



Directional

NOBLE ENERGY INC WELD COUNTY CO

SEC.8-T3N-R67W

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

Berry P08-18D

Wellbore #1

Plan: Plan #2 (9-15-09)

Standard Planning Report

15 September, 2009



Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Berry P08-18D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4831.0ft (Original Well Elev)
Project:	SEC.8-T3N-R67W	MD Reference:	WELL @ 4831.0ft (Original Well Elev)
Site:	Berry P08-18D Pad Sec.8-T3N-R67W	North Reference:	True
Well:	Berry P08-18D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (9-15-09)		

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:	1,333,149.59ft	Latitude:	40° 14' 47.112 N
From:	Lat/Long	Easting:	3,163,053.62ft	Longitude:	104° 54' 57.132 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.38 °

Well	Berry P08-18D					
Well Position	+N/-S	0.0 ft	Northing:	1,333,149.59 ft	Latitude:	40° 14' 47.112 N
	+E/-W	0.0 ft	Easting:	3,163,053.62 ft	Longitude:	104° 54' 57.132 W
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,818.0 ft	

Wellbore	Wellbore #1				
----------	-------------	--	--	--	--

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

Design	Plan #2 (9-15-09)				
--------	-------------------	--	--	--	--

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	156.18

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	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,350.0	7.00	200.00	1,349.1	-20.1	-7.3	2.00	2.00	0.00	200.00	
1,909.5	14.86	153.81	1,899.0	-116.8	12.8	2.00	1.40	-8.26	-72.49	
4,875.1	14.86	153.81	4,765.3	-799.2	348.5	0.00	0.00	0.00	0.00	
5,618.0	0.00	0.00	5,500.0	-885.2	390.8	2.00	-2.00	0.00	180.00	TARGET BHL 135C
7,404.0	0.00	0.00	7,286.0	-885.2	390.8	0.00	0.00	0.00	0.00	

Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Berry P08-18D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4831.0ft (Original Well Elev)
Project:	SEC.8-T3N-R67W	MD Reference:	WELL @ 4831.0ft (Original Well Elev)
Site:	Berry P08-18D Pad Sec.8-T3N-R67W	North Reference:	True
Well:	Berry P08-18D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (9-15-09)		

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	0.80	200.00	1,040.0	-0.3	-0.1	0.2	2.00	2.00	0.00
1,080.0	1.60	200.00	1,080.0	-1.0	-0.4	0.8	2.00	2.00	0.00
1,120.0	2.40	200.00	1,120.0	-2.4	-0.9	1.8	2.00	2.00	0.00
1,160.0	3.20	200.00	1,159.9	-4.2	-1.5	3.2	2.00	2.00	0.00
1,200.0	4.00	200.00	1,199.8	-6.6	-2.4	5.0	2.00	2.00	0.00
1,240.0	4.80	200.00	1,239.7	-9.4	-3.4	7.2	2.00	2.00	0.00
1,280.0	5.60	200.00	1,279.6	-12.8	-4.7	9.9	2.00	2.00	0.00
1,320.0	6.40	200.00	1,319.3	-16.8	-6.1	12.9	2.00	2.00	0.00
1,350.0	7.00	200.00	1,349.1	-20.1	-7.3	15.4	2.00	2.00	0.00
1,360.0	7.06	198.45	1,359.1	-21.2	-7.7	16.3	2.00	0.63	-15.51
1,400.0	7.36	192.54	1,398.7	-26.1	-9.0	20.2	2.00	0.75	-14.78
1,440.0	7.73	187.14	1,438.4	-31.2	-9.9	24.6	2.00	0.93	-13.50
1,480.0	8.17	182.27	1,478.0	-36.7	-10.4	29.4	2.00	1.08	-12.18
1,520.0	8.65	177.91	1,517.6	-42.6	-10.4	34.8	2.00	1.21	-10.89
1,560.0	9.18	174.03	1,557.1	-48.8	-9.9	40.6	2.00	1.32	-9.70
1,600.0	9.74	170.59	1,596.6	-55.3	-9.1	46.9	2.00	1.41	-8.61
1,640.0	10.34	167.53	1,635.9	-62.1	-7.7	53.7	2.00	1.49	-7.65
1,680.0	10.96	164.80	1,675.3	-69.3	-6.0	61.0	2.00	1.55	-6.81
1,720.0	11.61	162.37	1,714.5	-76.8	-3.7	68.7	2.00	1.61	-6.08
1,760.0	12.27	160.19	1,753.6	-84.6	-1.1	77.0	2.00	1.65	-5.44
1,800.0	12.94	158.24	1,792.6	-92.8	2.0	85.7	2.00	1.69	-4.88
1,840.0	13.63	156.48	1,831.6	-101.3	5.6	94.9	2.00	1.73	-4.40
1,880.0	14.34	154.89	1,870.4	-110.1	9.5	104.6	2.00	1.75	-3.98
1,909.5	14.86	153.81	1,899.0	-116.8	12.8	112.0	2.00	1.77	-3.66
1,920.0	14.86	153.81	1,909.1	-119.2	14.0	114.7	0.00	0.00	0.00
1,960.0	14.86	153.81	1,947.7	-128.4	18.5	124.9	0.00	0.00	0.00
2,000.0	14.86	153.81	1,986.4	-137.6	23.0	135.2	0.00	0.00	0.00
2,040.0	14.86	153.81	2,025.1	-146.8	27.5	145.4	0.00	0.00	0.00

Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Berry P08-18D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4831.0ft (Original Well Elev)
Project:	SEC.8-T3N-R67W	MD Reference:	WELL @ 4831.0ft (Original Well Elev)
Site:	Berry P08-18D Pad Sec.8-T3N-R67W	North Reference:	True
Well:	Berry P08-18D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (9-15-09)		

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)
2,080.0	14.86	153.81	2,063.7	-156.0	32.1	155.7	0.00	0.00	0.00
2,120.0	14.86	153.81	2,102.4	-165.2	36.6	165.9	0.00	0.00	0.00
2,160.0	14.86	153.81	2,141.1	-174.4	41.1	176.2	0.00	0.00	0.00
2,200.0	14.86	153.81	2,179.7	-183.6	45.7	186.4	0.00	0.00	0.00
2,240.0	14.86	153.81	2,218.4	-192.8	50.2	196.7	0.00	0.00	0.00
2,280.0	14.86	153.81	2,257.0	-202.0	54.7	206.9	0.00	0.00	0.00
2,320.0	14.86	153.81	2,295.7	-211.2	59.2	217.2	0.00	0.00	0.00
2,360.0	14.86	153.81	2,334.4	-220.4	63.8	227.4	0.00	0.00	0.00
2,400.0	14.86	153.81	2,373.0	-229.7	68.3	237.7	0.00	0.00	0.00
2,440.0	14.86	153.81	2,411.7	-238.9	72.8	247.9	0.00	0.00	0.00
2,480.0	14.86	153.81	2,450.4	-248.1	77.3	258.2	0.00	0.00	0.00
2,520.0	14.86	153.81	2,489.0	-257.3	81.9	268.4	0.00	0.00	0.00
2,560.0	14.86	153.81	2,527.7	-266.5	86.4	278.7	0.00	0.00	0.00
2,600.0	14.86	153.81	2,566.3	-275.7	90.9	288.9	0.00	0.00	0.00
2,640.0	14.86	153.81	2,605.0	-284.9	95.5	299.2	0.00	0.00	0.00
2,680.0	14.86	153.81	2,643.7	-294.1	100.0	309.4	0.00	0.00	0.00
2,720.0	14.86	153.81	2,682.3	-303.3	104.5	319.7	0.00	0.00	0.00
2,760.0	14.86	153.81	2,721.0	-312.5	109.0	329.9	0.00	0.00	0.00
2,800.0	14.86	153.81	2,759.7	-321.7	113.6	340.2	0.00	0.00	0.00
2,840.0	14.86	153.81	2,798.3	-330.9	118.1	350.4	0.00	0.00	0.00
2,880.0	14.86	153.81	2,837.0	-340.1	122.6	360.7	0.00	0.00	0.00
2,920.0	14.86	153.81	2,875.6	-349.3	127.2	370.9	0.00	0.00	0.00
2,960.0	14.86	153.81	2,914.3	-358.5	131.7	381.2	0.00	0.00	0.00
3,000.0	14.86	153.81	2,953.0	-367.7	136.2	391.4	0.00	0.00	0.00
3,040.0	14.86	153.81	2,991.6	-376.9	140.7	401.7	0.00	0.00	0.00
3,080.0	14.86	153.81	3,030.3	-386.1	145.3	411.9	0.00	0.00	0.00
3,120.0	14.86	153.81	3,069.0	-395.3	149.8	422.2	0.00	0.00	0.00
3,160.0	14.86	153.81	3,107.6	-404.5	154.3	432.4	0.00	0.00	0.00
3,200.0	14.86	153.81	3,146.3	-413.7	158.9	442.7	0.00	0.00	0.00
3,240.0	14.86	153.81	3,184.9	-423.0	163.4	452.9	0.00	0.00	0.00
3,280.0	14.86	153.81	3,223.6	-432.2	167.9	463.2	0.00	0.00	0.00
3,320.0	14.86	153.81	3,262.3	-441.4	172.4	473.4	0.00	0.00	0.00
3,360.0	14.86	153.81	3,300.9	-450.6	177.0	483.7	0.00	0.00	0.00
3,400.0	14.86	153.81	3,339.6	-459.8	181.5	493.9	0.00	0.00	0.00
3,440.0	14.86	153.81	3,378.3	-469.0	186.0	504.2	0.00	0.00	0.00
3,480.0	14.86	153.81	3,416.9	-478.2	190.6	514.4	0.00	0.00	0.00
3,520.0	14.86	153.81	3,455.6	-487.4	195.1	524.7	0.00	0.00	0.00
3,560.0	14.86	153.81	3,494.2	-496.6	199.6	534.9	0.00	0.00	0.00
3,600.0	14.86	153.81	3,532.9	-505.8	204.1	545.2	0.00	0.00	0.00
3,640.0	14.86	153.81	3,571.6	-515.0	208.7	555.4	0.00	0.00	0.00
3,680.0	14.86	153.81	3,610.2	-524.2	213.2	565.7	0.00	0.00	0.00
3,720.0	14.86	153.81	3,648.9	-533.4	217.7	575.9	0.00	0.00	0.00
3,760.0	14.86	153.81	3,687.6	-542.6	222.3	586.2	0.00	0.00	0.00
3,800.0	14.86	153.81	3,726.2	-551.8	226.8	596.4	0.00	0.00	0.00
3,840.0	14.86	153.81	3,764.9	-561.0	231.3	606.6	0.00	0.00	0.00
3,880.0	14.86	153.81	3,803.5	-570.2	235.8	616.9	0.00	0.00	0.00
3,920.0	14.86	153.81	3,842.2	-579.4	240.4	627.1	0.00	0.00	0.00
3,960.0	14.86	153.81	3,880.9	-588.6	244.9	637.4	0.00	0.00	0.00
4,000.0	14.86	153.81	3,919.5	-597.8	249.4	647.6	0.00	0.00	0.00
4,040.0	14.86	153.81	3,958.2	-607.0	254.0	657.9	0.00	0.00	0.00
4,080.0	14.86	153.81	3,996.8	-616.2	258.5	668.1	0.00	0.00	0.00
4,120.0	14.86	153.81	4,035.5	-625.5	263.0	678.4	0.00	0.00	0.00
4,160.0	14.86	153.81	4,074.2	-634.7	267.5	688.6	0.00	0.00	0.00
4,200.0	14.86	153.81	4,112.8	-643.9	272.1	698.9	0.00	0.00	0.00

Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Berry P08-18D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4831.0ft (Original Well Elev)
Project:	SEC.8-T3N-R67W	MD Reference:	WELL @ 4831.0ft (Original Well Elev)
Site:	Berry P08-18D Pad Sec.8-T3N-R67W	North Reference:	True
Well:	Berry P08-18D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (9-15-09)		

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)
4,240.0	14.86	153.81	4,151.5	-653.1	276.6	709.1	0.00	0.00	0.00
4,280.0	14.86	153.81	4,190.2	-662.3	281.1	719.4	0.00	0.00	0.00
4,320.0	14.86	153.81	4,228.8	-671.5	285.6	729.6	0.00	0.00	0.00
4,360.0	14.86	153.81	4,267.5	-680.7	290.2	739.9	0.00	0.00	0.00
4,400.0	14.86	153.81	4,306.1	-689.9	294.7	750.1	0.00	0.00	0.00
4,440.0	14.86	153.81	4,344.8	-699.1	299.2	760.4	0.00	0.00	0.00
4,480.0	14.86	153.81	4,383.5	-708.3	303.8	770.6	0.00	0.00	0.00
4,520.0	14.86	153.81	4,422.1	-717.5	308.3	780.9	0.00	0.00	0.00
4,560.0	14.86	153.81	4,460.8	-726.7	312.8	791.1	0.00	0.00	0.00
4,600.0	14.86	153.81	4,499.5	-735.9	317.3	801.4	0.00	0.00	0.00
4,640.0	14.86	153.81	4,538.1	-745.1	321.9	811.6	0.00	0.00	0.00
4,680.0	14.86	153.81	4,576.8	-754.3	326.4	821.9	0.00	0.00	0.00
4,720.0	14.86	153.81	4,615.4	-763.5	330.9	832.1	0.00	0.00	0.00
4,760.0	14.86	153.81	4,654.1	-772.7	335.5	842.4	0.00	0.00	0.00
4,800.0	14.86	153.81	4,692.8	-781.9	340.0	852.6	0.00	0.00	0.00
4,840.0	14.86	153.81	4,731.4	-791.1	344.5	862.9	0.00	0.00	0.00
4,875.1	14.86	153.81	4,765.3	-799.2	348.5	871.9	0.00	0.00	0.00
4,880.0	14.76	153.81	4,770.1	-800.3	349.0	873.1	2.00	-2.00	0.00
4,920.0	13.96	153.81	4,808.8	-809.2	353.4	883.0	2.00	-2.00	0.00
4,960.0	13.16	153.81	4,847.7	-817.7	357.6	892.4	2.00	-2.00	0.00
5,000.0	12.36	153.81	4,886.7	-825.6	361.5	901.2	2.00	-2.00	0.00
5,040.0	11.56	153.81	4,925.9	-833.0	365.1	909.5	2.00	-2.00	0.00
5,080.0	10.76	153.81	4,965.1	-840.0	368.5	917.3	2.00	-2.00	0.00
5,120.0	9.96	153.81	5,004.5	-846.4	371.7	924.4	2.00	-2.00	0.00
5,160.0	9.16	153.81	5,043.9	-852.4	374.6	931.1	2.00	-2.00	0.00
5,200.0	8.36	153.81	5,083.4	-857.8	377.3	937.2	2.00	-2.00	0.00
5,240.0	7.56	153.81	5,123.1	-862.8	379.8	942.7	2.00	-2.00	0.00
5,280.0	6.76	153.81	5,162.7	-867.3	382.0	947.7	2.00	-2.00	0.00
5,320.0	5.96	153.81	5,202.5	-871.3	383.9	952.1	2.00	-2.00	0.00
5,360.0	5.16	153.81	5,242.3	-874.7	385.6	956.0	2.00	-2.00	0.00
5,400.0	4.36	153.81	5,282.2	-877.7	387.1	959.3	2.00	-2.00	0.00
5,440.0	3.56	153.81	5,322.1	-880.2	388.3	962.1	2.00	-2.00	0.00
5,480.0	2.76	153.81	5,362.0	-882.2	389.3	964.3	2.00	-2.00	0.00
5,520.0	1.96	153.81	5,402.0	-883.7	390.0	965.9	2.00	-2.00	0.00
5,560.0	1.16	153.81	5,442.0	-884.6	390.5	967.0	2.00	-2.00	0.00
5,600.0	0.36	153.81	5,482.0	-885.1	390.8	967.5	2.00	-2.00	0.00
5,618.0	0.00	0.00	5,500.0	-885.2	390.8	967.6	2.00	-2.00	0.00
TARGET BHL 1350'FNL, 2450'FWL									
5,640.0	0.00	0.00	5,522.0	-885.2	390.8	967.6	0.00	0.00	0.00
5,680.0	0.00	0.00	5,562.0	-885.2	390.8	967.6	0.00	0.00	0.00
5,720.0	0.00	0.00	5,602.0	-885.2	390.8	967.6	0.00	0.00	0.00
5,760.0	0.00	0.00	5,642.0	-885.2	390.8	967.6	0.00	0.00	0.00
5,800.0	0.00	0.00	5,682.0	-885.2	390.8	967.6	0.00	0.00	0.00
5,840.0	0.00	0.00	5,722.0	-885.2	390.8	967.6	0.00	0.00	0.00
5,880.0	0.00	0.00	5,762.0	-885.2	390.8	967.6	0.00	0.00	0.00
5,920.0	0.00	0.00	5,802.0	-885.2	390.8	967.6	0.00	0.00	0.00
5,960.0	0.00	0.00	5,842.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,000.0	0.00	0.00	5,882.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,040.0	0.00	0.00	5,922.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,080.0	0.00	0.00	5,962.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,120.0	0.00	0.00	6,002.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,160.0	0.00	0.00	6,042.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,200.0	0.00	0.00	6,082.0	-885.2	390.8	967.6	0.00	0.00	0.00

Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Berry P08-18D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4831.0ft (Original Well Elev)
Project:	SEC.8-T3N-R67W	MD Reference:	WELL @ 4831.0ft (Original Well Elev)
Site:	Berry P08-18D Pad Sec.8-T3N-R67W	North Reference:	True
Well:	Berry P08-18D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (9-15-09)		

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)
6,240.0	0.00	0.00	6,122.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,280.0	0.00	0.00	6,162.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,320.0	0.00	0.00	6,202.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,360.0	0.00	0.00	6,242.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,400.0	0.00	0.00	6,282.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,440.0	0.00	0.00	6,322.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,480.0	0.00	0.00	6,362.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,520.0	0.00	0.00	6,402.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,560.0	0.00	0.00	6,442.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,600.0	0.00	0.00	6,482.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,640.0	0.00	0.00	6,522.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,680.0	0.00	0.00	6,562.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,720.0	0.00	0.00	6,602.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,760.0	0.00	0.00	6,642.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,800.0	0.00	0.00	6,682.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,840.0	0.00	0.00	6,722.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,880.0	0.00	0.00	6,762.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,920.0	0.00	0.00	6,802.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,960.0	0.00	0.00	6,842.0	-885.2	390.8	967.6	0.00	0.00	0.00
6,979.0	0.00	0.00	6,861.0	-885.2	390.8	967.6	0.00	0.00	0.00
NIOBRARA									
7,000.0	0.00	0.00	6,882.0	-885.2	390.8	967.6	0.00	0.00	0.00
7,040.0	0.00	0.00	6,922.0	-885.2	390.8	967.6	0.00	0.00	0.00
7,080.0	0.00	0.00	6,962.0	-885.2	390.8	967.6	0.00	0.00	0.00
7,120.0	0.00	0.00	7,002.0	-885.2	390.8	967.6	0.00	0.00	0.00
7,160.0	0.00	0.00	7,042.0	-885.2	390.8	967.6	0.00	0.00	0.00
7,200.0	0.00	0.00	7,082.0	-885.2	390.8	967.6	0.00	0.00	0.00
7,240.0	0.00	0.00	7,122.0	-885.2	390.8	967.6	0.00	0.00	0.00
7,254.0	0.00	0.00	7,136.0	-885.2	390.8	967.6	0.00	0.00	0.00
CODELL									
7,280.0	0.00	0.00	7,162.0	-885.2	390.8	967.6	0.00	0.00	0.00
7,320.0	0.00	0.00	7,202.0	-885.2	390.8	967.6	0.00	0.00	0.00
7,360.0	0.00	0.00	7,242.0	-885.2	390.8	967.6	0.00	0.00	0.00
7,400.0	0.00	0.00	7,282.0	-885.2	390.8	967.6	0.00	0.00	0.00
7,404.0	0.00	0.00	7,286.0	-885.2	390.8	967.6	0.00	0.00	0.00
HARDLINE 125'E OF BHL									

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
TARGET BHL 1350'F	0.00	0.00	5,500.0	-885.2	390.8	1,332,267.05	3,163,450.20	40° 14' 38.365 N	104° 54' 52.093 W
- plan hits target center									
- Point									
HARDLINE 125'E OF	0.00	0.00	7,286.0	-995.2	515.8	1,332,157.85	3,163,575.94	40° 14' 37.277 N	104° 54' 50.480 W
- plan misses target center by 166.5ft at 7404.0ft MD (7286.0 TVD, -885.2 N, 390.8 E)									
- Polygon									
Point 1			7,286.0	0.0	0.0	1,332,157.85	3,163,575.94		
Point 2			7,286.0	200.0	0.0	1,332,357.84	3,163,574.63		

Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Berry P08-18D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4831.0ft (Original Well Elev)
Project:	SEC.8-T3N-R67W	MD Reference:	WELL @ 4831.0ft (Original Well Elev)
Site:	Berry P08-18D Pad Sec.8-T3N-R67W	North Reference:	True
Well:	Berry P08-18D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (9-15-09)		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
6,979.0	6,861.0	NIOBRARA		0.00		
7,254.0	7,136.0	CODELL		0.00		