

Energen Resources Corporation

Permian Basin(Lea County, NM)

Cox Federal 35

#4H

OH

Plan: Design #1

Standard Planning Report

17 March, 2014

Cox Federal 35 #4H
 Permian Basin(Lea County, NM)
 Northing: (Y) 456982.10
 Easting: (X) 754348.10
 Design #1



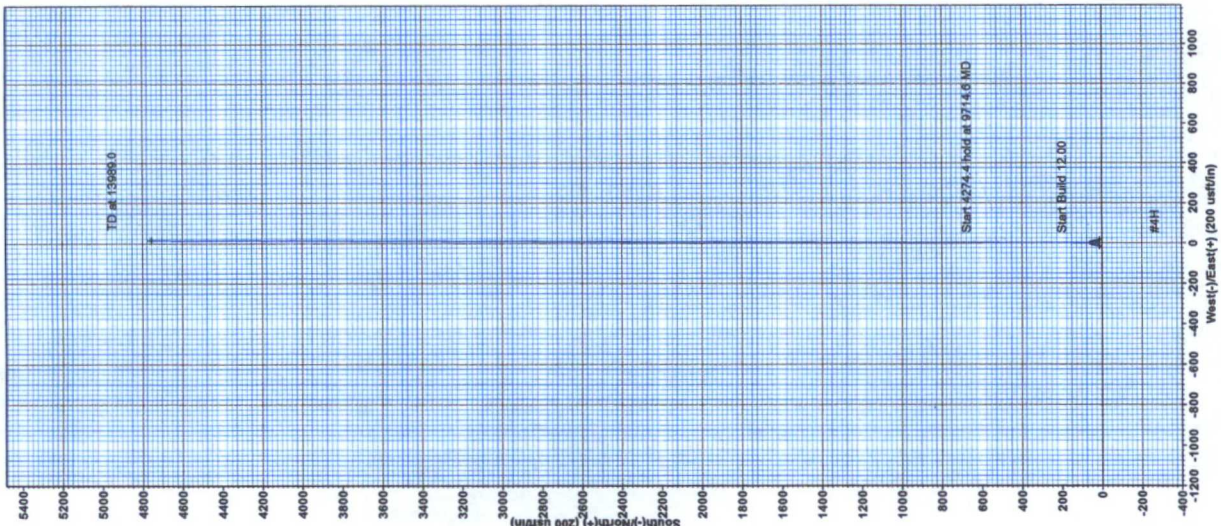
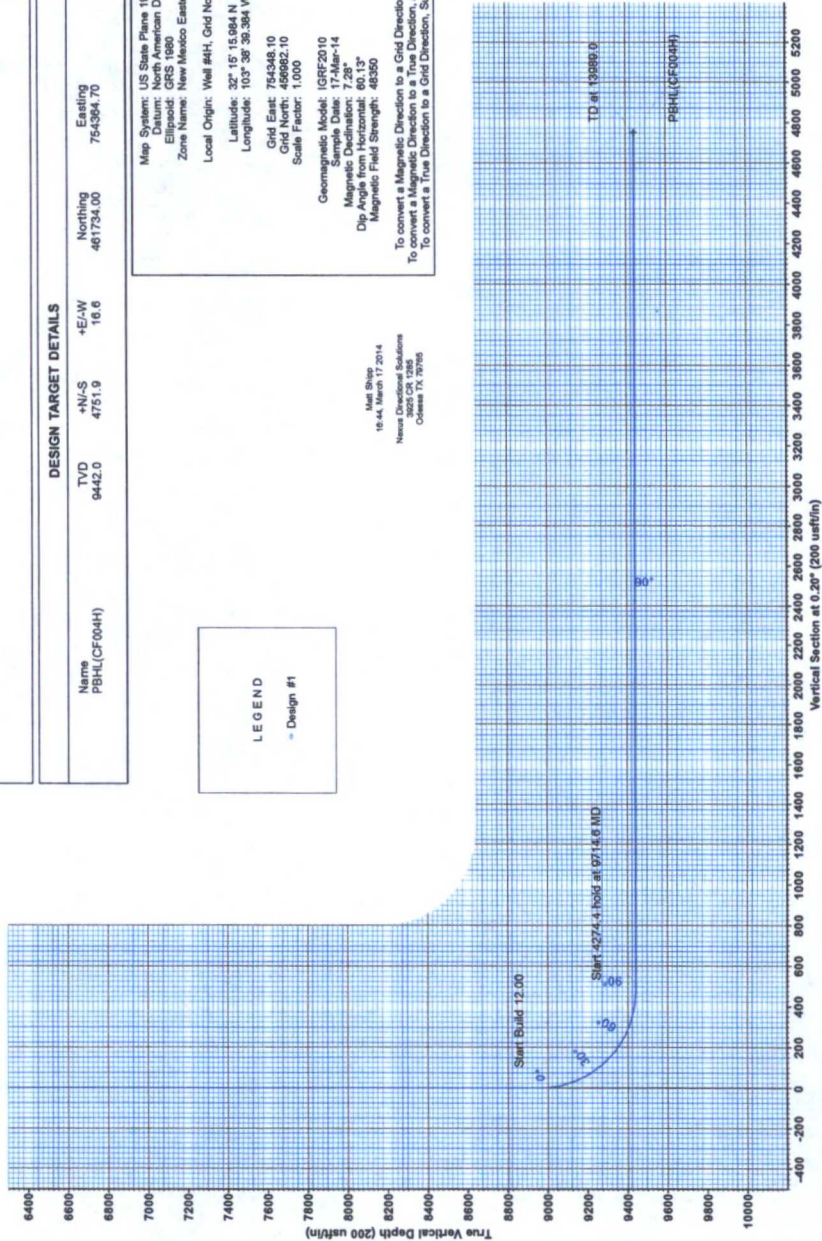
Asimuths to Grid North
 True North: -0.37°
 Magnetic North: 6.91°
 Magnetic Field
 Strength: 0.000 T
 Dip Angle: 60.13°
 Date: 3/17/2014
 To convert a Magnetic Direction to a Grid Direction, Add 6.91°
 To convert a True Direction to a Grid Direction, Subtract 0.37°

WELL DETAILS:									
WELL @ 3660.6usft (Original Well Elev)									
		+N-S	+E-W	North	East	Latitude	Longitude		
		0.0	0.0	456982.10	754348.10	32° 15' 15.984 N	103° 36' 38.384 W		
SECTION DETAILS									
MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	V/Sect	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
8964.5	0.00	0.00	8964.5	0.0	0.0	0.00	0.00	0.0	
9714.6	90.00	0.20	9442.0	477.5	1.7	12.00	0.20	477.5	PBHL(CF004H)
13989.0	90.00	0.20	9442.0	4751.9	16.6	0.00	0.00	4751.9	
DESIGN TARGET DETAILS									
Name		PBHL(CF004H)		TVD		+N-S		+E-W	
				9442.0		4751.9		16.6	
						Northing		Easting	
						461734.00		754364.70	

LEGEND
 - Design #1

Map System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone Name: New Mexico Eastern Zone
 Local Origin: Well #4H, Grid North
 Latitude: 32° 15' 15.984 N
 Longitude: 103° 36' 38.384 W
 Grid East: 754348.10
 Grid North: 456982.10
 Scale Factor: 1.000
 Geomagnetic Model: IGRF2010
 Sample Date: 17-Mar-14
 Magnetic Declination: 7.28° East
 Dip Angle: 60.13°
 Magnetic Field Strength: 48350
 To convert a Magnetic Direction to a Grid Direction, Add 6.91°
 To convert a Magnetic Direction to a True Direction, Add 7.28° East
 To convert a True Direction to a Grid Direction, Subtract 0.37°

Map Sheet
 16-A, March 17, 2014
 News Directional Solutions
 Odessa TX 79766



Wellplanning

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #4H
Company:	Energen Resources Corporation	TVD Reference:	WELL @ 3660.6usft (Original Well Elev)
Project:	Permian Basin(Lea County, NM)	MD Reference:	WELL @ 3660.6usft (Original Well Elev)
Site:	Cox Federal 35	North Reference:	Grid
Well:	#4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #1		

Project	Permian Basin(Lea County, NM)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Cox Federal 35				
Site Position:		Northing:	457,002.00 usft	Latitude:	32° 15' 16.060 N
From:	Lat/Long	Easting:	756,238.12 usft	Longitude:	103° 38' 17.374 W
Position Uncertainty:	2.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.37 °

Well	#4H					
Well Position	+N/-S	-19.9 usft	Northing:	456,982.10 usft	Latitude:	32° 15' 15.984 N
	+E/-W	-1,890.0 usft	Easting:	754,348.10 usft	Longitude:	103° 38' 39.384 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,630.6 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/17/2014	7.28	60.13	48,350

Design	Design #1				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	0.20	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
8,964.5	0.00	0.00	8,964.5	0.0	0.0	0.00	0.00	0.00	0.00	
9,714.6	90.00	0.20	9,442.0	477.5	1.7	12.00	12.00	0.00	0.20	
13,989.0	90.00	0.20	9,442.0	4,751.9	16.6	0.00	0.00	0.00	0.00	PBHL(CF004H)

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Site:	Cox Federal 35	North Reference:	Grid
Well:	#4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00

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Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
8,600.0	0.00	0.00	8,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
8,700.0	0.00	0.00	8,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
8,800.0	0.00	0.00	8,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
8,900.0	0.00	0.00	8,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
8,964.5	0.00	0.00	8,964.5	0.0	0.0	0.0	0.00	0.00	0.00	
8,975.0	1.26	0.20	8,975.0	0.1	0.0	0.1	12.00	12.00	0.00	
9,000.0	4.26	0.20	9,000.0	1.3	0.0	1.3	12.00	12.00	0.00	
9,025.0	7.26	0.20	9,024.8	3.8	0.0	3.8	12.00	12.00	0.00	
9,050.0	10.26	0.20	9,049.5	7.6	0.0	7.6	12.00	12.00	0.00	
9,075.0	13.26	0.20	9,074.0	12.7	0.0	12.7	12.00	12.00	0.00	
9,100.0	16.26	0.20	9,098.2	19.1	0.1	19.1	12.00	12.00	0.00	
9,125.0	19.26	0.20	9,122.0	26.7	0.1	26.7	12.00	12.00	0.00	
9,150.0	22.26	0.20	9,145.4	35.6	0.1	35.6	12.00	12.00	0.00	
9,175.0	25.26	0.20	9,168.2	45.7	0.2	45.7	12.00	12.00	0.00	
9,200.0	28.26	0.20	9,190.6	56.9	0.2	56.9	12.00	12.00	0.00	
9,225.0	31.26	0.20	9,212.3	69.3	0.2	69.3	12.00	12.00	0.00	
9,250.0	34.26	0.20	9,233.3	82.8	0.3	82.8	12.00	12.00	0.00	
9,275.0	37.26	0.20	9,253.6	97.4	0.3	97.4	12.00	12.00	0.00	
9,300.0	40.26	0.20	9,273.1	113.1	0.4	113.1	12.00	12.00	0.00	
9,325.0	43.26	0.20	9,291.7	129.7	0.5	129.7	12.00	12.00	0.00	
9,350.0	46.26	0.20	9,309.5	147.3	0.5	147.3	12.00	12.00	0.00	
9,375.0	49.26	0.20	9,326.3	165.8	0.6	165.8	12.00	12.00	0.00	

Wellplanning

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #4H
Company:	Energen Resources Corporation	TVD Reference:	WELL @ 3660.6usft (Original Well Elev)
Project:	Permian Basin(Lea County, NM)	MD Reference:	WELL @ 3660.6usft (Original Well Elev)
Site:	Cox Federal 35	North Reference:	Grid
Well:	#4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #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)	
9,400.0	52.26	0.20	9,342.1	185.2	0.6	185.2	12.00	12.00	0.00	
9,425.0	55.26	0.20	9,356.9	205.4	0.7	205.4	12.00	12.00	0.00	
9,450.0	58.26	0.20	9,370.6	226.3	0.8	226.3	12.00	12.00	0.00	
9,475.0	61.26	0.20	9,383.2	247.9	0.9	247.9	12.00	12.00	0.00	
9,500.0	64.26	0.20	9,394.6	270.1	0.9	270.1	12.00	12.00	0.00	
9,525.0	67.26	0.20	9,404.9	292.9	1.0	292.9	12.00	12.00	0.00	
9,550.0	70.25	0.20	9,413.9	316.2	1.1	316.2	12.00	12.00	0.00	
9,575.0	73.25	0.20	9,421.8	339.9	1.2	339.9	12.00	12.00	0.00	
9,600.0	76.25	0.20	9,428.3	364.0	1.3	364.0	12.00	12.00	0.00	
9,625.0	79.25	0.20	9,433.6	388.5	1.4	388.5	12.00	12.00	0.00	
9,650.0	82.25	0.20	9,437.6	413.1	1.4	413.1	12.00	12.00	0.00	
9,675.0	85.25	0.20	9,440.4	438.0	1.5	438.0	12.00	12.00	0.00	
9,700.0	88.25	0.20	9,441.8	462.9	1.6	462.9	12.00	12.00	0.00	
9,714.6	90.00	0.20	9,442.0	477.5	1.7	477.5	12.00	12.00	0.00	
9,800.0	90.00	0.20	9,442.0	562.9	2.0	562.9	0.00	0.00	0.00	
9,900.0	90.00	0.20	9,442.0	662.9	2.3	662.9	0.00	0.00	0.00	
10,000.0	90.00	0.20	9,442.0	762.9	2.7	762.9	0.00	0.00	0.00	
10,100.0	90.00	0.20	9,442.0	862.9	3.0	862.9	0.00	0.00	0.00	
10,200.0	90.00	0.20	9,442.0	962.9	3.4	962.9	0.00	0.00	0.00	
10,300.0	90.00	0.20	9,442.0	1,062.9	3.7	1,062.9	0.00	0.00	0.00	
10,400.0	90.00	0.20	9,442.0	1,162.9	4.1	1,162.9	0.00	0.00	0.00	
10,500.0	90.00	0.20	9,442.0	1,262.9	4.4	1,262.9	0.00	0.00	0.00	
10,600.0	90.00	0.20	9,442.0	1,362.9	4.8	1,362.9	0.00	0.00	0.00	
10,700.0	90.00	0.20	9,442.0	1,462.9	5.1	1,462.9	0.00	0.00	0.00	
10,800.0	90.00	0.20	9,442.0	1,562.9	5.5	1,562.9	0.00	0.00	0.00	
10,900.0	90.00	0.20	9,442.0	1,662.9	5.8	1,662.9	0.00	0.00	0.00	
11,000.0	90.00	0.20	9,442.0	1,762.9	6.2	1,762.9	0.00	0.00	0.00	
11,100.0	90.00	0.20	9,442.0	1,862.9	6.5	1,862.9	0.00	0.00	0.00	
11,200.0	90.00	0.20	9,442.0	1,962.9	6.9	1,962.9	0.00	0.00	0.00	
11,300.0	90.00	0.20	9,442.0	2,062.9	7.2	2,062.9	0.00	0.00	0.00	
11,400.0	90.00	0.20	9,442.0	2,162.9	7.6	2,162.9	0.00	0.00	0.00	
11,500.0	90.00	0.20	9,442.0	2,262.9	7.9	2,262.9	0.00	0.00	0.00	
11,600.0	90.00	0.20	9,442.0	2,362.9	8.2	2,362.9	0.00	0.00	0.00	
11,700.0	90.00	0.20	9,442.0	2,462.9	8.6	2,462.9	0.00	0.00	0.00	
11,800.0	90.00	0.20	9,442.0	2,562.9	8.9	2,562.9	0.00	0.00	0.00	
11,900.0	90.00	0.20	9,442.0	2,662.9	9.3	2,662.9	0.00	0.00	0.00	
12,000.0	90.00	0.20	9,442.0	2,762.9	9.6	2,762.9	0.00	0.00	0.00	
12,100.0	90.00	0.20	9,442.0	2,862.9	10.0	2,862.9	0.00	0.00	0.00	
12,200.0	90.00	0.20	9,442.0	2,962.9	10.3	2,962.9	0.00	0.00	0.00	
12,300.0	90.00	0.20	9,442.0	3,062.9	10.7	3,062.9	0.00	0.00	0.00	
12,400.0	90.00	0.20	9,442.0	3,162.9	11.0	3,162.9	0.00	0.00	0.00	
12,500.0	90.00	0.20	9,442.0	3,262.9	11.4	3,262.9	0.00	0.00	0.00	
12,600.0	90.00	0.20	9,442.0	3,362.9	11.7	3,362.9	0.00	0.00	0.00	
12,700.0	90.00	0.20	9,442.0	3,462.9	12.1	3,462.9	0.00	0.00	0.00	
12,800.0	90.00	0.20	9,442.0	3,562.9	12.4	3,562.9	0.00	0.00	0.00	
12,900.0	90.00	0.20	9,442.0	3,662.9	12.8	3,662.9	0.00	0.00	0.00	
13,000.0	90.00	0.20	9,442.0	3,762.9	13.1	3,762.9	0.00	0.00	0.00	
13,100.0	90.00	0.20	9,442.0	3,862.9	13.5	3,862.9	0.00	0.00	0.00	
13,200.0	90.00	0.20	9,442.0	3,962.9	13.8	3,962.9	0.00	0.00	0.00	
13,300.0	90.00	0.20	9,442.0	4,062.9	14.2	4,062.9	0.00	0.00	0.00	
13,400.0	90.00	0.20	9,442.0	4,162.9	14.5	4,162.9	0.00	0.00	0.00	
13,500.0	90.00	0.20	9,442.0	4,262.9	14.9	4,262.9	0.00	0.00	0.00	
13,600.0	90.00	0.20	9,442.0	4,362.9	15.2	4,362.9	0.00	0.00	0.00	
13,700.0	90.00	0.20	9,442.0	4,462.9	15.6	4,462.9	0.00	0.00	0.00	

Wellplanning

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #4H
Company:	Energen Resources Corporation	TVD Reference:	WELL @ 3660.6usft (Original Well Elev)
Project:	Permian Basin(Lea County, NM)	MD Reference:	WELL @ 3660.6usft (Original Well Elev)
Site:	Cox Federal 35	North Reference:	Grid
Well:	#4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #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)	
13,800.0	90.00	0.20	9,442.0	4,562.9	15.9	4,562.9	0.00	0.00	0.00	
13,900.0	90.00	0.20	9,442.0	4,662.9	16.3	4,662.9	0.00	0.00	0.00	
13,989.0	90.00	0.20	9,442.0	4,751.9	16.6	4,751.9	0.00	0.00	0.00	
PBHL(CF004H)										

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL(CF004H)	0.00	0.00	9,442.0	4,751.9	16.6	461,734.00	754,364.70	32° 16' 3.004 N	103° 38' 38.836 W
- plan hits target center									
- Point									