



Directional

NOBLE ENERGY INC WELD COUNTY CO

SEC.8-T3N-R67W

Berry P08-18D Pad Sec.8-T3N-R67W

Berry P08-28D

Wellbore #1

Plan: Plan #1 (9-3-09)

Standard Planning Report

04 September, 2009



Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Berry P08-28D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4832.0ft (Original Well Elev)
Project:	SEC.8-T3N-R67W	MD Reference:	WELL @ 4832.0ft (Original Well Elev)
Site:	Berry P08-18D Pad Sec.8-T3N-R67W	North Reference:	True
Well:	Berry P08-28D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (9-3-09)		

Project	SEC.8-T3N-R67W, Weld County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	Berry P08-18D Pad Sec.8-T3N-R67W				
Site Position:		Northing:	1,333,149.59 ft	Latitude:	40° 14' 47.112 N
From:	Lat/Long	Easting:	3,163,053.62 ft	Longitude:	104° 54' 57.132 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.38 °

Well	Berry P08-28D					
Well Position	+N/-S	40.1 ft	Northing:	1,333,189.66 ft	Latitude:	40° 14' 47.508 N
	+E/-W	0.0 ft	Easting:	3,163,053.36 ft	Longitude:	104° 54' 57.132 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,819.0 ft

Wellbore	Wellbore #1				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	9/3/2009	9.14	66.97	53,241

Design	Plan #1 (9-3-09)				
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Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	49.96	

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,147.3	14.95	49.96	2,138.8	62.4	74.2	2.00	2.00	0.00	49.96	
4,550.9	14.95	49.96	4,461.2	461.2	548.8	0.00	0.00	0.00	0.00	
5,298.2	0.00	0.00	5,200.0	523.5	623.0	2.00	-2.00	0.00	180.00	TARGET BHL 100'I
7,860.2	0.00	0.00	7,762.0	523.5	623.0	0.00	0.00	0.00	0.00	

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Project:	SEC.8-T3N-R67W	MD Reference:	WELL @ 4832.0ft (Original Well Elev)
Site:	Berry P08-18D Pad Sec.8-T3N-R67W	North Reference:	True
Well:	Berry P08-28D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (9-3-09)		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
40.0	0.00	0.00	40.0	0.0	0.0	0.0	0.00	0.00	0.00
80.0	0.00	0.00	80.0	0.0	0.0	0.0	0.00	0.00	0.00
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	0.00
160.0	0.00	0.00	160.0	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
240.0	0.00	0.00	240.0	0.0	0.0	0.0	0.00	0.00	0.00
280.0	0.00	0.00	280.0	0.0	0.0	0.0	0.00	0.00	0.00
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00
360.0	0.00	0.00	360.0	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
440.0	0.00	0.00	440.0	0.0	0.0	0.0	0.00	0.00	0.00
480.0	0.00	0.00	480.0	0.0	0.0	0.0	0.00	0.00	0.00
520.0	0.00	0.00	520.0	0.0	0.0	0.0	0.00	0.00	0.00
560.0	0.00	0.00	560.0	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
640.0	0.00	0.00	640.0	0.0	0.0	0.0	0.00	0.00	0.00
680.0	0.00	0.00	680.0	0.0	0.0	0.0	0.00	0.00	0.00
720.0	0.00	0.00	720.0	0.0	0.0	0.0	0.00	0.00	0.00
760.0	0.00	0.00	760.0	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
840.0	0.00	0.00	840.0	0.0	0.0	0.0	0.00	0.00	0.00
880.0	0.00	0.00	880.0	0.0	0.0	0.0	0.00	0.00	0.00
920.0	0.00	0.00	920.0	0.0	0.0	0.0	0.00	0.00	0.00
960.0	0.00	0.00	960.0	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
1,040.0	0.00	0.00	1,040.0	0.0	0.0	0.0	0.00	0.00	0.00
1,080.0	0.00	0.00	1,080.0	0.0	0.0	0.0	0.00	0.00	0.00
1,120.0	0.00	0.00	1,120.0	0.0	0.0	0.0	0.00	0.00	0.00
1,160.0	0.00	0.00	1,160.0	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
1,240.0	0.00	0.00	1,240.0	0.0	0.0	0.0	0.00	0.00	0.00
1,280.0	0.00	0.00	1,280.0	0.0	0.0	0.0	0.00	0.00	0.00
1,320.0	0.00	0.00	1,320.0	0.0	0.0	0.0	0.00	0.00	0.00
1,360.0	0.00	0.00	1,360.0	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
1,440.0	0.80	49.96	1,440.0	0.2	0.2	0.3	2.00	2.00	0.00
1,480.0	1.60	49.96	1,480.0	0.7	0.9	1.1	2.00	2.00	0.00
1,520.0	2.40	49.96	1,520.0	1.6	1.9	2.5	2.00	2.00	0.00
1,560.0	3.20	49.96	1,559.9	2.9	3.4	4.5	2.00	2.00	0.00
1,600.0	4.00	49.96	1,599.8	4.5	5.3	7.0	2.00	2.00	0.00
1,640.0	4.80	49.96	1,639.7	6.5	7.7	10.0	2.00	2.00	0.00
1,680.0	5.60	49.96	1,679.6	8.8	10.5	13.7	2.00	2.00	0.00
1,720.0	6.40	49.96	1,719.3	11.5	13.7	17.9	2.00	2.00	0.00
1,760.0	7.20	49.96	1,759.1	14.5	17.3	22.6	2.00	2.00	0.00
1,800.0	8.00	49.96	1,798.7	17.9	21.3	27.9	2.00	2.00	0.00
1,840.0	8.80	49.96	1,838.3	21.7	25.8	33.7	2.00	2.00	0.00
1,880.0	9.60	49.96	1,877.8	25.8	30.7	40.1	2.00	2.00	0.00
1,920.0	10.40	49.96	1,917.1	30.3	36.0	47.1	2.00	2.00	0.00
1,960.0	11.20	49.96	1,956.4	35.1	41.8	54.6	2.00	2.00	0.00
2,000.0	12.00	49.96	1,995.6	40.3	47.9	62.6	2.00	2.00	0.00
2,040.0	12.80	49.96	2,034.7	45.8	54.5	71.2	2.00	2.00	0.00
2,080.0	13.60	49.96	2,073.6	51.7	61.5	80.3	2.00	2.00	0.00
2,120.0	14.40	49.96	2,112.4	57.9	68.9	90.0	2.00	2.00	0.00

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Project:	SEC.8-T3N-R67W	MD Reference:	WELL @ 4832.0ft (Original Well Elev)
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Well:	Berry P08-28D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (9-3-09)		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
2,147.3	14.95	49.96	2,138.8	62.4	74.2	96.9	2.00	2.00	0.00
2,160.0	14.95	49.96	2,151.1	64.5	76.7	100.2	0.00	0.00	0.00
2,200.0	14.95	49.96	2,189.8	71.1	84.6	110.5	0.00	0.00	0.00
2,240.0	14.95	49.96	2,228.4	77.7	92.5	120.8	0.00	0.00	0.00
2,280.0	14.95	49.96	2,267.1	84.4	100.4	131.1	0.00	0.00	0.00
2,320.0	14.95	49.96	2,305.7	91.0	108.3	141.5	0.00	0.00	0.00
2,360.0	14.95	49.96	2,344.4	97.6	116.2	151.8	0.00	0.00	0.00
2,400.0	14.95	49.96	2,383.0	104.3	124.1	162.1	0.00	0.00	0.00
2,440.0	14.95	49.96	2,421.7	110.9	132.0	172.4	0.00	0.00	0.00
2,480.0	14.95	49.96	2,460.3	117.6	139.9	182.7	0.00	0.00	0.00
2,520.0	14.95	49.96	2,498.9	124.2	147.8	193.0	0.00	0.00	0.00
2,560.0	14.95	49.96	2,537.6	130.8	155.7	203.4	0.00	0.00	0.00
2,600.0	14.95	49.96	2,576.2	137.5	163.6	213.7	0.00	0.00	0.00
2,640.0	14.95	49.96	2,614.9	144.1	171.5	224.0	0.00	0.00	0.00
2,680.0	14.95	49.96	2,653.5	150.7	179.4	234.3	0.00	0.00	0.00
2,720.0	14.95	49.96	2,692.2	157.4	187.3	244.6	0.00	0.00	0.00
2,760.0	14.95	49.96	2,730.8	164.0	195.2	254.9	0.00	0.00	0.00
2,800.0	14.95	49.96	2,769.5	170.7	203.1	265.3	0.00	0.00	0.00
2,840.0	14.95	49.96	2,808.1	177.3	211.0	275.6	0.00	0.00	0.00
2,880.0	14.95	49.96	2,846.8	183.9	218.9	285.9	0.00	0.00	0.00
2,920.0	14.95	49.96	2,885.4	190.6	226.8	296.2	0.00	0.00	0.00
2,960.0	14.95	49.96	2,924.1	197.2	234.7	306.5	0.00	0.00	0.00
3,000.0	14.95	49.96	2,962.7	203.8	242.6	316.8	0.00	0.00	0.00
3,040.0	14.95	49.96	3,001.4	210.5	250.5	327.2	0.00	0.00	0.00
3,080.0	14.95	49.96	3,040.0	217.1	258.3	337.5	0.00	0.00	0.00
3,120.0	14.95	49.96	3,078.6	223.8	266.2	347.8	0.00	0.00	0.00
3,160.0	14.95	49.96	3,117.3	230.4	274.1	358.1	0.00	0.00	0.00
3,200.0	14.95	49.96	3,155.9	237.0	282.0	368.4	0.00	0.00	0.00
3,240.0	14.95	49.96	3,194.6	243.7	289.9	378.7	0.00	0.00	0.00
3,280.0	14.95	49.96	3,233.2	250.3	297.8	389.0	0.00	0.00	0.00
3,320.0	14.95	49.96	3,271.9	256.9	305.7	399.4	0.00	0.00	0.00
3,360.0	14.95	49.96	3,310.5	263.6	313.6	409.7	0.00	0.00	0.00
3,400.0	14.95	49.96	3,349.2	270.2	321.5	420.0	0.00	0.00	0.00
3,440.0	14.95	49.96	3,387.8	276.9	329.4	430.3	0.00	0.00	0.00
3,480.0	14.95	49.96	3,426.5	283.5	337.3	440.6	0.00	0.00	0.00
3,520.0	14.95	49.96	3,465.1	290.1	345.2	450.9	0.00	0.00	0.00
3,560.0	14.95	49.96	3,503.8	296.8	353.1	461.3	0.00	0.00	0.00
3,600.0	14.95	49.96	3,542.4	303.4	361.0	471.6	0.00	0.00	0.00
3,640.0	14.95	49.96	3,581.1	310.0	368.9	481.9	0.00	0.00	0.00
3,680.0	14.95	49.96	3,619.7	316.7	376.8	492.2	0.00	0.00	0.00
3,720.0	14.95	49.96	3,658.3	323.3	384.7	502.5	0.00	0.00	0.00
3,760.0	14.95	49.96	3,697.0	330.0	392.6	512.8	0.00	0.00	0.00
3,800.0	14.95	49.96	3,735.6	336.6	400.5	523.2	0.00	0.00	0.00
3,840.0	14.95	49.96	3,774.3	343.2	408.4	533.5	0.00	0.00	0.00
3,880.0	14.95	49.96	3,812.9	349.9	416.3	543.8	0.00	0.00	0.00
3,920.0	14.95	49.96	3,851.6	356.5	424.2	554.1	0.00	0.00	0.00
3,960.0	14.95	49.96	3,890.2	363.1	432.1	564.4	0.00	0.00	0.00
4,000.0	14.95	49.96	3,928.9	369.8	440.0	574.7	0.00	0.00	0.00
4,040.0	14.95	49.96	3,967.5	376.4	447.9	585.1	0.00	0.00	0.00
4,080.0	14.95	49.96	4,006.2	383.0	455.8	595.4	0.00	0.00	0.00
4,120.0	14.95	49.96	4,044.8	389.7	463.7	605.7	0.00	0.00	0.00
4,160.0	14.95	49.96	4,083.5	396.3	471.6	616.0	0.00	0.00	0.00
4,200.0	14.95	49.96	4,122.1	403.0	479.5	626.3	0.00	0.00	0.00
4,240.0	14.95	49.96	4,160.8	409.6	487.4	636.6	0.00	0.00	0.00

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Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,280.0	14.95	49.96	4,199.4	416.2	495.3	647.0	0.00	0.00	0.00
4,320.0	14.95	49.96	4,238.1	422.9	503.2	657.3	0.00	0.00	0.00
4,360.0	14.95	49.96	4,276.7	429.5	511.1	667.6	0.00	0.00	0.00
4,400.0	14.95	49.96	4,315.3	436.1	519.0	677.9	0.00	0.00	0.00
4,440.0	14.95	49.96	4,354.0	442.8	526.9	688.2	0.00	0.00	0.00
4,480.0	14.95	49.96	4,392.6	449.4	534.8	698.5	0.00	0.00	0.00
4,520.0	14.95	49.96	4,431.3	456.1	542.7	708.9	0.00	0.00	0.00
4,550.9	14.95	49.96	4,461.2	461.2	548.8	716.8	0.00	0.00	0.00
4,560.0	14.76	49.96	4,469.9	462.7	550.5	719.2	2.00	-2.00	0.00
4,600.0	13.96	49.96	4,508.7	469.1	558.1	729.1	2.00	-2.00	0.00
4,640.0	13.16	49.96	4,547.6	475.1	565.3	738.5	2.00	-2.00	0.00
4,680.0	12.36	49.96	4,586.6	480.8	572.1	747.3	2.00	-2.00	0.00
4,720.0	11.56	49.96	4,625.7	486.1	578.4	755.6	2.00	-2.00	0.00
4,760.0	10.76	49.96	4,665.0	491.1	584.4	763.3	2.00	-2.00	0.00
4,800.0	9.96	49.96	4,704.3	495.7	589.9	770.5	2.00	-2.00	0.00
4,840.0	9.16	49.96	4,743.7	500.0	595.0	777.2	2.00	-2.00	0.00
4,880.0	8.36	49.96	4,783.3	503.9	599.6	783.3	2.00	-2.00	0.00
4,920.0	7.56	49.96	4,822.9	507.5	603.9	788.8	2.00	-2.00	0.00
4,960.0	6.76	49.96	4,862.6	510.7	607.7	793.8	2.00	-2.00	0.00
5,000.0	5.96	49.96	4,902.3	513.6	611.1	798.2	2.00	-2.00	0.00
5,040.0	5.16	49.96	4,942.1	516.1	614.1	802.1	2.00	-2.00	0.00
5,080.0	4.36	49.96	4,982.0	518.2	616.6	805.4	2.00	-2.00	0.00
5,120.0	3.56	49.96	5,021.9	520.0	618.7	808.2	2.00	-2.00	0.00
5,160.0	2.76	49.96	5,061.8	521.4	620.4	810.4	2.00	-2.00	0.00
5,200.0	1.96	49.96	5,101.8	522.5	621.7	812.1	2.00	-2.00	0.00
5,240.0	1.16	49.96	5,141.8	523.2	622.5	813.1	2.00	-2.00	0.00
5,280.0	0.36	49.96	5,181.8	523.5	622.9	813.7	2.00	-2.00	0.00
5,298.2	0.00	0.00	5,200.0	523.5	623.0	813.7	2.00	-2.00	0.00
TARGET BHL 100'FSL, 2450'FEL									
5,320.0	0.00	0.00	5,221.8	523.5	623.0	813.7	0.00	0.00	0.00
5,360.0	0.00	0.00	5,261.8	523.5	623.0	813.7	0.00	0.00	0.00
5,400.0	0.00	0.00	5,301.8	523.5	623.0	813.7	0.00	0.00	0.00
5,440.0	0.00	0.00	5,341.8	523.5	623.0	813.7	0.00	0.00	0.00
5,480.0	0.00	0.00	5,381.8	523.5	623.0	813.7	0.00	0.00	0.00
5,520.0	0.00	0.00	5,421.8	523.5	623.0	813.7	0.00	0.00	0.00
5,560.0	0.00	0.00	5,461.8	523.5	623.0	813.7	0.00	0.00	0.00
5,600.0	0.00	0.00	5,501.8	523.5	623.0	813.7	0.00	0.00	0.00
5,640.0	0.00	0.00	5,541.8	523.5	623.0	813.7	0.00	0.00	0.00
5,680.0	0.00	0.00	5,581.8	523.5	623.0	813.7	0.00	0.00	0.00
5,720.0	0.00	0.00	5,621.8	523.5	623.0	813.7	0.00	0.00	0.00
5,760.0	0.00	0.00	5,661.8	523.5	623.0	813.7	0.00	0.00	0.00
5,800.0	0.00	0.00	5,701.8	523.5	623.0	813.7	0.00	0.00	0.00
5,840.0	0.00	0.00	5,741.8	523.5	623.0	813.7	0.00	0.00	0.00
5,880.0	0.00	0.00	5,781.8	523.5	623.0	813.7	0.00	0.00	0.00
5,920.0	0.00	0.00	5,821.8	523.5	623.0	813.7	0.00	0.00	0.00
5,960.0	0.00	0.00	5,861.8	523.5	623.0	813.7	0.00	0.00	0.00
6,000.0	0.00	0.00	5,901.8	523.5	623.0	813.7	0.00	0.00	0.00
6,040.0	0.00	0.00	5,941.8	523.5	623.0	813.7	0.00	0.00	0.00
6,080.0	0.00	0.00	5,981.8	523.5	623.0	813.7	0.00	0.00	0.00
6,120.0	0.00	0.00	6,021.8	523.5	623.0	813.7	0.00	0.00	0.00
6,160.0	0.00	0.00	6,061.8	523.5	623.0	813.7	0.00	0.00	0.00
6,200.0	0.00	0.00	6,101.8	523.5	623.0	813.7	0.00	0.00	0.00
6,240.0	0.00	0.00	6,141.8	523.5	623.0	813.7	0.00	0.00	0.00

Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Berry P08-28D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4832.0ft (Original Well Elev)
Project:	SEC.8-T3N-R67W	MD Reference:	WELL @ 4832.0ft (Original Well Elev)
Site:	Berry P08-18D Pad Sec.8-T3N-R67W	North Reference:	True
Well:	Berry P08-28D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (9-3-09)		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
6,280.0	0.00	0.00	6,181.8	523.5	623.0	813.7	0.00	0.00	0.00
6,320.0	0.00	0.00	6,221.8	523.5	623.0	813.7	0.00	0.00	0.00
6,360.0	0.00	0.00	6,261.8	523.5	623.0	813.7	0.00	0.00	0.00
6,400.0	0.00	0.00	6,301.8	523.5	623.0	813.7	0.00	0.00	0.00
6,440.0	0.00	0.00	6,341.8	523.5	623.0	813.7	0.00	0.00	0.00
6,480.0	0.00	0.00	6,381.8	523.5	623.0	813.7	0.00	0.00	0.00
6,520.0	0.00	0.00	6,421.8	523.5	623.0	813.7	0.00	0.00	0.00
6,560.0	0.00	0.00	6,461.8	523.5	623.0	813.7	0.00	0.00	0.00
6,600.0	0.00	0.00	6,501.8	523.5	623.0	813.7	0.00	0.00	0.00
6,640.0	0.00	0.00	6,541.8	523.5	623.0	813.7	0.00	0.00	0.00
6,680.0	0.00	0.00	6,581.8	523.5	623.0	813.7	0.00	0.00	0.00
6,720.0	0.00	0.00	6,621.8	523.5	623.0	813.7	0.00	0.00	0.00
6,760.0	0.00	0.00	6,661.8	523.5	623.0	813.7	0.00	0.00	0.00
6,800.0	0.00	0.00	6,701.8	523.5	623.0	813.7	0.00	0.00	0.00
6,840.0	0.00	0.00	6,741.8	523.5	623.0	813.7	0.00	0.00	0.00
6,880.0	0.00	0.00	6,781.8	523.5	623.0	813.7	0.00	0.00	0.00
6,920.0	0.00	0.00	6,821.8	523.5	623.0	813.7	0.00	0.00	0.00
6,960.0	0.00	0.00	6,861.8	523.5	623.0	813.7	0.00	0.00	0.00
6,960.2	0.00	0.00	6,862.0	523.5	623.0	813.7	0.00	0.00	0.00
NIOBRARA									
7,000.0	0.00	0.00	6,901.8	523.5	623.0	813.7	0.00	0.00	0.00
7,040.0	0.00	0.00	6,941.8	523.5	623.0	813.7	0.00	0.00	0.00
7,080.0	0.00	0.00	6,981.8	523.5	623.0	813.7	0.00	0.00	0.00
7,120.0	0.00	0.00	7,021.8	523.5	623.0	813.7	0.00	0.00	0.00
7,160.0	0.00	0.00	7,061.8	523.5	623.0	813.7	0.00	0.00	0.00
7,200.0	0.00	0.00	7,101.8	523.5	623.0	813.7	0.00	0.00	0.00
7,240.0	0.00	0.00	7,141.8	523.5	623.0	813.7	0.00	0.00	0.00
7,240.2	0.00	0.00	7,142.0	523.5	623.0	813.7	0.00	0.00	0.00
CODELL									
7,280.0	0.00	0.00	7,181.8	523.5	623.0	813.7	0.00	0.00	0.00
7,320.0	0.00	0.00	7,221.8	523.5	623.0	813.7	0.00	0.00	0.00
7,360.0	0.00	0.00	7,261.8	523.5	623.0	813.7	0.00	0.00	0.00
7,400.0	0.00	0.00	7,301.8	523.5	623.0	813.7	0.00	0.00	0.00
7,440.0	0.00	0.00	7,341.8	523.5	623.0	813.7	0.00	0.00	0.00
7,480.0	0.00	0.00	7,381.8	523.5	623.0	813.7	0.00	0.00	0.00
7,520.0	0.00	0.00	7,421.8	523.5	623.0	813.7	0.00	0.00	0.00
7,560.0	0.00	0.00	7,461.8	523.5	623.0	813.7	0.00	0.00	0.00
7,600.0	0.00	0.00	7,501.8	523.5	623.0	813.7	0.00	0.00	0.00
7,640.0	0.00	0.00	7,541.8	523.5	623.0	813.7	0.00	0.00	0.00
7,640.2	0.00	0.00	7,542.0	523.5	623.0	813.7	0.00	0.00	0.00
D-SAND									
7,680.0	0.00	0.00	7,581.8	523.5	623.0	813.7	0.00	0.00	0.00
7,710.2	0.00	0.00	7,612.0	523.5	623.0	813.7	0.00	0.00	0.00
J-SAND									
7,720.0	0.00	0.00	7,621.8	523.5	623.0	813.7	0.00	0.00	0.00
7,760.0	0.00	0.00	7,661.8	523.5	623.0	813.7	0.00	0.00	0.00
7,800.0	0.00	0.00	7,701.8	523.5	623.0	813.7	0.00	0.00	0.00
7,840.0	0.00	0.00	7,741.8	523.5	623.0	813.7	0.00	0.00	0.00
7,860.2	0.00	0.00	7,762.0	523.5	623.0	813.7	0.00	0.00	0.00
HARDLINE 100'S, 122'W OF BHL									

Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Berry P08-28D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4832.0ft (Original Well Elev)
Project:	SEC.8-T3N-R67W	MD Reference:	WELL @ 4832.0ft (Original Well Elev)
Site:	Berry P08-18D Pad Sec.8-T3N-R67W	North Reference:	True
Well:	Berry P08-28D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (9-3-09)		

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
TARGET BHL 100'FS	0.00	0.00	5,200.0	523.5	623.0	1,333,717.27	3,163,672.83	40° 14' 52.681 N	104° 54' 49.098 W
- plan hits target center									
- Point									
HARDLINE 100'S, 12'	0.00	0.00	7,762.0	423.5	501.0	1,333,616.43	3,163,551.54	40° 14' 51.693 N	104° 54' 50.671 W
- plan misses target center by 157.7ft at 7860.2ft MD (7762.0 TVD, 523.5 N, 623.0 E)									
- Polygon									
Point 1			7,762.0	0.0	0.0	1,333,616.43	3,163,551.54		
Point 2			7,762.0	0.0	200.0	1,333,617.75	3,163,751.52		
Point 3			7,762.0	0.0	0.0	1,333,616.43	3,163,551.54		
Point 4			7,762.0	200.0	0.0	1,333,816.42	3,163,550.22		

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
6,960.2	6,862.0	NIOBRARA		0.00		
7,240.2	7,142.0	CODELL		0.00		
7,640.2	7,542.0	D-SAND		0.00		
7,710.2	7,612.0	J-SAND		0.00		