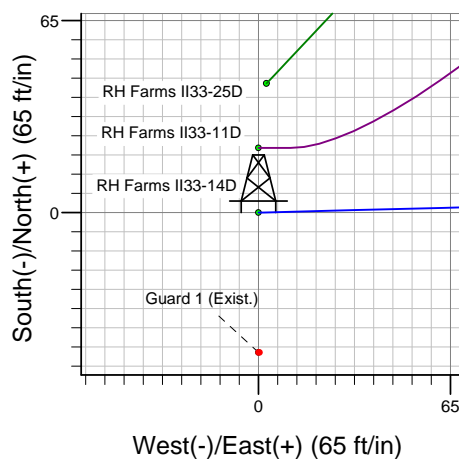
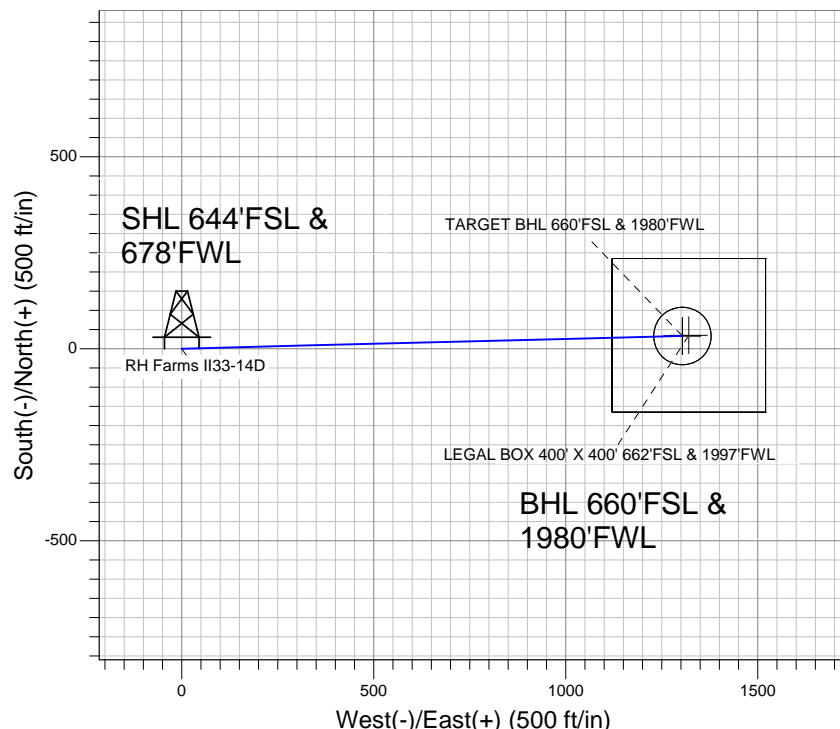
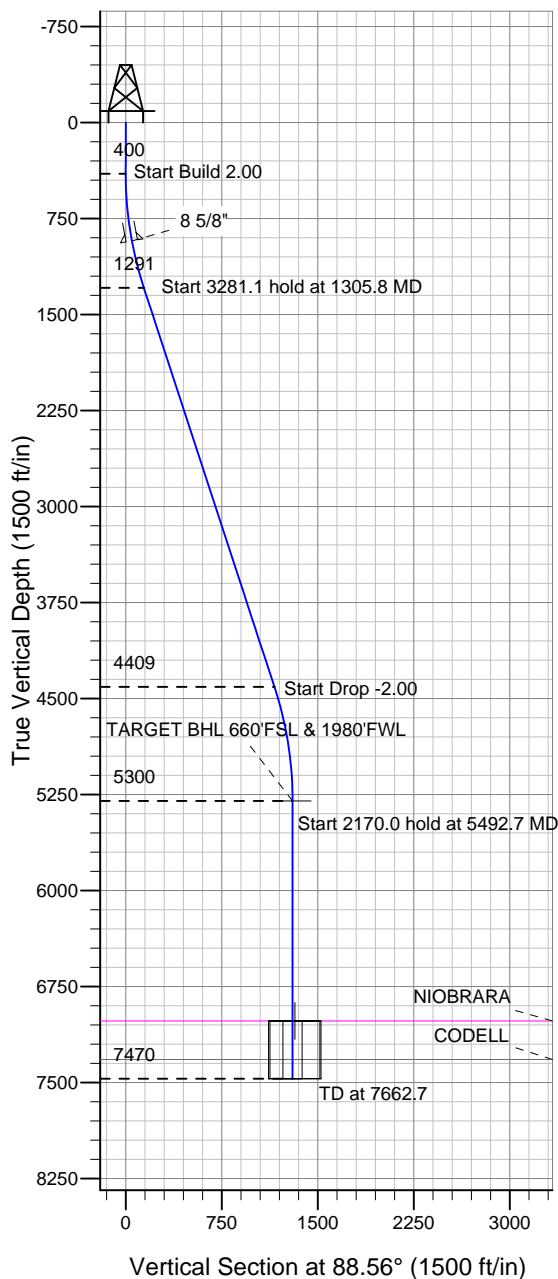


Well Name: RH Farms II33-14D

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	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1435110.83	3196954.07	40.525620	-104.791510	
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 II33-14D
Noble RH Farms II33-14D Plan #1 (9-06-11)
9:17, September 12 2011



Azimuths to True North
Magnetic North: 8.86°
Magnetic Field
Strength: 53170.0nT
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 660'FSL & 1980'FWL	5300.0	32.8	1303.8	40.525710	-104.786820	Point
LEGAL BOX 400' X 400' 662'FSL & 1997'FWL	7019.0	34.8	1320.8	40.525715	-104.786759	Rectangle (Sides: L400.0 W400.0)
TARGET CIRCLE 660'FSL & 1980'FWL	7019.0	32.8	1303.8	40.525710	-104.786820	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	400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	
3	1305.8	18.12	88.56	1290.8	3.6	142.0	2.00	88.56	142.0	
4	4586.9	18.12	88.56	4409.2	29.3	1161.9	0.00	0.00	1162.2	
5	5492.7	0.00	0.00	5300.0	32.8	1303.8	2.00	180.00	1304.2	TARGET BHL 660'FSL & 1980'FWL
6	7662.7	0.00	0.00	7470.0	32.8	1303.8	0.00	0.00	1304.2	



NOBLE ENERGY INC WELD COUNTY CO

SEC.33-T7N-R66W

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

RH Farms II33-14D

Wellbore #1

Plan: Noble RH Farms II33-14D Plan #1 (9-06-11)

Standard Planning Report

12 September, 2011



Database: Landmark
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.33-T7N-R66W
Site: RH Farms II33-12D Pad Sec.33-T7N-R66W
Well: RH Farms II33-14D
Wellbore: Wellbore #1
Design: Noble RH Farms II33-14D Plan #1 (9-06-11)

Local Co-ordinate Reference: Well RH Farms II33-14D
TVD Reference: WELL @ 4878.0ft (Original Well Elev)
MD Reference: WELL @ 4878.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Project	SEC.33-T7N-R66W, Weld County, CO		
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						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 II33-14D					
Well Position	+N/-S	-69.2 ft	Northing:	1,435,110.83 ft	Latitude:	40.525620
	+E/-W	-2.8 ft	Easting:	3,196,954.07 ft	Longitude:	-104.791510
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,865.0 ft

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

Design	Noble RH Farms II33-14D Plan #1 (9-06-11)			
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	88.56

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	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,305.8	18.12	88.56	1,290.8	3.6	142.0	2.00	2.00	0.00	88.56	
4,586.9	18.12	88.56	4,409.2	29.3	1,161.9	0.00	0.00	0.00	0.00	
5,492.7	0.00	0.00	5,300.0	32.8	1,303.8	2.00	-2.00	0.00	180.00	TARGET BHL 660'I
7,662.7	0.00	0.00	7,470.0	32.8	1,303.8	0.00	0.00	0.00	0.00	

Database:	Landmark	Local Co-ordinate Reference:	Well RH Farms II33-14D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4878.0ft (Original Well Elev)
Project:	SEC.33-T7N-R66W	MD Reference:	WELL @ 4878.0ft (Original Well Elev)
Site:	RH Farms II33-12D Pad Sec.33-T7N-R66W	North Reference:	True
Well:	RH Farms II33-14D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble RH Farms II33-14D 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	0.80	88.56	440.0	0.0	0.3	0.3	2.00	2.00	0.00
480.0	1.60	88.56	480.0	0.0	1.1	1.1	2.00	2.00	0.00
520.0	2.40	88.56	520.0	0.1	2.5	2.5	2.00	2.00	0.00
560.0	3.20	88.56	559.9	0.1	4.5	4.5	2.00	2.00	0.00
600.0	4.00	88.56	599.8	0.2	7.0	7.0	2.00	2.00	0.00
640.0	4.80	88.56	639.7	0.3	10.0	10.0	2.00	2.00	0.00
680.0	5.60	88.56	679.6	0.3	13.7	13.7	2.00	2.00	0.00
720.0	6.40	88.56	719.3	0.4	17.8	17.9	2.00	2.00	0.00
760.0	7.20	88.56	759.1	0.6	22.6	22.6	2.00	2.00	0.00
800.0	8.00	88.56	798.7	0.7	27.9	27.9	2.00	2.00	0.00
840.0	8.80	88.56	838.3	0.8	33.7	33.7	2.00	2.00	0.00
880.0	9.60	88.56	877.8	1.0	40.1	40.1	2.00	2.00	0.00
920.0	10.40	88.56	917.1	1.2	47.0	47.1	2.00	2.00	0.00
928.0	10.56	88.56	925.0	1.2	48.5	48.5	2.00	2.00	0.00
8 5/8"									
960.0	11.20	88.56	956.4	1.4	54.5	54.6	2.00	2.00	0.00
1,000.0	12.00	88.56	995.6	1.6	62.6	62.6	2.00	2.00	0.00
1,040.0	12.80	88.56	1,034.7	1.8	71.2	71.2	2.00	2.00	0.00
1,080.0	13.60	88.56	1,073.6	2.0	80.3	80.3	2.00	2.00	0.00
1,120.0	14.40	88.56	1,112.4	2.3	90.0	90.0	2.00	2.00	0.00
1,160.0	15.20	88.56	1,151.1	2.5	100.2	100.2	2.00	2.00	0.00
1,200.0	16.00	88.56	1,189.6	2.8	110.9	111.0	2.00	2.00	0.00
1,240.0	16.80	88.56	1,228.0	3.1	122.2	122.3	2.00	2.00	0.00
1,280.0	17.60	88.56	1,266.2	3.4	134.1	134.1	2.00	2.00	0.00
1,305.8	18.12	88.56	1,290.8	3.6	142.0	142.0	2.00	2.00	0.00
1,320.0	18.12	88.56	1,304.3	3.7	146.4	146.4	0.00	0.00	0.00
1,360.0	18.12	88.56	1,342.3	4.0	158.8	158.9	0.00	0.00	0.00
1,400.0	18.12	88.56	1,380.3	4.3	171.2	171.3	0.00	0.00	0.00
1,440.0	18.12	88.56	1,418.3	4.6	183.7	183.7	0.00	0.00	0.00
1,480.0	18.12	88.56	1,456.3	4.9	196.1	196.2	0.00	0.00	0.00
1,520.0	18.12	88.56	1,494.4	5.3	208.5	208.6	0.00	0.00	0.00
1,560.0	18.12	88.56	1,532.4	5.6	221.0	221.1	0.00	0.00	0.00
1,600.0	18.12	88.56	1,570.4	5.9	233.4	233.5	0.00	0.00	0.00
1,640.0	18.12	88.56	1,608.4	6.2	245.8	245.9	0.00	0.00	0.00
1,680.0	18.12	88.56	1,646.4	6.5	258.3	258.4	0.00	0.00	0.00
1,720.0	18.12	88.56	1,684.5	6.8	270.7	270.8	0.00	0.00	0.00
1,760.0	18.12	88.56	1,722.5	7.1	283.2	283.2	0.00	0.00	0.00
1,800.0	18.12	88.56	1,760.5	7.4	295.6	295.7	0.00	0.00	0.00
1,840.0	18.12	88.56	1,798.5	7.8	308.0	308.1	0.00	0.00	0.00
1,880.0	18.12	88.56	1,836.5	8.1	320.5	320.6	0.00	0.00	0.00
1,920.0	18.12	88.56	1,874.5	8.4	332.9	333.0	0.00	0.00	0.00
1,960.0	18.12	88.56	1,912.6	8.7	345.3	345.4	0.00	0.00	0.00
2,000.0	18.12	88.56	1,950.6	9.0	357.8	357.9	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well RH Farms II33-14D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4878.0ft (Original Well Elev)
Project:	SEC.33-T7N-R66W	MD Reference:	WELL @ 4878.0ft (Original Well Elev)
Site:	RH Farms II33-12D Pad Sec.33-T7N-R66W	North Reference:	True
Well:	RH Farms II33-14D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble RH Farms II33-14D 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	18.12	88.56	1,988.6	9.3	370.2	370.3	0.00	0.00	0.00
2,080.0	18.12	88.56	2,026.6	9.6	382.6	382.7	0.00	0.00	0.00
2,120.0	18.12	88.56	2,064.6	9.9	395.1	395.2	0.00	0.00	0.00
2,160.0	18.12	88.56	2,102.6	10.3	407.5	407.6	0.00	0.00	0.00
2,200.0	18.12	88.56	2,140.7	10.6	419.9	420.1	0.00	0.00	0.00
2,240.0	18.12	88.56	2,178.7	10.9	432.4	432.5	0.00	0.00	0.00
2,280.0	18.12	88.56	2,216.7	11.2	444.8	444.9	0.00	0.00	0.00
2,320.0	18.12	88.56	2,254.7	11.5	457.2	457.4	0.00	0.00	0.00
2,360.0	18.12	88.56	2,292.7	11.8	469.7	469.8	0.00	0.00	0.00
2,400.0	18.12	88.56	2,330.7	12.1	482.1	482.2	0.00	0.00	0.00
2,440.0	18.12	88.56	2,368.8	12.5	494.5	494.7	0.00	0.00	0.00
2,480.0	18.12	88.56	2,406.8	12.8	507.0	507.1	0.00	0.00	0.00
2,520.0	18.12	88.56	2,444.8	13.1	519.4	519.6	0.00	0.00	0.00
2,560.0	18.12	88.56	2,482.8	13.4	531.8	532.0	0.00	0.00	0.00
2,600.0	18.12	88.56	2,520.8	13.7	544.3	544.4	0.00	0.00	0.00
2,640.0	18.12	88.56	2,558.8	14.0	556.7	556.9	0.00	0.00	0.00
2,680.0	18.12	88.56	2,596.9	14.3	569.1	569.3	0.00	0.00	0.00
2,720.0	18.12	88.56	2,634.9	14.6	581.6	581.7	0.00	0.00	0.00
2,760.0	18.12	88.56	2,672.9	15.0	594.0	594.2	0.00	0.00	0.00
2,800.0	18.12	88.56	2,710.9	15.3	606.4	606.6	0.00	0.00	0.00
2,840.0	18.12	88.56	2,748.9	15.6	618.9	619.1	0.00	0.00	0.00
2,880.0	18.12	88.56	2,786.9	15.9	631.3	631.5	0.00	0.00	0.00
2,920.0	18.12	88.56	2,825.0	16.2	643.7	643.9	0.00	0.00	0.00
2,960.0	18.12	88.56	2,863.0	16.5	656.2	656.4	0.00	0.00	0.00
3,000.0	18.12	88.56	2,901.0	16.8	668.6	668.8	0.00	0.00	0.00
3,040.0	18.12	88.56	2,939.0	17.2	681.0	681.2	0.00	0.00	0.00
3,080.0	18.12	88.56	2,977.0	17.5	693.5	693.7	0.00	0.00	0.00
3,120.0	18.12	88.56	3,015.1	17.8	705.9	706.1	0.00	0.00	0.00
3,160.0	18.12	88.56	3,053.1	18.1	718.3	718.6	0.00	0.00	0.00
3,200.0	18.12	88.56	3,091.1	18.4	730.8	731.0	0.00	0.00	0.00
3,240.0	18.12	88.56	3,129.1	18.7	743.2	743.4	0.00	0.00	0.00
3,280.0	18.12	88.56	3,167.1	19.0	755.6	755.9	0.00	0.00	0.00
3,320.0	18.12	88.56	3,205.1	19.3	768.1	768.3	0.00	0.00	0.00
3,360.0	18.12	88.56	3,243.2	19.7	780.5	780.7	0.00	0.00	0.00
3,400.0	18.12	88.56	3,281.2	20.0	792.9	793.2	0.00	0.00	0.00
3,440.0	18.12	88.56	3,319.2	20.3	805.4	805.6	0.00	0.00	0.00
3,480.0	18.12	88.56	3,357.2	20.6	817.8	818.1	0.00	0.00	0.00
3,520.0	18.12	88.56	3,395.2	20.9	830.2	830.5	0.00	0.00	0.00
3,560.0	18.12	88.56	3,433.2	21.2	842.7	842.9	0.00	0.00	0.00
3,600.0	18.12	88.56	3,471.3	21.5	855.1	855.4	0.00	0.00	0.00
3,640.0	18.12	88.56	3,509.3	21.8	867.5	867.8	0.00	0.00	0.00
3,680.0	18.12	88.56	3,547.3	22.2	880.0	880.3	0.00	0.00	0.00
3,720.0	18.12	88.56	3,585.3	22.5	892.4	892.7	0.00	0.00	0.00
3,760.0	18.12	88.56	3,623.3	22.8	904.8	905.1	0.00	0.00	0.00
3,800.0	18.12	88.56	3,661.3	23.1	917.3	917.6	0.00	0.00	0.00
3,840.0	18.12	88.56	3,699.4	23.4	929.7	930.0	0.00	0.00	0.00
3,880.0	18.12	88.56	3,737.4	23.7	942.1	942.4	0.00	0.00	0.00
3,920.0	18.12	88.56	3,775.4	24.0	954.6	954.9	0.00	0.00	0.00
3,960.0	18.12	88.56	3,813.4	24.4	967.0	967.3	0.00	0.00	0.00
4,000.0	18.12	88.56	3,851.4	24.7	979.4	979.8	0.00	0.00	0.00
4,040.0	18.12	88.56	3,889.4	25.0	991.9	992.2	0.00	0.00	0.00
4,080.0	18.12	88.56	3,927.5	25.3	1,004.3	1,004.6	0.00	0.00	0.00
4,120.0	18.12	88.56	3,965.5	25.6	1,016.7	1,017.1	0.00	0.00	0.00
4,160.0	18.12	88.56	4,003.5	25.9	1,029.2	1,029.5	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well RH Farms II33-14D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4878.0ft (Original Well Elev)
Project:	SEC.33-T7N-R66W	MD Reference:	WELL @ 4878.0ft (Original Well Elev)
Site:	RH Farms II33-12D Pad Sec.33-T7N-R66W	North Reference:	True
Well:	RH Farms II33-14D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble RH Farms II33-14D 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)	
4,200.0	18.12	88.56	4,041.5	26.2	1,041.6	1,041.9	0.00	0.00	0.00	
4,240.0	18.12	88.56	4,079.5	26.5	1,054.0	1,054.4	0.00	0.00	0.00	
4,280.0	18.12	88.56	4,117.5	26.9	1,066.5	1,066.8	0.00	0.00	0.00	
4,320.0	18.12	88.56	4,155.6	27.2	1,078.9	1,079.3	0.00	0.00	0.00	
4,360.0	18.12	88.56	4,193.6	27.5	1,091.3	1,091.7	0.00	0.00	0.00	
4,400.0	18.12	88.56	4,231.6	27.8	1,103.8	1,104.1	0.00	0.00	0.00	
4,440.0	18.12	88.56	4,269.6	28.1	1,116.2	1,116.6	0.00	0.00	0.00	
4,480.0	18.12	88.56	4,307.6	28.4	1,128.6	1,129.0	0.00	0.00	0.00	
4,520.0	18.12	88.56	4,345.7	28.7	1,141.1	1,141.4	0.00	0.00	0.00	
4,560.0	18.12	88.56	4,383.7	29.0	1,153.5	1,153.9	0.00	0.00	0.00	
4,586.9	18.12	88.56	4,409.2	29.3	1,161.9	1,162.2	0.00	0.00	0.00	
4,600.0	17.85	88.56	4,421.7	29.4	1,165.9	1,166.3	2.00	-2.00	0.00	
4,640.0	17.05	88.56	4,459.9	29.7	1,177.9	1,178.3	2.00	-2.00	0.00	
4,680.0	16.25	88.56	4,498.2	30.0	1,189.4	1,189.7	2.00	-2.00	0.00	
4,720.0	15.45	88.56	4,536.7	30.2	1,200.3	1,200.7	2.00	-2.00	0.00	
4,760.0	14.65	88.56	4,575.3	30.5	1,210.7	1,211.1	2.00	-2.00	0.00	
4,800.0	13.85	88.56	4,614.0	30.7	1,220.5	1,220.9	2.00	-2.00	0.00	
4,840.0	13.05	88.56	4,652.9	31.0	1,229.8	1,230.2	2.00	-2.00	0.00	
4,880.0	12.25	88.56	4,692.0	31.2	1,238.6	1,239.0	2.00	-2.00	0.00	
4,920.0	11.45	88.56	4,731.1	31.4	1,246.8	1,247.2	2.00	-2.00	0.00	
4,960.0	10.65	88.56	4,770.4	31.6	1,254.5	1,254.9	2.00	-2.00	0.00	
5,000.0	9.85	88.56	4,809.7	31.8	1,261.6	1,262.0	2.00	-2.00	0.00	
5,040.0	9.05	88.56	4,849.2	31.9	1,268.2	1,268.6	2.00	-2.00	0.00	
5,080.0	8.25	88.56	4,888.7	32.1	1,274.2	1,274.6	2.00	-2.00	0.00	
5,120.0	7.45	88.56	4,928.4	32.2	1,279.6	1,280.0	2.00	-2.00	0.00	
5,160.0	6.65	88.56	4,968.1	32.3	1,284.5	1,285.0	2.00	-2.00	0.00	
5,200.0	5.85	88.56	5,007.8	32.5	1,288.9	1,289.3	2.00	-2.00	0.00	
5,240.0	5.05	88.56	5,047.6	32.6	1,292.7	1,293.1	2.00	-2.00	0.00	
5,280.0	4.25	88.56	5,087.5	32.6	1,295.9	1,296.4	2.00	-2.00	0.00	
5,320.0	3.45	88.56	5,127.4	32.7	1,298.6	1,299.0	2.00	-2.00	0.00	
5,360.0	2.65	88.56	5,167.4	32.8	1,300.8	1,301.2	2.00	-2.00	0.00	
5,400.0	1.85	88.56	5,207.3	32.8	1,302.3	1,302.7	2.00	-2.00	0.00	
5,440.0	1.05	88.56	5,247.3	32.8	1,303.4	1,303.8	2.00	-2.00	0.00	
5,480.0	0.25	88.56	5,287.3	32.8	1,303.8	1,304.2	2.00	-2.00	0.00	
5,492.7	0.00	0.00	5,300.0	32.8	1,303.8	1,304.2	2.00	-2.00	-698.31	
TARGET BHL 660'FSL & 1980'FWL										
5,520.0	0.00	0.00	5,327.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00	
5,560.0	0.00	0.00	5,367.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00	
5,600.0	0.00	0.00	5,407.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00	
5,640.0	0.00	0.00	5,447.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00	
5,680.0	0.00	0.00	5,487.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00	
5,720.0	0.00	0.00	5,527.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00	
5,760.0	0.00	0.00	5,567.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00	
5,800.0	0.00	0.00	5,607.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00	
5,840.0	0.00	0.00	5,647.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00	
5,880.0	0.00	0.00	5,687.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00	
5,920.0	0.00	0.00	5,727.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00	
5,960.0	0.00	0.00	5,767.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00	
6,000.0	0.00	0.00	5,807.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00	
6,040.0	0.00	0.00	5,847.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00	
6,080.0	0.00	0.00	5,887.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00	
6,120.0	0.00	0.00	5,927.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00	
6,160.0	0.00	0.00	5,967.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00	
6,200.0	0.00	0.00	6,007.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00	

Database: Landmark
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.33-T7N-R66W
Site: RH Farms II33-12D Pad Sec.33-T7N-R66W
Well: RH Farms II33-14D
Wellbore: Wellbore #1
Design: Noble RH Farms II33-14D Plan #1 (9-06-11)

Local Co-ordinate Reference: Well RH Farms II33-14D
TVD Reference: WELL @ 4878.0ft (Original Well Elev)
MD Reference: WELL @ 4878.0ft (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)
6,240.0	0.00	0.00	6,047.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
6,280.0	0.00	0.00	6,087.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
6,320.0	0.00	0.00	6,127.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
6,360.0	0.00	0.00	6,167.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
6,400.0	0.00	0.00	6,207.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
6,440.0	0.00	0.00	6,247.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
6,480.0	0.00	0.00	6,287.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
6,520.0	0.00	0.00	6,327.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
6,560.0	0.00	0.00	6,367.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
6,600.0	0.00	0.00	6,407.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
6,640.0	0.00	0.00	6,447.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
6,680.0	0.00	0.00	6,487.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
6,720.0	0.00	0.00	6,527.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
6,760.0	0.00	0.00	6,567.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
6,800.0	0.00	0.00	6,607.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
6,840.0	0.00	0.00	6,647.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
6,880.0	0.00	0.00	6,687.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
6,920.0	0.00	0.00	6,727.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
6,960.0	0.00	0.00	6,767.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
7,000.0	0.00	0.00	6,807.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
7,040.0	0.00	0.00	6,847.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
7,080.0	0.00	0.00	6,887.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
7,120.0	0.00	0.00	6,927.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
7,160.0	0.00	0.00	6,967.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
7,200.0	0.00	0.00	7,007.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
7,211.7	0.00	0.00	7,019.0	32.8	1,303.8	1,304.2	0.00	0.00	0.00
NIOBRARA - TARGET CIRCLE 660'FSL & 1980'FWL - LEGAL BOX 400' X 400' 662'FSL & 1997'FWL									
7,240.0	0.00	0.00	7,047.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
7,280.0	0.00	0.00	7,087.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
7,320.0	0.00	0.00	7,127.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
7,360.0	0.00	0.00	7,167.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
7,400.0	0.00	0.00	7,207.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
7,440.0	0.00	0.00	7,247.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
7,480.0	0.00	0.00	7,287.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
7,512.7	0.00	0.00	7,320.0	32.8	1,303.8	1,304.2	0.00	0.00	0.00
CODELL									
7,520.0	0.00	0.00	7,327.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
7,560.0	0.00	0.00	7,367.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
7,600.0	0.00	0.00	7,407.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
7,640.0	0.00	0.00	7,447.3	32.8	1,303.8	1,304.2	0.00	0.00	0.00
7,662.7	0.00	0.00	7,470.0	32.8	1,303.8	1,304.2	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well RH Farms II33-14D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4878.0ft (Original Well Elev)
Project:	SEC.33-T7N-R66W	MD Reference:	WELL @ 4878.0ft (Original Well Elev)
Site:	RH Farms II33-12D Pad Sec.33-T7N-R66W	North Reference:	True
Well:	RH Farms II33-14D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble RH Farms II33-14D Plan #1 (9-06-11)		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
TARGET CIRCLE 660'FS	0.00	0.00	7,019.0	32.8	1,303.8	1,435,154.08	3,198,257.55	40.525710	-104.786820
- plan hits target center									
- Circle (radius 75.0)									
TARGET BHL 660'FS	0.00	0.00	5,300.0	32.8	1,303.8	1,435,154.08	3,198,257.55	40.525710	-104.786820
- plan hits target center									
- Point									
LEGAL BOX 400' X 400'FS	0.00	0.00	7,019.0	34.8	1,320.8	1,435,156.18	3,198,274.50	40.525715	-104.786759
- plan misses target center by 17.1ft at 7211.7ft MD (7019.0 TVD, 32.8 N, 1303.8 E)									
- Rectangle (sides W400.0 H400.0 D451.0)									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
928.0	925.0	8 5/8"	8-5/8	12-1/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
7,211.7	7,019.0	NIOBRARA		0.00		
7,512.7	7,320.0	CODELL		0.00		