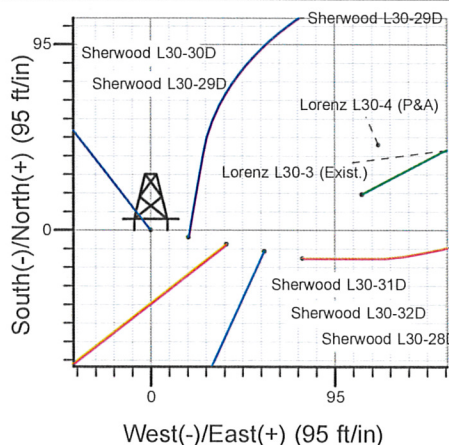
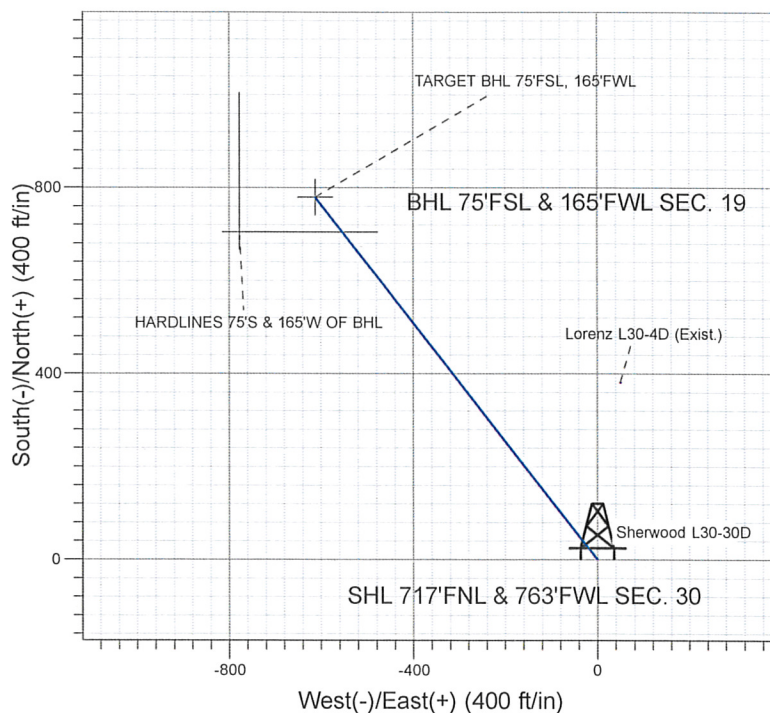
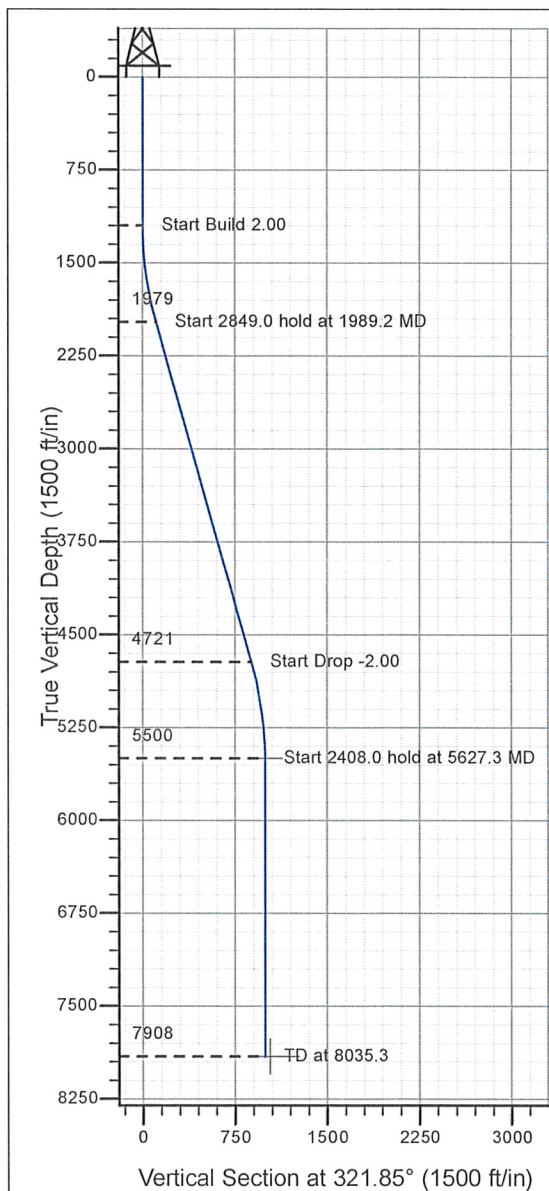


Well Name: Sherwood L30-30D

Surface Location: Sherwood Pad Sec.30-T3N-R66W
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
 Ground Elevation: 4820.0
 +N/-S+E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1316721.10 3187891.33 40° 12' 3.024 N 104° 49' 38.424 W
 Original Well Elev WELL @ 4833.0ft (Original Well Elev)

NOBLE ENERGY INC WELD COUNTY CO



Sherwood Pad Sec.30-T3N-R66W
 Sherwood L30-30D
 Plan #3 (08-03-09)
 17:10, August 03 2009

Azimuths to True North
 Magnetic North: 9.11°
 Magnetic Field
 Strength: 53244.7snT
 Dip Angle: 66.95°
 Date: 6/30/2009
 Model: IGRF200510

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 75'FSL, 165'FWL	5500.0	779.2	-612.2	40° 12' 10.724 N	104° 49' 46.313 W	Point
HARDLINES 75'S & 165'W OF BHL	7908.0	704.2	-777.2	40° 12' 9.983 N	104° 49' 48.440 W	Polygon

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1200.0	0.00	0.00	1200.0	0.0	0.0	0.00	0.00	0.0	
3	1989.2	15.78	321.85	1979.2	84.9	-66.7	2.00	321.85	108.0	
4	4838.1	15.78	321.85	4720.8	694.3	-545.4	0.00	0.00	882.9	
5	5627.3	0.00	0.00	5500.0	779.2	-612.2	2.00	180.00	990.9	TARGET BHL 75'FSL, 165'FWL
6	8035.3	0.00	0.00	7908.0	779.2	-612.2	0.00	0.00	990.9	



Directional

NOBLE ENERGY INC WELD COUNTY CO

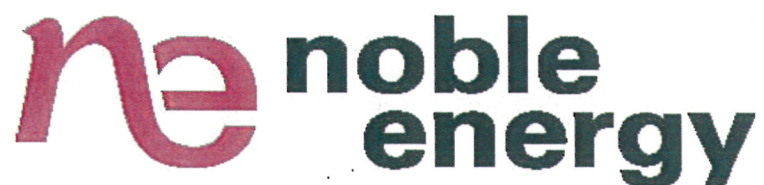
**SEC.30-T3N-R66W
Sherwood Pad Sec.30-T3N-R66W
Sherwood L30-30D**

Wellbore #1

Plan: Plan #3 (08-03-09)

Standard Planning Report

03 August, 2009



Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Sherwood L30-30D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4833.0ft (Original Well Elev)
Project:	SEC.30-T3N-R66W	MD Reference:	WELL @ 4833.0ft (Original Well Elev)
Site:	Sherwood Pad Sec.30-T3N-R66W	North Reference:	True
Well:	Sherwood L30-30D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 (08-03-09)		

Project	SEC.30-T3N-R66W, Weld County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	Sherwood Pad Sec.30-T3N-R66W				
Site Position:		Northing:	1,316,714.12 ft	Latitude:	40° 12' 2.952 N
From:	Lat/Long	Easting:	3,187,930.49 ft	Longitude:	104° 49' 37.920 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.43 °

Well	Sherwood L30-30D					
Well Position	+N/-S	7.3 ft	Northing:	1,316,721.10 ft	Latitude:	40° 12' 3.024 N
	+E/-W	-39.1 ft	Easting:	3,187,891.33 ft	Longitude:	104° 49' 38.424 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,820.0 ft

Wellbore	Wellbore #1
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	6/30/2009	9.11	66.95	53,245

Design	Plan #3 (08-03-09)
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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	321.85

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	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,989.2	15.78	321.85	1,979.2	84.9	-66.7	2.00	2.00	0.00	321.85	
4,838.1	15.78	321.85	4,720.8	694.3	-545.4	0.00	0.00	0.00	0.00	
5,627.3	0.00	0.00	5,500.0	779.2	-612.2	2.00	-2.00	0.00	180.00	TARGET BHL 75°F
8,035.3	0.00	0.00	7,908.0	779.2	-612.2	0.00	0.00	0.00	0.00	

Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Sherwood L30-30D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4833.0ft (Original Well Elev)
Project:	SEC.30-T3N-R66W	MD Reference:	WELL @ 4833.0ft (Original Well Elev)
Site:	Sherwood Pad Sec.30-T3N-R66W	North Reference:	True
Well:	Sherwood L30-30D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 (08-03-09)		

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	0.80	321.85	1,240.0	0.2	-0.2	0.3	2.00	2.00	0.00
1,280.0	1.60	321.85	1,280.0	0.9	-0.7	1.1	2.00	2.00	0.00
1,320.0	2.40	321.85	1,320.0	2.0	-1.6	2.5	2.00	2.00	0.00
1,360.0	3.20	321.85	1,359.9	3.5	-2.8	4.5	2.00	2.00	0.00
1,400.0	4.00	321.85	1,399.8	5.5	-4.3	7.0	2.00	2.00	0.00
1,440.0	4.80	321.85	1,439.7	7.9	-6.2	10.0	2.00	2.00	0.00
1,480.0	5.60	321.85	1,479.6	10.8	-8.4	13.7	2.00	2.00	0.00
1,520.0	6.40	321.85	1,519.3	14.0	-11.0	17.9	2.00	2.00	0.00
1,560.0	7.20	321.85	1,559.1	17.8	-14.0	22.6	2.00	2.00	0.00
1,600.0	8.00	321.85	1,598.7	21.9	-17.2	27.9	2.00	2.00	0.00
1,640.0	8.80	321.85	1,638.3	26.5	-20.8	33.7	2.00	2.00	0.00
1,680.0	9.60	321.85	1,677.8	31.5	-24.8	40.1	2.00	2.00	0.00
1,720.0	10.40	321.85	1,717.1	37.0	-29.1	47.1	2.00	2.00	0.00
1,760.0	11.20	321.85	1,756.4	42.9	-33.7	54.6	2.00	2.00	0.00
1,800.0	12.00	321.85	1,795.6	49.2	-38.7	62.6	2.00	2.00	0.00
1,840.0	12.80	321.85	1,834.7	56.0	-44.0	71.2	2.00	2.00	0.00
1,880.0	13.60	321.85	1,873.6	63.2	-49.6	80.3	2.00	2.00	0.00
1,920.0	14.40	321.85	1,912.4	70.8	-55.6	90.0	2.00	2.00	0.00
1,960.0	15.20	321.85	1,951.1	78.8	-61.9	100.2	2.00	2.00	0.00
1,989.2	15.78	321.85	1,979.2	84.9	-66.7	108.0	2.00	2.00	0.00
2,000.0	15.78	321.85	1,989.6	87.3	-68.5	111.0	0.00	0.00	0.00
2,040.0	15.78	321.85	2,028.1	95.8	-75.3	121.8	0.00	0.00	0.00
2,080.0	15.78	321.85	2,066.6	104.4	-82.0	132.7	0.00	0.00	0.00

Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Sherwood L30-30D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4833.0ft (Original Well Elev)
Project:	SEC.30-T3N-R66W	MD Reference:	WELL @ 4833.0ft (Original Well Elev)
Site:	Sherwood Pad Sec.30-T3N-R66W	North Reference:	True
Well:	Sherwood L30-30D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 (08-03-09)		

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)
2,120.0	15.78	321.85	2,105.1	112.9	-88.7	143.6	0.00	0.00	0.00
2,160.0	15.78	321.85	2,143.6	121.5	-95.4	154.5	0.00	0.00	0.00
2,200.0	15.78	321.85	2,182.1	130.0	-102.2	165.4	0.00	0.00	0.00
2,240.0	15.78	321.85	2,220.6	138.6	-108.9	176.2	0.00	0.00	0.00
2,280.0	15.78	321.85	2,259.1	147.1	-115.6	187.1	0.00	0.00	0.00
2,320.0	15.78	321.85	2,297.6	155.7	-122.3	198.0	0.00	0.00	0.00
2,360.0	15.78	321.85	2,336.1	164.3	-129.0	208.9	0.00	0.00	0.00
2,400.0	15.78	321.85	2,374.6	172.8	-135.8	219.8	0.00	0.00	0.00
2,440.0	15.78	321.85	2,413.1	181.4	-142.5	230.6	0.00	0.00	0.00
2,480.0	15.78	321.85	2,451.6	189.9	-149.2	241.5	0.00	0.00	0.00
2,520.0	15.78	321.85	2,490.0	198.5	-155.9	252.4	0.00	0.00	0.00
2,560.0	15.78	321.85	2,528.5	207.0	-162.6	263.3	0.00	0.00	0.00
2,600.0	15.78	321.85	2,567.0	215.6	-169.4	274.2	0.00	0.00	0.00
2,640.0	15.78	321.85	2,605.5	224.1	-176.1	285.0	0.00	0.00	0.00
2,680.0	15.78	321.85	2,644.0	232.7	-182.8	295.9	0.00	0.00	0.00
2,720.0	15.78	321.85	2,682.5	241.3	-189.5	306.8	0.00	0.00	0.00
2,760.0	15.78	321.85	2,721.0	249.8	-196.2	317.7	0.00	0.00	0.00
2,800.0	15.78	321.85	2,759.5	258.4	-203.0	328.6	0.00	0.00	0.00
2,840.0	15.78	321.85	2,798.0	266.9	-209.7	339.4	0.00	0.00	0.00
2,880.0	15.78	321.85	2,836.5	275.5	-216.4	350.3	0.00	0.00	0.00
2,920.0	15.78	321.85	2,875.0	284.0	-223.1	361.2	0.00	0.00	0.00
2,960.0	15.78	321.85	2,913.5	292.6	-229.9	372.1	0.00	0.00	0.00
3,000.0	15.78	321.85	2,951.9	301.1	-236.6	383.0	0.00	0.00	0.00
3,040.0	15.78	321.85	2,990.4	309.7	-243.3	393.8	0.00	0.00	0.00
3,080.0	15.78	321.85	3,028.9	318.3	-250.0	404.7	0.00	0.00	0.00
3,120.0	15.78	321.85	3,067.4	326.8	-256.7	415.6	0.00	0.00	0.00
3,160.0	15.78	321.85	3,105.9	335.4	-263.5	426.5	0.00	0.00	0.00
3,200.0	15.78	321.85	3,144.4	343.9	-270.2	437.4	0.00	0.00	0.00
3,240.0	15.78	321.85	3,182.9	352.5	-276.9	448.2	0.00	0.00	0.00
3,280.0	15.78	321.85	3,221.4	361.0	-283.6	459.1	0.00	0.00	0.00
3,320.0	15.78	321.85	3,259.9	369.6	-290.3	470.0	0.00	0.00	0.00
3,360.0	15.78	321.85	3,298.4	378.1	-297.1	480.9	0.00	0.00	0.00
3,400.0	15.78	321.85	3,336.9	386.7	-303.8	491.8	0.00	0.00	0.00
3,440.0	15.78	321.85	3,375.4	395.3	-310.5	502.6	0.00	0.00	0.00
3,480.0	15.78	321.85	3,413.8	403.8	-317.2	513.5	0.00	0.00	0.00
3,520.0	15.78	321.85	3,452.3	412.4	-323.9	524.4	0.00	0.00	0.00
3,560.0	15.78	321.85	3,490.8	420.9	-330.7	535.3	0.00	0.00	0.00
3,600.0	15.78	321.85	3,529.3	429.5	-337.4	546.2	0.00	0.00	0.00
3,640.0	15.78	321.85	3,567.8	438.0	-344.1	557.0	0.00	0.00	0.00
3,680.0	15.78	321.85	3,606.3	446.6	-350.8	567.9	0.00	0.00	0.00
3,720.0	15.78	321.85	3,644.8	455.1	-357.6	578.8	0.00	0.00	0.00
3,760.0	15.78	321.85	3,683.3	463.7	-364.3	589.7	0.00	0.00	0.00
3,800.0	15.78	321.85	3,721.8	472.3	-371.0	600.6	0.00	0.00	0.00
3,840.0	15.78	321.85	3,760.3	480.8	-377.7	611.4	0.00	0.00	0.00
3,880.0	15.78	321.85	3,798.8	489.4	-384.4	622.3	0.00	0.00	0.00
3,920.0	15.78	321.85	3,837.3	497.9	-391.2	633.2	0.00	0.00	0.00
3,960.0	15.78	321.85	3,875.8	506.5	-397.9	644.1	0.00	0.00	0.00
4,000.0	15.78	321.85	3,914.2	515.0	-404.6	655.0	0.00	0.00	0.00
4,040.0	15.78	321.85	3,952.7	523.6	-411.3	665.8	0.00	0.00	0.00
4,080.0	15.78	321.85	3,991.2	532.1	-418.0	676.7	0.00	0.00	0.00
4,120.0	15.78	321.85	4,029.7	540.7	-424.8	687.6	0.00	0.00	0.00
4,160.0	15.78	321.85	4,068.2	549.3	-431.5	698.5	0.00	0.00	0.00
4,200.0	15.78	321.85	4,106.7	557.8	-438.2	709.4	0.00	0.00	0.00
4,240.0	15.78	321.85	4,145.2	566.4	-444.9	720.2	0.00	0.00	0.00

Database: EDM den0-adp01 Server Data
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.30-T3N-R66W
Site: Sherwood Pad Sec.30-T3N-R66W
Well: Sherwood L30-30D
Wellbore: Wellbore #1
Design: Plan #3 (08-03-09)

Local Co-ordinate Reference: Well Sherwood L30-30D
TVD Reference: WELL @ 4833.0ft (Original Well Elev)
MD Reference: WELL @ 4833.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

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	15.78	321.85	4,183.7	574.9	-451.6	731.1	0.00	0.00	0.00
4,320.0	15.78	321.85	4,222.2	583.5	-458.4	742.0	0.00	0.00	0.00
4,360.0	15.78	321.85	4,260.7	592.0	-465.1	752.9	0.00	0.00	0.00
4,400.0	15.78	321.85	4,299.2	600.6	-471.8	763.7	0.00	0.00	0.00
4,440.0	15.78	321.85	4,337.7	609.1	-478.5	774.6	0.00	0.00	0.00
4,480.0	15.78	321.85	4,376.1	617.7	-485.3	785.5	0.00	0.00	0.00
4,520.0	15.78	321.85	4,414.6	626.3	-492.0	796.4	0.00	0.00	0.00
4,560.0	15.78	321.85	4,453.1	634.8	-498.7	807.3	0.00	0.00	0.00
4,600.0	15.78	321.85	4,491.6	643.4	-505.4	818.1	0.00	0.00	0.00
4,640.0	15.78	321.85	4,530.1	651.9	-512.1	829.0	0.00	0.00	0.00
4,680.0	15.78	321.85	4,568.6	660.5	-518.9	839.9	0.00	0.00	0.00
4,720.0	15.78	321.85	4,607.1	669.0	-525.6	850.8	0.00	0.00	0.00
4,760.0	15.78	321.85	4,645.6	677.6	-532.3	861.7	0.00	0.00	0.00
4,800.0	15.78	321.85	4,684.1	686.1	-539.0	872.5	0.00	0.00	0.00
4,838.1	15.78	321.85	4,720.8	694.3	-545.4	882.9	0.00	0.00	0.00
4,840.0	15.75	321.85	4,722.6	694.7	-545.7	883.4	2.00	-2.00	0.00
4,880.0	14.95	321.85	4,761.1	703.0	-552.3	894.0	2.00	-2.00	0.00
4,920.0	14.15	321.85	4,799.9	710.9	-558.5	904.1	2.00	-2.00	0.00
4,960.0	13.35	321.85	4,838.7	718.4	-564.4	913.6	2.00	-2.00	0.00
5,000.0	12.55	321.85	4,877.7	725.4	-569.9	922.5	2.00	-2.00	0.00
5,040.0	11.75	321.85	4,916.8	732.1	-575.1	930.9	2.00	-2.00	0.00
5,080.0	10.95	321.85	4,956.0	738.3	-580.0	938.8	2.00	-2.00	0.00
5,120.0	10.15	321.85	4,995.3	744.0	-584.5	946.1	2.00	-2.00	0.00
5,160.0	9.35	321.85	5,034.8	749.3	-588.7	952.9	2.00	-2.00	0.00
5,200.0	8.55	321.85	5,074.3	754.2	-592.5	959.1	2.00	-2.00	0.00
5,240.0	7.75	321.85	5,113.9	758.7	-596.0	964.8	2.00	-2.00	0.00
5,280.0	6.95	321.85	5,153.6	762.7	-599.2	969.9	2.00	-2.00	0.00
5,320.0	6.15	321.85	5,193.3	766.3	-602.0	974.5	2.00	-2.00	0.00
5,360.0	5.35	321.85	5,233.1	769.4	-604.5	978.5	2.00	-2.00	0.00
5,400.0	4.55	321.85	5,272.9	772.1	-606.6	981.9	2.00	-2.00	0.00
5,440.0	3.75	321.85	5,312.8	774.4	-608.4	984.8	2.00	-2.00	0.00
5,480.0	2.95	321.85	5,352.8	776.3	-609.8	987.1	2.00	-2.00	0.00
5,520.0	2.15	321.85	5,392.7	777.7	-610.9	988.9	2.00	-2.00	0.00
5,560.0	1.35	321.85	5,432.7	778.6	-611.7	990.1	2.00	-2.00	0.00
5,600.0	0.55	321.85	5,472.7	779.1	-612.1	990.8	2.00	-2.00	0.00
5,627.3	0.00	0.00	5,500.0	779.2	-612.2	990.9	2.00	-2.00	139.77
TARGET BHL 75'FSL, 165'FWL									
5,640.0	0.00	0.00	5,512.7	779.2	-612.2	990.9	0.00	0.00	0.00
5,680.0	0.00	0.00	5,552.7	779.2	-612.2	990.9	0.00	0.00	0.00
5,720.0	0.00	0.00	5,592.7	779.2	-612.2	990.9	0.00	0.00	0.00
5,760.0	0.00	0.00	5,632.7	779.2	-612.2	990.9	0.00	0.00	0.00
5,800.0	0.00	0.00	5,672.7	779.2	-612.2	990.9	0.00	0.00	0.00
5,840.0	0.00	0.00	5,712.7	779.2	-612.2	990.9	0.00	0.00	0.00
5,880.0	0.00	0.00	5,752.7	779.2	-612.2	990.9	0.00	0.00	0.00
5,920.0	0.00	0.00	5,792.7	779.2	-612.2	990.9	0.00	0.00	0.00
5,960.0	0.00	0.00	5,832.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,000.0	0.00	0.00	5,872.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,040.0	0.00	0.00	5,912.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,080.0	0.00	0.00	5,952.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,120.0	0.00	0.00	5,992.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,160.0	0.00	0.00	6,032.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,200.0	0.00	0.00	6,072.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,240.0	0.00	0.00	6,112.7	779.2	-612.2	990.9	0.00	0.00	0.00

Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Sherwood L30-30D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4833.0ft (Original Well Elev)
Project:	SEC.30-T3N-R66W	MD Reference:	WELL @ 4833.0ft (Original Well Elev)
Site:	Sherwood Pad Sec.30-T3N-R66W	North Reference:	True
Well:	Sherwood L30-30D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 (08-03-09)		

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	6,152.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,320.0	0.00	0.00	6,192.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,360.0	0.00	0.00	6,232.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,400.0	0.00	0.00	6,272.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,440.0	0.00	0.00	6,312.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,480.0	0.00	0.00	6,352.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,520.0	0.00	0.00	6,392.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,560.0	0.00	0.00	6,432.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,600.0	0.00	0.00	6,472.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,640.0	0.00	0.00	6,512.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,680.0	0.00	0.00	6,552.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,720.0	0.00	0.00	6,592.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,760.0	0.00	0.00	6,632.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,800.0	0.00	0.00	6,672.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,840.0	0.00	0.00	6,712.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,880.0	0.00	0.00	6,752.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,920.0	0.00	0.00	6,792.7	779.2	-612.2	990.9	0.00	0.00	0.00
6,960.0	0.00	0.00	6,832.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,000.0	0.00	0.00	6,872.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,040.0	0.00	0.00	6,912.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,080.0	0.00	0.00	6,952.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,120.0	0.00	0.00	6,992.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,150.3	0.00	0.00	7,023.0	779.2	-612.2	990.9	0.00	0.00	0.00
NIOBRARA									
7,160.0	0.00	0.00	7,032.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,200.0	0.00	0.00	7,072.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,240.0	0.00	0.00	7,112.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,280.0	0.00	0.00	7,152.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,320.0	0.00	0.00	7,192.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,360.0	0.00	0.00	7,232.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,400.0	0.00	0.00	7,272.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,440.0	0.00	0.00	7,312.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,440.3	0.00	0.00	7,313.0	779.2	-612.2	990.9	0.00	0.00	0.00
CODELL									
7,480.0	0.00	0.00	7,352.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,520.0	0.00	0.00	7,392.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,560.0	0.00	0.00	7,432.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,600.0	0.00	0.00	7,472.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,640.0	0.00	0.00	7,512.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,680.0	0.00	0.00	7,552.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,720.0	0.00	0.00	7,592.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,760.0	0.00	0.00	7,632.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,800.0	0.00	0.00	7,672.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,840.0	0.00	0.00	7,712.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,880.0	0.00	0.00	7,752.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,885.3	0.00	0.00	7,758.0	779.2	-612.2	990.9	0.00	0.00	0.00
J-SAND									
7,920.0	0.00	0.00	7,792.7	779.2	-612.2	990.9	0.00	0.00	0.00
7,960.0	0.00	0.00	7,832.7	779.2	-612.2	990.9	0.00	0.00	0.00
8,000.0	0.00	0.00	7,872.7	779.2	-612.2	990.9	0.00	0.00	0.00
8,035.3	0.00	0.00	7,908.0	779.2	-612.2	990.9	0.00	0.00	0.00
HARDLINES 75'S & 165'W OF BHL									

Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Sherwood L30-30D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4833.0ft (Original Well Elev)
Project:	SEC.30-T3N-R66W	MD Reference:	WELL @ 4833.0ft (Original Well Elev)
Site:	Sherwood Pad Sec.30-T3N-R66W	North Reference:	True
Well:	Sherwood L30-30D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 (08-03-09)		

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									
HARDLINES 75'S & 1	0.00	0.00	7,908.0	704.2	-777.2	1,317,419.35	3,187,108.85	40° 12' 9.983 N	104° 49' 48.440 W
- plan misses target center by 181.3ft at 8035.3ft MD (7908.0 TVD, 779.2 N, -612.2 E)									
- Polygon									
Point 1			7,908.0	0.0	0.0	1,317,419.35	3,187,108.85		
Point 2			7,908.0	0.0	300.0	1,317,421.63	3,187,408.82		
Point 3			7,908.0	0.0	0.0	1,317,419.35	3,187,108.85		
Point 4			7,908.0	300.0	0.0	1,317,719.33	3,187,106.57		
TARGET BHL 75'FSL	0.00	0.00	5,500.0	779.2	-612.2	1,317,495.63	3,187,273.31	40° 12' 10.724 N	104° 49' 46.313 W
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
7,150.3	7,023.0	NIOBRARA		0.00		
7,440.3	7,313.0	CODELL		0.00		
7,885.3	7,758.0	J-SAND		0.00		