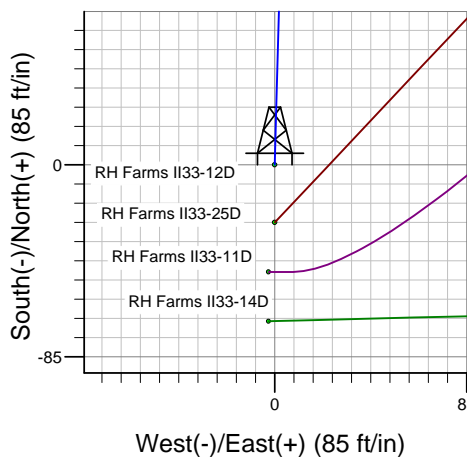
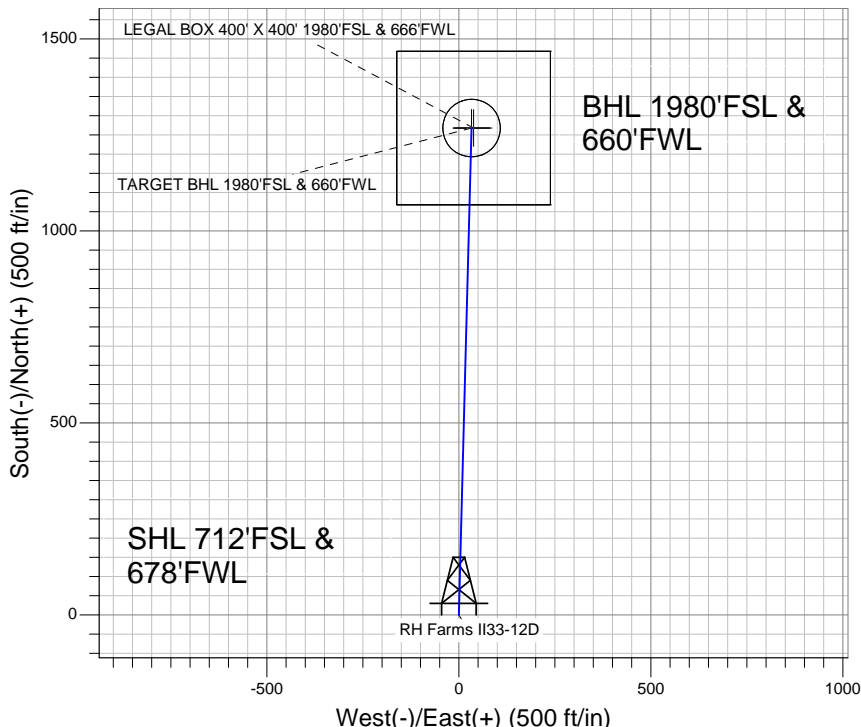
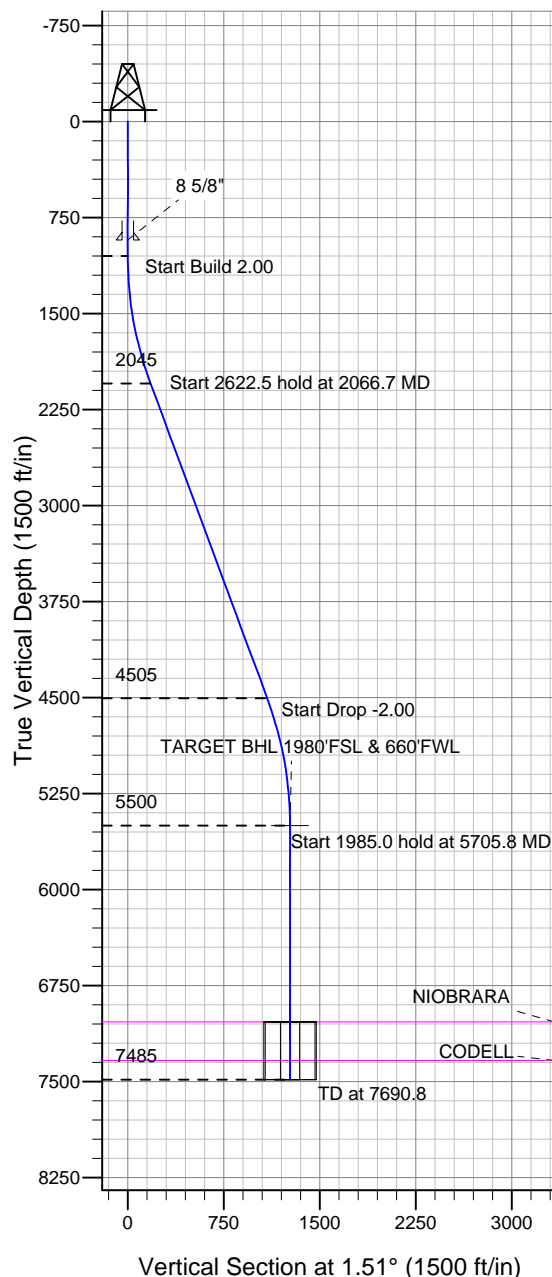


### Well Name: RH Farms II33-12D

Surface Location: RH Farms II33-12D Pad Sec.33-T7N-R66W  
 North American Datum 1983, US State Plane 1983 Colorado Northern Zone  
 Ground Elevation: 4865.0  
 +N/-S 0.0 +E/-W 0.0 Northing 1435180.07 Easting 3196956.29 Latitude 40.525810 Longitude -104.791500  
 Original Well EleWELL @ 4878.0ft (Original Well Elev)

## NOBLE ENERGY INC WELD COUNTY CO



RH Farms II33-12D Pad Sec.33-T7N-R66W  
 RH Farms II33-12D  
 Noble RH Farms II33-12D Plan #1 (9-06-11)  
 8:28, September 12 2011



Azimuths to True North  
 Magnetic North: 8.86°  
 Magnetic Field  
 Strength: 53170.1nT  
 Dip Angle: 67.14°  
 Date: 9/6/2011  
 Model: IGRF2010

### WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 1980'FSL & 660'FWL	5500.0	1267.8	33.4	40.529290	-104.791380	Point
LEGAL BOX 400' X 400' 1980'FSL & 666'FWL	7034.0	1267.8	38.4	40.529290	-104.791362	Rectangle (Sides: L400.0 W400.0)
TARGET CIRCLE 1980'FSL & 660'FWL	7034.0	1267.8	33.4	40.529290	-104.791380	Circle (Radius: 75.0)

### 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	1050.0	0.00	0.00	1050.0	0.0	0.0	0.00	0.00	0.0	
3	2066.7	20.33	1.51	2045.4	178.4	4.7	2.00	1.51	178.5	
4	4689.2	20.33	1.51	4504.6	1089.4	28.7	0.00	0.00	1089.8	
5	5705.8	0.00	0.00	5500.0	1267.8	33.4	2.00	180.00	1268.3	TARGET BHL 1980'FSL & 660'FWL
6	7690.8	0.00	0.00	7485.0	1267.8	33.4	0.00	0.00	1268.3	



# **NOBLE ENERGY INC WELD COUNTY CO**

**SEC.33-T7N-R66W**

**RH Farms II33-12D Pad Sec.33-T7N-R66W**

**RH Farms II33-12D**

**Wellbore #1**

**Plan: Noble RH Farms II33-12D Plan #1 (9-06-11)**

## **Standard Planning Report**

**12 September, 2011**



<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well RH Farms II33-12D
<b>Company:</b>	NOBLE ENERGY INC WELD COUNTY CO	<b>TVD Reference:</b>	WELL @ 4878.0ft (Original Well Elev)
<b>Project:</b>	SEC.33-T7N-R66W	<b>MD Reference:</b>	WELL @ 4878.0ft (Original Well Elev)
<b>Site:</b>	RH Farms II33-12D Pad Sec.33-T7N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	RH Farms II33-12D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Noble RH Farms II33-12D Plan #1 (9-06-11)		

<b>Project</b>	SEC.33-T7N-R66W, Weld County, CO		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		Using Well Reference Point
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

Site						RH Farms II33-12D Pad Sec.33-T7N-R66W											
Site Position:						Northing:			1,435,180.08 ft			Latitude:			40.525810		
From:			Lat/Long			Easting:			3,196,956.29 ft			Longitude:			-104.791500		
Position Uncertainty:			0.0 ft			Slot Radius:			"			Grid Convergence:			0.46 °		

Well	RH Farms II33-12D					
Well Position	+N/-S	0.0 ft	Northing:	1,435,180.07 ft	Latitude:	40.525810
	+E/-W	0.0 ft	Easting:	3,196,956.29 ft	Longitude:	-104.791500
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,865.0 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	9/6/2011	8.86	67.14	53,170

<b>Design</b>	Noble RH Farms II33-12D Plan #1 (9-06-11)			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	1.51

<b>Plan Sections</b>										
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	
1,050.0	0.00	0.00	1,050.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,066.7	20.33	1.51	2,045.4	178.4	4.7	2.00	2.00	0.00	1.51	
4,689.2	20.33	1.51	4,504.6	1,089.4	28.7	0.00	0.00	0.00	0.00	
5,705.8	0.00	0.00	5,500.0	1,267.8	33.4	2.00	-2.00	0.00	180.00	TARGET BHL 198C
7,690.8	0.00	0.00	7,485.0	1,267.8	33.4	0.00	0.00	0.00	0.00	

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well RH Farms II33-12D
<b>Company:</b>	NOBLE ENERGY INC WELD COUNTY CO	<b>TVD Reference:</b>	WELL @ 4878.0ft (Original Well Elev)
<b>Project:</b>	SEC.33-T7N-R66W	<b>MD Reference:</b>	WELL @ 4878.0ft (Original Well Elev)
<b>Site:</b>	RH Farms II33-12D Pad Sec.33-T7N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	RH Farms II33-12D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Noble RH Farms II33-12D Plan #1 (9-06-11)		

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
925.0	0.00	0.00	925.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>8 5/8"</b>									
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
1,050.0	0.00	0.00	1,050.0	0.0	0.0	0.0	0.00	0.00	0.00
1,080.0	0.60	1.51	1,080.0	0.2	0.0	0.2	2.00	2.00	0.00
1,120.0	1.40	1.51	1,120.0	0.9	0.0	0.9	2.00	2.00	0.00
1,160.0	2.20	1.51	1,160.0	2.1	0.1	2.1	2.00	2.00	0.00
1,200.0	3.00	1.51	1,199.9	3.9	0.1	3.9	2.00	2.00	0.00
1,240.0	3.80	1.51	1,239.9	6.3	0.2	6.3	2.00	2.00	0.00
1,280.0	4.60	1.51	1,279.8	9.2	0.2	9.2	2.00	2.00	0.00
1,320.0	5.40	1.51	1,319.6	12.7	0.3	12.7	2.00	2.00	0.00
1,360.0	6.20	1.51	1,359.4	16.8	0.4	16.8	2.00	2.00	0.00
1,400.0	7.00	1.51	1,399.1	21.3	0.6	21.4	2.00	2.00	0.00
1,440.0	7.80	1.51	1,438.8	26.5	0.7	26.5	2.00	2.00	0.00
1,480.0	8.60	1.51	1,478.4	32.2	0.8	32.2	2.00	2.00	0.00
1,520.0	9.40	1.51	1,517.9	38.5	1.0	38.5	2.00	2.00	0.00
1,560.0	10.20	1.51	1,557.3	45.3	1.2	45.3	2.00	2.00	0.00
1,600.0	11.00	1.51	1,596.6	52.6	1.4	52.6	2.00	2.00	0.00
1,640.0	11.80	1.51	1,635.8	60.5	1.6	60.5	2.00	2.00	0.00
1,680.0	12.60	1.51	1,674.9	69.0	1.8	69.0	2.00	2.00	0.00
1,720.0	13.40	1.51	1,713.9	78.0	2.1	78.0	2.00	2.00	0.00
1,760.0	14.20	1.51	1,752.8	87.5	2.3	87.5	2.00	2.00	0.00
1,800.0	15.00	1.51	1,791.5	97.6	2.6	97.6	2.00	2.00	0.00
1,840.0	15.80	1.51	1,830.0	108.2	2.8	108.2	2.00	2.00	0.00
1,880.0	16.60	1.51	1,868.4	119.4	3.1	119.4	2.00	2.00	0.00
1,920.0	17.40	1.51	1,906.7	131.0	3.4	131.1	2.00	2.00	0.00
1,960.0	18.20	1.51	1,944.8	143.3	3.8	143.3	2.00	2.00	0.00
2,000.0	19.00	1.51	1,982.7	156.0	4.1	156.1	2.00	2.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well RH Farms II33-12D
<b>Company:</b>	NOBLE ENERGY INC WELD COUNTY CO	<b>TVD Reference:</b>	WELL @ 4878.0ft (Original Well Elev)
<b>Project:</b>	SEC.33-T7N-R66W	<b>MD Reference:</b>	WELL @ 4878.0ft (Original Well Elev)
<b>Site:</b>	RH Farms II33-12D Pad Sec.33-T7N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	RH Farms II33-12D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Noble RH Farms II33-12D Plan #1 (9-06-11)		

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)
2,040.0	19.80	1.51	2,020.4	169.3	4.5	169.4	2.00	2.00	0.00
2,066.7	20.33	1.51	2,045.4	178.4	4.7	178.5	2.00	2.00	0.00
2,080.0	20.33	1.51	2,058.0	183.1	4.8	183.1	0.00	0.00	0.00
2,120.0	20.33	1.51	2,095.5	197.0	5.2	197.0	0.00	0.00	0.00
2,160.0	20.33	1.51	2,133.0	210.9	5.5	210.9	0.00	0.00	0.00
2,200.0	20.33	1.51	2,170.5	224.8	5.9	224.8	0.00	0.00	0.00
2,240.0	20.33	1.51	2,208.0	238.7	6.3	238.7	0.00	0.00	0.00
2,280.0	20.33	1.51	2,245.5	252.6	6.6	252.6	0.00	0.00	0.00
2,320.0	20.33	1.51	2,283.0	266.4	7.0	266.5	0.00	0.00	0.00
2,360.0	20.33	1.51	2,320.5	280.3	7.4	280.4	0.00	0.00	0.00
2,400.0	20.33	1.51	2,358.0	294.2	7.7	294.3	0.00	0.00	0.00
2,440.0	20.33	1.51	2,395.5	308.1	8.1	308.2	0.00	0.00	0.00
2,480.0	20.33	1.51	2,433.0	322.0	8.5	322.1	0.00	0.00	0.00
2,520.0	20.33	1.51	2,470.5	335.9	8.8	336.0	0.00	0.00	0.00
2,560.0	20.33	1.51	2,508.1	349.8	9.2	349.9	0.00	0.00	0.00
2,600.0	20.33	1.51	2,545.6	363.7	9.6	363.8	0.00	0.00	0.00
2,640.0	20.33	1.51	2,583.1	377.6	9.9	377.7	0.00	0.00	0.00
2,680.0	20.33	1.51	2,620.6	391.5	10.3	391.6	0.00	0.00	0.00
2,720.0	20.33	1.51	2,658.1	405.4	10.7	405.5	0.00	0.00	0.00
2,760.0	20.33	1.51	2,695.6	419.3	11.0	419.4	0.00	0.00	0.00
2,800.0	20.33	1.51	2,733.1	433.2	11.4	433.3	0.00	0.00	0.00
2,840.0	20.33	1.51	2,770.6	447.1	11.8	447.2	0.00	0.00	0.00
2,880.0	20.33	1.51	2,808.1	461.0	12.1	461.1	0.00	0.00	0.00
2,920.0	20.33	1.51	2,845.6	474.9	12.5	475.0	0.00	0.00	0.00
2,960.0	20.33	1.51	2,883.1	488.8	12.9	488.9	0.00	0.00	0.00
3,000.0	20.33	1.51	2,920.6	502.7	13.2	502.8	0.00	0.00	0.00
3,040.0	20.33	1.51	2,958.1	516.5	13.6	516.7	0.00	0.00	0.00
3,080.0	20.33	1.51	2,995.7	530.4	14.0	530.6	0.00	0.00	0.00
3,120.0	20.33	1.51	3,033.2	544.3	14.3	544.5	0.00	0.00	0.00
3,160.0	20.33	1.51	3,070.7	558.2	14.7	558.4	0.00	0.00	0.00
3,200.0	20.33	1.51	3,108.2	572.1	15.1	572.3	0.00	0.00	0.00
3,240.0	20.33	1.51	3,145.7	586.0	15.4	586.2	0.00	0.00	0.00
3,280.0	20.33	1.51	3,183.2	599.9	15.8	600.1	0.00	0.00	0.00
3,320.0	20.33	1.51	3,220.7	613.8	16.2	614.0	0.00	0.00	0.00
3,360.0	20.33	1.51	3,258.2	627.7	16.5	627.9	0.00	0.00	0.00
3,400.0	20.33	1.51	3,295.7	641.6	16.9	641.8	0.00	0.00	0.00
3,440.0	20.33	1.51	3,333.2	655.5	17.2	655.7	0.00	0.00	0.00
3,480.0	20.33	1.51	3,370.7	669.4	17.6	669.6	0.00	0.00	0.00
3,520.0	20.33	1.51	3,408.2	683.3	18.0	683.5	0.00	0.00	0.00
3,560.0	20.33	1.51	3,445.7	697.2	18.3	697.4	0.00	0.00	0.00
3,600.0	20.33	1.51	3,483.2	711.1	18.7	711.3	0.00	0.00	0.00
3,640.0	20.33	1.51	3,520.8	725.0	19.1	725.2	0.00	0.00	0.00
3,680.0	20.33	1.51	3,558.3	738.9	19.4	739.1	0.00	0.00	0.00
3,720.0	20.33	1.51	3,595.8	752.7	19.8	753.0	0.00	0.00	0.00
3,760.0	20.33	1.51	3,633.3	766.6	20.2	766.9	0.00	0.00	0.00
3,800.0	20.33	1.51	3,670.8	780.5	20.5	780.8	0.00	0.00	0.00
3,840.0	20.33	1.51	3,708.3	794.4	20.9	794.7	0.00	0.00	0.00
3,880.0	20.33	1.51	3,745.8	808.3	21.3	808.6	0.00	0.00	0.00
3,920.0	20.33	1.51	3,783.3	822.2	21.6	822.5	0.00	0.00	0.00
3,960.0	20.33	1.51	3,820.8	836.1	22.0	836.4	0.00	0.00	0.00
4,000.0	20.33	1.51	3,858.3	850.0	22.4	850.3	0.00	0.00	0.00
4,040.0	20.33	1.51	3,895.8	863.9	22.7	864.2	0.00	0.00	0.00
4,080.0	20.33	1.51	3,933.3	877.8	23.1	878.1	0.00	0.00	0.00
4,120.0	20.33	1.51	3,970.8	891.7	23.5	892.0	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well RH Farms II33-12D
<b>Company:</b>	NOBLE ENERGY INC WELD COUNTY CO	<b>TVD Reference:</b>	WELL @ 4878.0ft (Original Well Elev)
<b>Project:</b>	SEC.33-T7N-R66W	<b>MD Reference:</b>	WELL @ 4878.0ft (Original Well Elev)
<b>Site:</b>	RH Farms II33-12D Pad Sec.33-T7N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	RH Farms II33-12D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Noble RH Farms II33-12D Plan #1 (9-06-11)		

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)
4,160.0	20.33	1.51	4,008.4	905.6	23.8	905.9	0.00	0.00	0.00
4,200.0	20.33	1.51	4,045.9	919.5	24.2	919.8	0.00	0.00	0.00
4,240.0	20.33	1.51	4,083.4	933.4	24.6	933.7	0.00	0.00	0.00
4,280.0	20.33	1.51	4,120.9	947.3	24.9	947.6	0.00	0.00	0.00
4,320.0	20.33	1.51	4,158.4	961.2	25.3	961.5	0.00	0.00	0.00
4,360.0	20.33	1.51	4,195.9	975.1	25.7	975.4	0.00	0.00	0.00
4,400.0	20.33	1.51	4,233.4	989.0	26.0	989.3	0.00	0.00	0.00
4,440.0	20.33	1.51	4,270.9	1,002.8	26.4	1,003.2	0.00	0.00	0.00
4,480.0	20.33	1.51	4,308.4	1,016.7	26.8	1,017.1	0.00	0.00	0.00
4,520.0	20.33	1.51	4,345.9	1,030.6	27.1	1,031.0	0.00	0.00	0.00
4,560.0	20.33	1.51	4,383.4	1,044.5	27.5	1,044.9	0.00	0.00	0.00
4,600.0	20.33	1.51	4,420.9	1,058.4	27.8	1,058.8	0.00	0.00	0.00
4,640.0	20.33	1.51	4,458.4	1,072.3	28.2	1,072.7	0.00	0.00	0.00
4,680.0	20.33	1.51	4,496.0	1,086.2	28.6	1,086.6	0.00	0.00	0.00
4,689.2	20.33	1.51	4,504.6	1,089.4	28.7	1,089.8	0.00	0.00	0.00
4,720.0	19.72	1.51	4,533.5	1,099.9	28.9	1,100.3	2.00	-2.00	0.00
4,760.0	18.92	1.51	4,571.3	1,113.2	29.3	1,113.6	2.00	-2.00	0.00
4,800.0	18.12	1.51	4,609.2	1,125.9	29.6	1,126.3	2.00	-2.00	0.00
4,840.0	17.32	1.51	4,647.3	1,138.0	29.9	1,138.4	2.00	-2.00	0.00
4,880.0	16.52	1.51	4,685.6	1,149.7	30.2	1,150.1	2.00	-2.00	0.00
4,920.0	15.72	1.51	4,724.0	1,160.8	30.5	1,161.2	2.00	-2.00	0.00
4,960.0	14.92	1.51	4,762.6	1,171.3	30.8	1,171.7	2.00	-2.00	0.00
5,000.0	14.12	1.51	4,801.3	1,181.4	31.1	1,181.8	2.00	-2.00	0.00
5,040.0	13.32	1.51	4,840.2	1,190.8	31.3	1,191.3	2.00	-2.00	0.00
5,080.0	12.52	1.51	4,879.1	1,199.8	31.6	1,200.2	2.00	-2.00	0.00
5,120.0	11.72	1.51	4,918.3	1,208.2	31.8	1,208.6	2.00	-2.00	0.00
5,160.0	10.92	1.51	4,957.5	1,216.0	32.0	1,216.4	2.00	-2.00	0.00
5,200.0	10.12	1.51	4,996.8	1,223.3	32.2	1,223.7	2.00	-2.00	0.00
5,240.0	9.32	1.51	5,036.2	1,230.1	32.4	1,230.5	2.00	-2.00	0.00
5,280.0	8.52	1.51	5,075.7	1,236.3	32.5	1,236.7	2.00	-2.00	0.00
5,320.0	7.72	1.51	5,115.3	1,241.9	32.7	1,242.3	2.00	-2.00	0.00
5,360.0	6.92	1.51	5,155.0	1,247.0	32.8	1,247.4	2.00	-2.00	0.00
5,400.0	6.12	1.51	5,194.8	1,251.5	32.9	1,252.0	2.00	-2.00	0.00
5,440.0	5.32	1.51	5,234.6	1,255.5	33.0	1,256.0	2.00	-2.00	0.00
5,480.0	4.52	1.51	5,274.4	1,258.9	33.1	1,259.4	2.00	-2.00	0.00
5,520.0	3.72	1.51	5,314.3	1,261.8	33.2	1,262.3	2.00	-2.00	0.00
5,560.0	2.92	1.51	5,354.2	1,264.1	33.3	1,264.6	2.00	-2.00	0.00
5,600.0	2.12	1.51	5,394.2	1,265.9	33.3	1,266.3	2.00	-2.00	0.00
5,640.0	1.32	1.51	5,434.2	1,267.1	33.3	1,267.5	2.00	-2.00	0.00
5,680.0	0.52	1.51	5,474.2	1,267.7	33.4	1,268.2	2.00	-2.00	0.00
5,705.8	0.00	0.00	5,500.0	1,267.8	33.4	1,268.3	2.00	-2.00	0.00
TARGET BHL 1980'FSL & 660'FWL									
5,720.0	0.00	0.00	5,514.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
5,760.0	0.00	0.00	5,554.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
5,800.0	0.00	0.00	5,594.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
5,840.0	0.00	0.00	5,634.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
5,880.0	0.00	0.00	5,674.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
5,920.0	0.00	0.00	5,714.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
5,960.0	0.00	0.00	5,754.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,000.0	0.00	0.00	5,794.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,040.0	0.00	0.00	5,834.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,080.0	0.00	0.00	5,874.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,120.0	0.00	0.00	5,914.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,160.0	0.00	0.00	5,954.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well RH Farms II33-12D
<b>Company:</b>	NOBLE ENERGY INC WELD COUNTY CO	<b>TVD Reference:</b>	WELL @ 4878.0ft (Original Well Elev)
<b>Project:</b>	SEC.33-T7N-R66W	<b>MD Reference:</b>	WELL @ 4878.0ft (Original Well Elev)
<b>Site:</b>	RH Farms II33-12D Pad Sec.33-T7N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	RH Farms II33-12D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Noble RH Farms II33-12D Plan #1 (9-06-11)		

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)
6,200.0	0.00	0.00	5,994.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,240.0	0.00	0.00	6,034.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,280.0	0.00	0.00	6,074.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,320.0	0.00	0.00	6,114.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,360.0	0.00	0.00	6,154.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,400.0	0.00	0.00	6,194.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,440.0	0.00	0.00	6,234.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,480.0	0.00	0.00	6,274.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,520.0	0.00	0.00	6,314.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,560.0	0.00	0.00	6,354.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,600.0	0.00	0.00	6,394.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,640.0	0.00	0.00	6,434.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,680.0	0.00	0.00	6,474.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,720.0	0.00	0.00	6,514.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,760.0	0.00	0.00	6,554.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,800.0	0.00	0.00	6,594.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,840.0	0.00	0.00	6,634.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,880.0	0.00	0.00	6,674.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,920.0	0.00	0.00	6,714.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
6,960.0	0.00	0.00	6,754.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
7,000.0	0.00	0.00	6,794.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
7,040.0	0.00	0.00	6,834.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
7,080.0	0.00	0.00	6,874.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
7,120.0	0.00	0.00	6,914.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
7,160.0	0.00	0.00	6,954.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
7,200.0	0.00	0.00	6,994.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
7,239.8	0.00	0.00	7,034.0	1,267.8	33.4	1,268.3	0.00	0.00	0.00
<b>NIORARA - LEGAL BOX 400' X 400' 1980'FSL &amp; 666'FWL - TARGET CIRCLE 1980'FSL &amp; 660'FWL</b>									
7,240.0	0.00	0.00	7,034.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
7,280.0	0.00	0.00	7,074.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
7,320.0	0.00	0.00	7,114.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
7,360.0	0.00	0.00	7,154.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
7,400.0	0.00	0.00	7,194.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
7,440.0	0.00	0.00	7,234.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
7,480.0	0.00	0.00	7,274.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
7,520.0	0.00	0.00	7,314.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
7,540.8	0.00	0.00	7,335.0	1,267.8	33.4	1,268.3	0.00	0.00	0.00
<b>CODELL</b>									
7,560.0	0.00	0.00	7,354.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
7,600.0	0.00	0.00	7,394.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
7,640.0	0.00	0.00	7,434.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
7,680.0	0.00	0.00	7,474.2	1,267.8	33.4	1,268.3	0.00	0.00	0.00
7,690.8	0.00	0.00	7,485.0	1,267.8	33.4	1,268.3	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well RH Farms II33-12D
<b>Company:</b>	NOBLE ENERGY INC WELD COUNTY CO	<b>TVD Reference:</b>	WELL @ 4878.0ft (Original Well Elev)
<b>Project:</b>	SEC.33-T7N-R66W	<b>MD Reference:</b>	WELL @ 4878.0ft (Original Well Elev)
<b>Site:</b>	RH Farms II33-12D Pad Sec.33-T7N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	RH Farms II33-12D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Noble RH Farms II33-12D Plan #1 (9-06-11)		

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 1980'F:	0.00	0.00	5,500.0	1,267.8	33.4	1,436,448.10	3,196,979.52	40.529290	-104.791380
- plan hits target center									
- Point									
LEGAL BOX 400' X 400'	0.00	0.00	7,034.0	1,267.8	38.4	1,436,448.14	3,196,984.56	40.529290	-104.791362
- plan misses target center by 5.0ft at 7239.8ft MD (7034.0 TVD, 1267.8 N, 33.4 E)									
- Rectangle (sides W400.0 H400.0 D451.0)									
TARGET CIRCLE 198'	0.00	0.00	7,034.0	1,267.8	33.4	1,436,448.10	3,196,979.52	40.529290	-104.791380
- plan hits target center									
- Circle (radius 75.0)									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
925.0	925.0	8 5/8"	8-5/8	12-1/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
7,239.8	7,034.0	NIOBRARA		0.00		
7,540.8	7,335.0	CODELL		0.00		