Database: EDM 5000 1 Single User Db

Planned Survey	MD (usft)	inc (")	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	D/Leg (°/100usft)	Northing (usft)	Easting (usft)
	0.0	0.00	0.00	0.0	-3,990.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
	25.3	0.00	0.00	25.3	-3,965.0	0.0	0.0	0.0	0.00	619,839.70	790,544.80
<b>QUATERNARY</b>											
100.0	0.00	0.00	0.00	100.0	-3,890.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
200.0	0.00	0.00	0.00	200.0	-3,790.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
300.0	0.00	0.00	0.00	300.0	-3,690.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
400.0	0.00	0.00	0.00	400.0	-3,590.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
500.0	0.00	0.00	0.00	500.0	-3,490.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
600.0	0.00	0.00	0.00	600.0	-3,390.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
700.0	0.00	0.00	0.00	700.0	-3,290.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
800.0	0.00	0.00	0.00	800.0	-3,190.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
900.0	0.00	0.00	0.00	900.0	-3,090.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
1,000.0	0.00	0.00	0.00	1,000.0	-2,990.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
1,100.0	0.00	0.00	0.00	1,100.0	-2,890.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
1,200.0	0.00	0.00	0.00	1,200.0	-2,790.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
1,300.0	0.00	0.00	0.00	1,300.0	-2,690.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
1,400.0	0.00	0.00	0.00	1,400.0	-2,590.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
1,500.0	0.00	0.00	0.00	1,500.0	-2,490.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
1,600.0	0.00	0.00	0.00	1,600.0	-2,390.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
1,700.0	0.00	0.00	0.00	1,700.0	-2,290.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
1,800.0	0.00	0.00	0.00	1,800.0	-2,190.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
1,894.3	0.00	0.00	0.00	1,894.3	-2,096.0	0.0	0.0	0.0	0.00	619,839.70	790,544.80
<b>RUSTLER DOL.</b>											
1,900.0	0.00	0.00	0.00	1,900.0	-2,090.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
2,000.0	0.00	0.00	0.00	2,000.0	-1,990.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
2,100.0	0.00	0.00	0.00	2,100.0	-1,890.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
2,175.3	0.00	0.00	0.00	2,175.3	-1,815.0	0.0	0.0	0.0	0.00	619,839.70	790,544.80
<b>SALADO SALT</b>											



**Pathfinder**  
PathfinderX & Y Report



A Schlumberger Company

**Company:** Devon Energy, Inc.  
**Project:** Lea County (NAD83)  
**Site:** Butler Cup 36 State Com  
**Well:** #2H  
**Wellbore:** OH  
**Design:** Plan #2

**Local Co-ordinate Reference:** Well #2H  
**TVD Reference:** KB = 19 @ 3990.3usft (McVay 8)  
**MD Reference:** KB = 19 @ 3990.3usft (McVay 8)  
**North Reference:** Grd  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 5000.1 Single User Db

**Planned Survey**

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
2,200.0	0.00	0.00	2,200.0	-1,790.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
2,300.0	0.00	0.00	2,300.0	-1,690.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
2,400.0	0.00	0.00	2,400.0	-1,590.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
2,500.0	0.00	0.00	2,500.0	-1,490.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
2,600.0	0.00	0.00	2,600.0	-1,390.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
2,700.0	0.00	0.00	2,700.0	-1,290.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
2,800.0	0.00	0.00	2,800.0	-1,190.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
2,900.0	0.00	0.00	2,900.0	-1,090.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
3,000.0	0.00	0.00	3,000.0	-990.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
3,100.0	0.00	0.00	3,100.0	-890.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
3,200.0	0.00	0.00	3,200.0	-790.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
3,300.0	0.00	0.00	3,300.0	-690.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
3,345.3	0.00	0.00	3,345.3	-645.0	0.0	0.0	0.0	0.00	619,839.70	790,544.80
<b>BASE SALT</b>										
3,400.0	0.00	0.00	3,400.0	-590.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
3,450.3	0.00	0.00	3,450.3	-540.0	0.0	0.0	0.0	0.00	619,839.70	790,544.80
<b>YATES SS</b>										
3,500.0	0.00	0.00	3,500.0	-490.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
3,600.0	0.00	0.00	3,600.0	-390.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
3,700.0	0.00	0.00	3,700.0	-290.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
3,800.0	0.00	0.00	3,800.0	-190.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
3,900.0	0.00	0.00	3,900.0	-90.3	0.0	0.0	0.0	0.00	619,839.70	790,544.80
4,000.0	0.00	0.00	4,000.0	9.7	0.0	0.0	0.0	0.00	619,839.70	790,544.80
4,100.0	0.00	0.00	4,100.0	109.7	0.0	0.0	0.0	0.00	619,839.70	790,544.80
4,200.0	0.00	0.00	4,200.0	209.7	0.0	0.0	0.0	0.00	619,839.70	790,544.80
4,300.0	0.00	0.00	4,300.0	309.7	0.0	0.0	0.0	0.00	619,839.70	790,544.80
4,400.0	0.00	0.00	4,400.0	409.7	0.0	0.0	0.0	0.00	619,839.70	790,544.80



Pathfinder  
PathfinderX & Y Report



Company:	Devon Energy, Inc.	Local Co-ordinate Reference:	Well #2H								
Project:	Lea County (NAD83)	TVD Reference:	KB = 19 @ 3990.3usft (McVay 8)								
Site:	Butler Cup 36 State Com	MD Reference:	KB = 19 @ 3990.3usft (McVay 8)								
Well:	#2H	North Reference:	Grid								
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature								
Design:	Plan #2	Database:	EDM 5000.1 Single User Db								
Planned Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	D Leg (°/100usft)	Northing (usft)	Easting (usft)	
4,500.0	0.00	0.00	4,500.0	509.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
4,600.0	0.00	0.00	4,600.0	609.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
4,700.0	0.00	0.00	4,700.0	709.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
4,725.3	0.00	0.00	4,725.3	735.0	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
<b>QUEEN SS:</b>											
4,800.0	0.00	0.00	4,800.0	809.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
4,900.0	0.00	0.00	4,900.0	909.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
5,000.0	0.00	0.00	5,000.0	1,009.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
5,100.0	0.00	0.00	5,100.0	1,109.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
5,200.0	0.00	0.00	5,200.0	1,209.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
5,300.0	0.00	0.00	5,300.0	1,309.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
5,305.3	0.00	0.00	5,305.3	1,315.0	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
<b>GRAYBURG</b>											
5,400.0	0.00	0.00	5,400.0	1,409.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
5,500.0	0.00	0.00	5,500.0	1,509.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
5,600.0	0.00	0.00	5,600.0	1,609.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
5,700.0	0.00	0.00	5,700.0	1,709.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
5,800.0	0.00	0.00	5,800.0	1,809.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
5,900.0	0.00	0.00	5,900.0	1,909.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
6,000.0	0.00	0.00	6,000.0	2,009.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
6,100.0	0.00	0.00	6,100.0	2,109.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
6,200.0	0.00	0.00	6,200.0	2,209.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
6,300.0	0.00	0.00	6,300.0	2,309.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
6,400.0	0.00	0.00	6,400.0	2,409.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
6,500.0	0.00	0.00	6,500.0	2,509.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
6,600.0	0.00	0.00	6,600.0	2,609.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
6,700.0	0.00	0.00	6,700.0	2,709.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	



Pathfinder  
PathfinderX & Y Report



Company:		Devon Energy, Inc.		Local Co-ordinate Reference:		Well #2H					
Project:		Lea County (NAD83)		TVD Reference:		KB = 19 @ 3990.3usft (McVay 8)					
Site:		Butter Cup 36 State Com		MD Reference:		KB = 19 @ 3990.3usft (McVay 8)					
Well:		#2H		North Reference:		Grid					
Wellbore:		OH		Survey Calculation Method:		Minimum Curvature					
Design:		Plan #2		Database:		EDM 5000.1 Single User Db					
Planned Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	NIS (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
6,800.0	0.00	0.00	6,800.0	2,809.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
6,900.0	0.00	0.00	6,900.0	2,909.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
6,991.3	0.00	0.00	6,991.3	3,001.0	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
<b>DELAWARE</b>											
7,000.0	0.00	0.00	7,000.0	3,009.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
7,100.0	0.00	0.00	7,100.0	3,109.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
7,200.0	0.00	0.00	7,200.0	3,209.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
7,300.0	0.00	0.00	7,300.0	3,309.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
7,400.0	0.00	0.00	7,400.0	3,409.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
7,500.0	0.00	0.00	7,500.0	3,509.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
7,600.0	0.00	0.00	7,600.0	3,609.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
7,700.0	0.00	0.00	7,700.0	3,709.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
7,800.0	0.00	0.00	7,800.0	3,809.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
7,900.0	0.00	0.00	7,900.0	3,909.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
7,980.3	0.00	0.00	7,980.3	3,990.0	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
<b>1ST BONE SPRING LM.</b>											
8,000.0	0.00	0.00	8,000.0	4,009.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
8,100.0	0.00	0.00	8,100.0	4,109.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
8,200.0	0.00	0.00	8,200.0	4,209.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
8,300.0	0.00	0.00	8,300.0	4,309.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
8,400.0	0.00	0.00	8,400.0	4,409.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
8,500.0	0.00	0.00	8,500.0	4,509.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
8,600.0	0.00	0.00	8,600.0	4,609.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
8,700.0	0.00	0.00	8,700.0	4,709.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
8,800.0	0.00	0.00	8,800.0	4,809.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
8,900.0	0.00	0.00	8,900.0	4,909.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	
9,000.0	0.00	0.00	9,000.0	5,009.7	0.0	0.0	0.0	0.0	619,839.70	790,544.80	



**Pathfinder**  
PathfinderX & Y Report



<b>Company:</b> Devon Energy, Inc.	<b>Local Co-ordinate Reference:</b> Well #2H
<b>Project:</b> Lea County (NAD83)	<b>TVD Reference:</b> KB = 19 @ 3990.3usft (McVay 8)
<b>Site:</b> Butler Cup 36 State Com	<b>MD Reference:</b> KB = 19 @ 3990.3usft (McVay 8)
<b>Well:</b> #2H	<b>Grid:</b>
<b>Wellbore:</b> OH	<b>Minimum Curvature</b>
<b>Design:</b> Plan #2	<b>EDM 5000.1 Single User Db</b>
<b>Survey Calculation Method:</b>	
<b>Database:</b>	

MD (usft)	Inc (")	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	D Leg (°/100usft)	Northing (usft)	Eastings (usft)
9,100.0	0.00	0.00	9,100.0	5,109.7	0.0	0.0	0.0	0.00	619,839.70	790,544.80
9,200.0	0.00	0.00	9,200.0	5,209.7	0.0	0.0	0.0	0.00	619,839.70	790,544.80
9,300.0	0.00	0.00	9,300.0	5,309.7	0.0	0.0	0.0	0.00	619,839.70	790,544.80
9,325.3	0.00	0.00	9,325.3	5,335.0	0.0	0.0	0.0	0.00	619,839.70	790,544.80
<b>1ST BONE SPRING SS.</b>										
9,400.0	0.00	0.00	9,400.0	5,409.7	0.0	0.0	0.0	0.00	619,839.70	790,544.80
9,500.0	0.00	0.00	9,500.0	5,509.7	0.0	0.0	0.0	0.00	619,839.70	790,544.80
9,525.3	0.00	0.00	9,525.3	5,535.0	0.0	0.0	0.0	0.00	619,839.70	790,544.80
<b>2ND BONE SPRING LM</b>										
9,600.0	0.00	0.00	9,600.0	5,609.7	0.0	0.0	0.0	0.00	619,839.70	790,544.80
9,700.0	0.00	0.00	9,700.0	5,709.7	0.0	0.0	0.0	0.00	619,839.70	790,544.80
9,800.0	0.00	0.00	9,800.0	5,809.7	0.0	0.0	0.0	0.00	619,839.70	790,544.80
9,865.3	0.00	0.00	9,865.3	5,875.0	0.0	0.0	0.0	0.00	619,839.70	790,544.80
<b>2ND BONE SPRING SS</b>										
9,900.0	0.00	0.00	9,900.0	5,909.7	0.0	0.0	0.0	0.00	619,839.70	790,544.80
9,992.0	0.00	0.00	9,992.0	6,001.7	0.0	0.0	0.0	0.00	619,839.70	790,544.80
10,000.0	0.80	84.76	10,000.0	6,009.7	0.0	0.1	0.1	10.00	619,839.71	790,544.86
10,005.3	1.33	84.76	10,005.3	6,015.0	0.0	0.2	0.2	10.00	619,839.71	790,544.95
<b>3rd Bone Spring Lime</b>										
10,050.0	5.80	84.76	10,049.9	6,059.6	0.3	2.9	2.9	10.00	619,839.97	790,547.72
10,100.0	10.80	84.76	10,099.4	6,109.1	0.9	10.1	10.1	10.00	619,840.63	790,554.91
10,150.0	15.80	84.76	10,148.0	6,157.7	2.0	21.6	21.6	10.00	619,841.68	790,566.36
10,200.0	20.80	84.76	10,195.5	6,205.2	3.4	37.2	37.3	10.00	619,843.11	790,581.99
10,250.0	25.80	84.76	10,241.4	6,251.1	5.2	56.9	57.1	10.00	619,844.92	790,601.67
10,300.0	30.80	84.76	10,285.4	6,295.1	7.4	80.5	80.8	10.00	619,847.08	790,625.27
10,350.0	35.80	84.76	10,327.2	6,336.9	9.9	107.8	108.3	10.00	619,849.59	790,652.60
10,400.0	40.80	84.76	10,368.4	6,376.1	12.7	138.6	139.2	10.00	619,852.42	790,683.45
10,450.0	45.80	84.76	10,402.8	6,412.5	15.8	172.8	173.5	10.00	619,855.55	790,717.59



Pathfinder  
PathfinderX & Y Report



**Company:** Devon Energy, Inc.  
**Project:** Lea County (NAD83)  
**Site:** Butler Cup 36 State Com  
**Well:** #2H  
**Wellbore:** OH  
**Design:** Plan #2

**Local Co-ordinate Reference:** Well #2H  
**TVD Reference:** KB = 19 @ 3990.3usft (McVay B)  
**MD Reference:** KB = 19 @ 3990.3usft (McVay B)  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 5000.1 Single User Db

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	D Leg (°/100usft)	Northing (usft)	Easting (usft)
10,483.3	49.13	84.76	10,425.3	6,435.0	18.1	197.3	198.1	10.00	619,857.79	790,742.05
<b>3rd Bone Spring Sand</b>										
10,500.0	50.80	84.76	10,436.0	6,445.7	19.3	210.0	210.8	10.00	619,858.96	790,754.75
10,550.0	55.80	84.76	10,465.9	6,475.6	22.9	249.9	250.9	10.00	619,862.62	790,794.66
10,600.0	60.80	84.76	10,492.1	6,501.8	26.8	292.2	293.4	10.00	619,866.50	790,837.01
10,650.0	65.80	84.76	10,514.6	6,524.3	30.9	336.7	338.1	10.00	619,870.58	790,881.48
10,700.0	70.80	84.76	10,533.1	6,542.8	35.1	382.9	384.5	10.00	619,874.82	790,927.72
10,750.0	75.80	84.76	10,547.5	6,557.2	39.5	430.6	432.4	10.00	619,879.20	790,975.40
10,800.0	80.80	84.76	10,557.6	6,567.3	44.0	479.3	481.4	10.00	619,883.67	791,024.14
10,850.0	85.80	84.76	10,563.4	6,573.1	48.5	528.8	531.0	10.00	619,888.20	791,073.58
10,887.0	89.50	84.76	10,564.9	6,574.6	51.9	565.6	568.0	10.00	619,891.58	791,110.40
10,900.0	89.50	84.76	10,565.0	6,574.7	53.1	578.5	581.0	0.00	619,892.77	791,123.33
11,000.0	89.50	84.76	10,565.9	6,575.6	62.2	678.1	681.0	0.00	619,901.90	791,222.91
11,100.0	89.50	84.76	10,566.8	6,576.5	71.3	777.7	780.9	0.00	619,911.03	791,322.49
11,200.0	89.50	84.76	10,567.7	6,577.4	80.5	877.3	880.9	0.00	619,920.17	791,422.06
11,300.0	89.50	84.76	10,568.5	6,578.2	89.6	976.8	980.9	0.00	619,929.30	791,521.64
11,400.0	89.50	84.76	10,569.4	6,579.1	98.7	1,076.4	1,080.9	0.00	619,938.44	791,621.22
11,500.0	89.50	84.76	10,570.3	6,580.0	107.9	1,176.0	1,180.9	0.00	619,947.57	791,720.80
11,600.0	89.50	84.76	10,571.1	6,580.8	117.0	1,275.6	1,280.9	0.00	619,956.70	791,820.38
11,700.0	89.50	84.76	10,572.0	6,581.7	126.1	1,375.2	1,380.9	0.00	619,965.84	791,919.95
11,800.0	89.50	84.76	10,572.9	6,582.6	135.3	1,474.7	1,480.9	0.00	619,974.97	792,019.53
11,900.0	89.50	84.76	10,573.7	6,583.4	144.4	1,574.3	1,580.9	0.00	619,984.11	792,119.11
12,000.0	89.50	84.76	10,574.6	6,584.3	153.5	1,673.9	1,680.9	0.00	619,993.24	792,218.69
12,100.0	89.50	84.76	10,575.5	6,585.2	162.7	1,773.5	1,780.9	0.00	620,002.37	792,318.27
12,200.0	89.50	84.76	10,576.3	6,586.0	171.8	1,873.0	1,880.9	0.00	620,011.51	792,417.85
12,300.0	89.50	84.76	10,577.2	6,586.9	180.9	1,972.6	1,980.9	0.00	620,020.64	792,517.42
12,400.0	89.50	84.76	10,578.1	6,587.8	190.1	2,072.2	2,080.9	0.00	620,029.78	792,617.00





Pathfinder  
PathfinderX & Y Report



Company: Devon Energy, Inc.  
 Project: Lea County (NAD83)  
 Site: Butter Cup 35 State Com  
 Well: #2H  
 Wellbore: OH  
 Design: Plan #2  
 Local Co-ordinate Reference: Well #2H  
 TVD Reference: KB = 19 @ 3990 3usft (McVay 8)  
 MD Reference: KB = 19 @ 3990 3usft (McVay 8)  
 North Reference: Grid  
 Survey Calculation Method: Minimum Curvature  
 Database: EDM 5000.1 Single User Db

MD (usft)	Inc. (°)	Azi (azimuth) (°)	TVD (usft)	TVSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
12,500.0	89.50	84.76	10,579.0	6,588.7	199.2	2,171.8	2,180.9	0.00	620,038.91	792,716.58
12,600.0	89.50	84.76	10,579.8	6,589.5	208.3	2,271.4	2,280.9	0.00	620,048.04	792,816.16
12,700.0	89.50	84.76	10,580.7	6,590.4	217.5	2,370.9	2,380.9	0.00	620,057.18	792,915.74
12,800.0	89.50	84.76	10,581.6	6,591.3	226.6	2,470.5	2,480.9	0.00	620,066.31	793,015.31
12,900.0	89.50	84.76	10,582.4	6,592.1	235.7	2,570.1	2,580.9	0.00	620,075.45	793,114.89
13,000.0	89.50	84.76	10,583.3	6,593.0	244.9	2,669.7	2,680.9	0.00	620,084.58	793,214.47
13,100.0	89.50	84.76	10,584.2	6,593.9	254.0	2,769.2	2,780.9	0.00	620,093.71	793,314.05
13,200.0	89.50	84.76	10,585.0	6,594.7	263.1	2,868.8	2,880.9	0.00	620,102.85	793,413.63
13,300.0	89.50	84.76	10,585.9	6,595.6	272.3	2,968.4	2,980.9	0.00	620,111.98	793,513.21
13,400.0	89.50	84.76	10,586.8	6,596.5	281.4	3,068.0	3,080.9	0.00	620,121.12	793,612.78
13,500.0	89.50	84.76	10,587.6	6,597.3	290.6	3,167.6	3,180.9	0.00	620,130.25	793,712.36
13,600.0	89.50	84.76	10,588.5	6,598.2	299.7	3,267.1	3,280.9	0.00	620,139.39	793,811.94
13,700.0	89.50	84.76	10,589.4	6,599.1	308.8	3,366.7	3,380.9	0.00	620,148.52	793,911.52
13,800.0	89.50	84.76	10,590.3	6,600.0	318.0	3,466.3	3,480.8	0.00	620,157.65	794,011.10
13,900.0	89.50	84.76	10,591.1	6,600.8	327.1	3,565.9	3,580.8	0.00	620,166.79	794,110.67
14,000.0	89.50	84.76	10,592.0	6,601.7	336.2	3,665.5	3,680.8	0.00	620,175.92	794,210.25
14,100.0	89.50	84.76	10,592.9	6,602.6	345.4	3,765.0	3,780.8	0.00	620,185.06	794,309.83
14,200.0	89.50	84.76	10,593.7	6,603.4	354.5	3,864.6	3,880.8	0.00	620,194.19	794,409.41
14,300.0	89.50	84.76	10,594.6	6,604.3	363.6	3,964.2	3,980.8	0.00	620,203.32	794,508.99
14,400.0	89.50	84.76	10,595.5	6,605.2	372.8	4,063.8	4,080.8	0.00	620,212.46	794,608.57
14,500.0	89.50	84.76	10,596.3	6,606.0	381.9	4,163.3	4,180.8	0.00	620,221.59	794,708.14
14,600.0	89.50	84.76	10,597.2	6,606.9	391.0	4,262.9	4,280.8	0.00	620,230.73	794,807.72
14,700.0	89.50	84.76	10,598.1	6,607.8	400.2	4,362.5	4,380.8	0.00	620,239.86	794,907.30
14,800.0	89.50	84.76	10,598.9	6,608.6	409.3	4,462.1	4,480.8	0.00	620,248.99	795,006.88
14,900.0	89.50	84.76	10,599.8	6,609.5	418.4	4,561.7	4,580.8	0.00	620,258.13	795,106.46
15,000.0	89.50	84.76	10,600.7	6,610.4	427.6	4,661.2	4,680.8	0.00	620,267.26	795,206.03
15,100.0	89.50	84.76	10,601.6	6,611.3	436.7	4,760.8	4,780.8	0.00	620,276.40	795,305.61



**Pathfinder**  
PathfinderX & Y Report



Company: Devon Energy, Inc.  
 Project: Lea County (NAD83)  
 Site: Butter Cup 36 State Com  
 Well: #2H  
 Wellbore: OH  
 Design: Plan #2

Local Co-ordinate Reference:  
 TVD Reference:  
 MD Reference:  
 North Reference:  
 Survey Calculation Method:  
 Database:

Well #2H  
 KB = 19 @ 3990.3usft (McVay 8)  
 KB = 19 @ 3990.3usft (McVay 8)  
 Grd  
 Minimum Curvature  
 EDM 5000.1 Single User Db

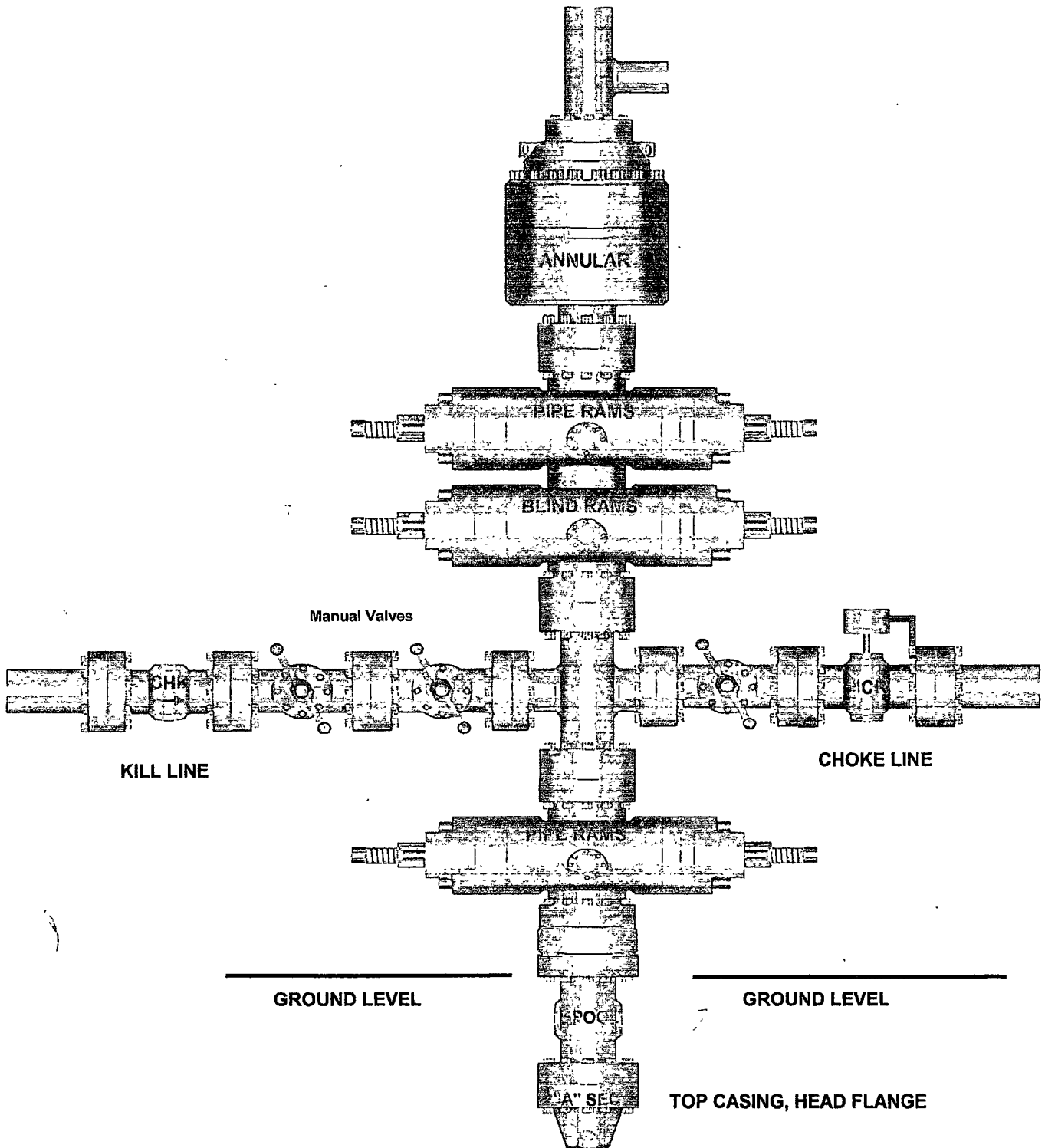
Planned Survey	MD (usft)	Inc (")	Azi (azimuth) (")	TVD (usft)	TVSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	D. Leg (*/100usft)	Northing (usft)	Easting (usft)
	15,200.0	89.50	84.76	10,602.4	6,612.1	445.8	4,860.4	4,880.8	0.00	620,285.53	795,405.19
	15,300.0	89.50	84.76	10,603.3	6,613.0	455.0	4,960.0	4,980.8	0.00	620,294.66	795,504.77
	15,400.0	89.50	84.76	10,604.2	6,613.9	464.1	5,059.5	5,080.8	0.00	620,303.80	795,604.35
	15,500.0	89.50	84.76	10,605.0	6,614.7	473.2	5,159.1	5,180.8	0.00	620,312.93	795,703.93
	15,531.4	89.50	84.76	10,605.3	6,615.0	476.1	5,190.4	5,212.2	0.00	620,315.80	795,735.20

PBHL (Butter Cup 36 State #2H)

Formations	Measured Depth (usft)	Vertical Depth (usft)	Name	Dip (")	Dip Direction (")	Lithology
	9,865.3	9,865.3	2ND BONE SPRING SS			
	10,005.3	10,005.3	3rd Bone Spring Lime			
	4,725.3	4,725.3	QUEEN SS.			
	25.3	25.3	QUATERNARY			
	2,175.3	2,175.3	SALADO SALT			
	10,483.3	10,425.3	3rd Bone Spring Sand			
	6,991.3	6,991.3	DELAWARE			
	5,305.3	5,305.3	GRAYBURG			
	1,894.3	1,894.3	RUSTLER DOL.			
	3,450.3	3,450.3	YATES SS			
	9,325.3	9,325.3	1ST BONE SPRING SS.			
	7,980.3	7,980.3	1ST BONE SPRING LM.			
	3,345.3	3,345.3	BASE SALT			
	9,525.3	9,525.3	2ND BONE SPRING LM			

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

# 13-5/8" x 3,000 psi BOP Stack



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

