

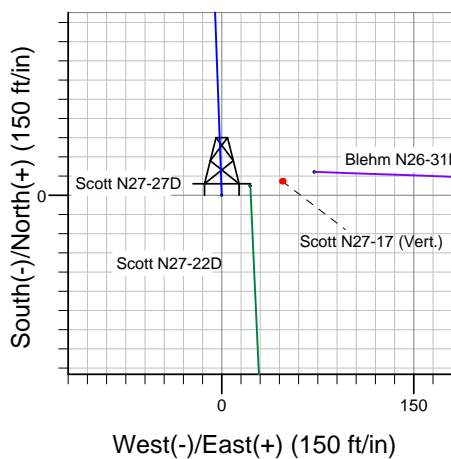
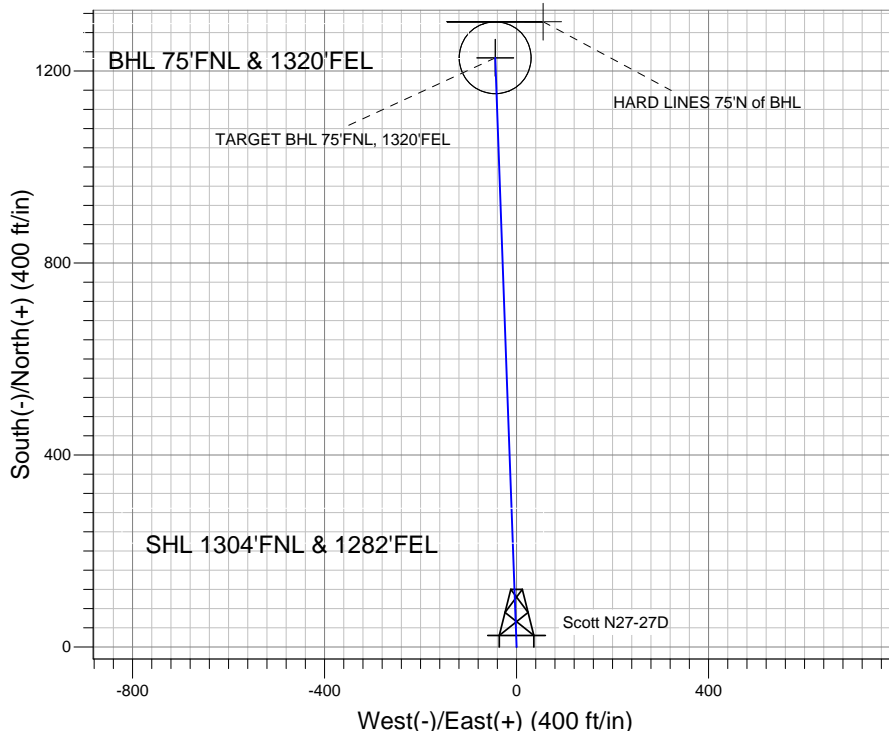
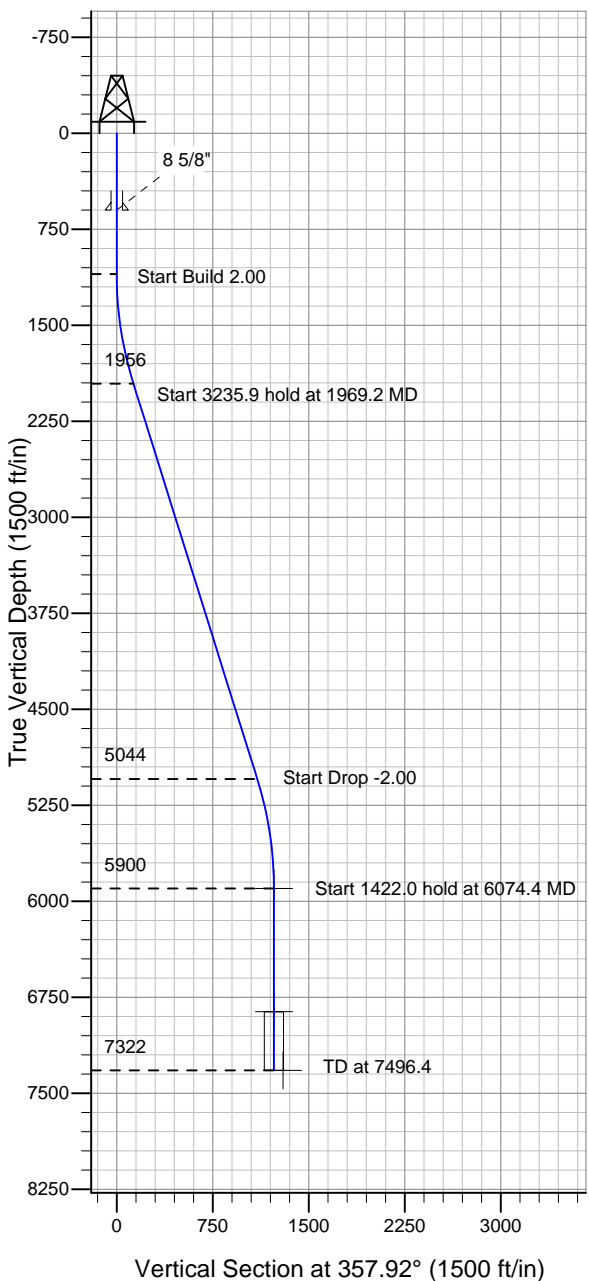
# ENSIGN

## Directional

### Well Name: Scott N27-27D

Surface Location: Blehm N26-31D Pad Sec.27-T5N-R67W  
 North American Datum 1983 US State Plane 1983 Colorado Northern Zone  
 Ground Elevation: 4964.0  
 +N/-S +E/-W Northing Easting Latitude Longitude Slot  
 0.0 0.0 1379831.04 3174300.56 40° 22' 27.660 N 104° 52' 27.840 W  
 Original Well Elev WELL @ 4977.0ft (Original Well Elev)

### NOBLE ENERGY INC WELD COUNTY CO



Blehm N26-31D Pad Sec.27-T5N-R67W  
 Scott N27-27D  
 Noble Scott N27-27D Plan #1 (10-19-10)  
 10:31, October 22 2010



Azimuths to True North  
 Magnetic North: 9.01°

Magnetic Field  
 Strength: 53174.0snT  
 Dip Angle: 67.03°  
 Date: 10/19/2010  
 Model: IGRF2010

### WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 75'FNL, 1320'FEL	5900.0	1227.7	-44.6	40° 22' 39.792 N	104° 52' 28.416 W	Point
TARGET CIRCLE 75'FNL, 1320'FEL	6862.0	1227.7	-44.6	40° 22' 39.792 N	104° 52' 28.416 W	Circle (Radius: 75.0)
HARD LINES 75'N of BHL	7322.0	1302.7	55.4	40° 22' 40.533 N	104° 52' 27.124 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	1100.0	0.00	0.00	1100.0	0.0	0.0	0.00	0.00	0.0	
3	1969.2	17.38	357.92	1955.9	130.8	-4.7	2.00	357.92	130.9	
4	5205.1	17.38	357.92	5044.1	1097.0	-39.8	0.00	0.00	1097.7	
5	6074.4	0.00	0.00	5900.0	1227.7	-44.6	2.00	180.00	1228.5	TARGET BHL 75'FNL, 1320'FEL
6	7496.4	0.00	0.00	7322.0	1227.7	-44.6	0.00	0.00	1228.5	



## **Directional**

### **NOBLE ENERGY INC WELD COUNTY CO**

**SEC.27-T5N-R67W**

**Blehm N26-31D Pad Sec.27-T5N-R67W**

**Scott N27-27D**

**Wellbore #1**

**Plan: Noble Scott N27-27D Plan #1 (10-19-10)**

### **Standard Planning Report**

**22 October, 2010**



<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Scott N27-27D
<b>Company:</b>	NOBLE ENERGY INC WELD COUNTY CO	<b>TVD Reference:</b>	WELL @ 4977.0ft (Original Well Elev)
<b>Project:</b>	SEC.27-T5N-R67W	<b>MD Reference:</b>	WELL @ 4977.0ft (Original Well Elev)
<b>Site:</b>	Blehm N26-31D Pad Sec.27-T5N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	Scott N27-27D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Noble Scott N27-27D Plan #1 (10-19-10)		

<b>Project</b>	SEC.27-T5N-R67W, Weld County, Colorado		
<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						Blehm N26-31D Pad Sec.27-T5N-R67W											
Site Position:						Northing:			1,379,849.77 ft			Latitude:			40° 22' 27.840 N		
From:			Lat/Long			Easting:			3,174,372.87 ft			Longitude:			104° 52' 26.904 W		
Position Uncertainty:			0.0 ft			Slot Radius:			"			Grid Convergence:			0.40 °		

Well	Scott N27-27D					
Well Position	+N-S	-18.2 ft	Northing:	1,379,831.04 ft	Latitude:	40° 22' 27.660 N
	+E-W	-72.4 ft	Easting:	3,174,300.56 ft	Longitude:	104° 52' 27.840 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,964.0 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	10/19/2010	9.01	67.03	53,174

<b>Design</b>	Noble Scott N27-27D Plan #1 (10-19-10)			
<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	357.92

<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	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,969.2	17.38	357.92	1,955.9	130.8	-4.7	2.00	2.00	0.00	357.92	
5,205.1	17.38	357.92	5,044.1	1,097.0	-39.8	0.00	0.00	0.00	0.00	
6,074.4	0.00	0.00	5,900.0	1,227.7	-44.6	2.00	-2.00	0.00	180.00	TARGET BHL 75'FI
7,496.4	0.00	0.00	7,322.0	1,227.7	-44.6	0.00	0.00	0.00	0.00	

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Scott N27-27D
<b>Company:</b>	NOBLE ENERGY INC WELD COUNTY CO	<b>TVD Reference:</b>	WELL @ 4977.0ft (Original Well Elev)
<b>Project:</b>	SEC.27-T5N-R67W	<b>MD Reference:</b>	WELL @ 4977.0ft (Original Well Elev)
<b>Site:</b>	Blehm N26-31D Pad Sec.27-T5N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	Scott N27-27D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Noble Scott N27-27D Plan #1 (10-19-10)		

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
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,120.0	0.40	357.92	1,120.0	0.1	0.0	0.1	2.00	2.00	0.00
1,160.0	1.20	357.92	1,160.0	0.6	0.0	0.6	2.00	2.00	0.00
1,200.0	2.00	357.92	1,200.0	1.7	-0.1	1.7	2.00	2.00	0.00
1,240.0	2.80	357.92	1,239.9	3.4	-0.1	3.4	2.00	2.00	0.00
1,280.0	3.60	357.92	1,279.9	5.6	-0.2	5.7	2.00	2.00	0.00
1,320.0	4.40	357.92	1,319.8	8.4	-0.3	8.4	2.00	2.00	0.00
1,360.0	5.20	357.92	1,359.6	11.8	-0.4	11.8	2.00	2.00	0.00
1,400.0	6.00	357.92	1,399.5	15.7	-0.6	15.7	2.00	2.00	0.00
1,440.0	6.80	357.92	1,439.2	20.1	-0.7	20.2	2.00	2.00	0.00
1,480.0	7.60	357.92	1,478.9	25.1	-0.9	25.2	2.00	2.00	0.00
1,520.0	8.40	357.92	1,518.5	30.7	-1.1	30.7	2.00	2.00	0.00
1,560.0	9.20	357.92	1,558.0	36.8	-1.3	36.9	2.00	2.00	0.00
1,600.0	10.00	357.92	1,597.5	43.5	-1.6	43.5	2.00	2.00	0.00
1,640.0	10.80	357.92	1,636.8	50.7	-1.8	50.7	2.00	2.00	0.00
1,680.0	11.60	357.92	1,676.0	58.5	-2.1	58.5	2.00	2.00	0.00
1,720.0	12.40	357.92	1,715.2	66.8	-2.4	66.8	2.00	2.00	0.00
1,760.0	13.20	357.92	1,754.2	75.6	-2.7	75.7	2.00	2.00	0.00
1,800.0	14.00	357.92	1,793.1	85.0	-3.1	85.1	2.00	2.00	0.00
1,840.0	14.80	357.92	1,831.8	95.0	-3.4	95.0	2.00	2.00	0.00
1,880.0	15.60	357.92	1,870.4	105.5	-3.8	105.5	2.00	2.00	0.00
1,920.0	16.40	357.92	1,908.8	116.5	-4.2	116.6	2.00	2.00	0.00
1,960.0	17.20	357.92	1,947.1	128.0	-4.6	128.1	2.00	2.00	0.00
1,969.2	17.38	357.92	1,955.9	130.8	-4.7	130.9	2.00	2.00	0.00
2,000.0	17.38	357.92	1,985.3	140.0	-5.1	140.1	0.00	0.00	0.00
2,040.0	17.38	357.92	2,023.5	151.9	-5.5	152.0	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Scott N27-27D
<b>Company:</b>	NOBLE ENERGY INC WELD COUNTY CO	<b>TVD Reference:</b>	WELL @ 4977.0ft (Original Well Elev)
<b>Project:</b>	SEC.27-T5N-R67W	<b>MD Reference:</b>	WELL @ 4977.0ft (Original Well Elev)
<b>Site:</b>	Blehm N26-31D Pad Sec.27-T5N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	Scott N27-27D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Noble Scott N27-27D Plan #1 (10-19-10)		

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	17.38	357.92	2,061.7	163.8	-5.9	164.0	0.00	0.00	0.00
2,120.0	17.38	357.92	2,099.8	175.8	-6.4	175.9	0.00	0.00	0.00
2,160.0	17.38	357.92	2,138.0	187.7	-6.8	187.9	0.00	0.00	0.00
2,200.0	17.38	357.92	2,176.2	199.7	-7.3	199.8	0.00	0.00	0.00
2,240.0	17.38	357.92	2,214.4	211.6	-7.7	211.8	0.00	0.00	0.00
2,280.0	17.38	357.92	2,252.5	223.6	-8.1	223.7	0.00	0.00	0.00
2,320.0	17.38	357.92	2,290.7	235.5	-8.6	235.7	0.00	0.00	0.00
2,360.0	17.38	357.92	2,328.9	247.5	-9.0	247.6	0.00	0.00	0.00
2,400.0	17.38	357.92	2,367.0	259.4	-9.4	259.6	0.00	0.00	0.00
2,440.0	17.38	357.92	2,405.2	271.3	-9.9	271.5	0.00	0.00	0.00
2,480.0	17.38	357.92	2,443.4	283.3	-10.3	283.5	0.00	0.00	0.00
2,520.0	17.38	357.92	2,481.6	295.2	-10.7	295.4	0.00	0.00	0.00
2,560.0	17.38	357.92	2,519.7	307.2	-11.2	307.4	0.00	0.00	0.00
2,600.0	17.38	357.92	2,557.9	319.1	-11.6	319.3	0.00	0.00	0.00
2,640.0	17.38	357.92	2,596.1	331.1	-12.0	331.3	0.00	0.00	0.00
2,680.0	17.38	357.92	2,634.3	343.0	-12.5	343.2	0.00	0.00	0.00
2,720.0	17.38	357.92	2,672.4	354.9	-12.9	355.2	0.00	0.00	0.00
2,760.0	17.38	357.92	2,710.6	366.9	-13.3	367.1	0.00	0.00	0.00
2,800.0	17.38	357.92	2,748.8	378.8	-13.8	379.1	0.00	0.00	0.00
2,840.0	17.38	357.92	2,786.9	390.8	-14.2	391.0	0.00	0.00	0.00
2,880.0	17.38	357.92	2,825.1	402.7	-14.6	403.0	0.00	0.00	0.00
2,920.0	17.38	357.92	2,863.3	414.7	-15.1	414.9	0.00	0.00	0.00
2,960.0	17.38	357.92	2,901.5	426.6	-15.5	426.9	0.00	0.00	0.00
3,000.0	17.38	357.92	2,939.6	438.5	-15.9	438.8	0.00	0.00	0.00
3,040.0	17.38	357.92	2,977.8	450.5	-16.4	450.8	0.00	0.00	0.00
3,080.0	17.38	357.92	3,016.0	462.4	-16.8	462.7	0.00	0.00	0.00
3,120.0	17.38	357.92	3,054.2	474.4	-17.2	474.7	0.00	0.00	0.00
3,160.0	17.38	357.92	3,092.3	486.3	-17.7	486.6	0.00	0.00	0.00
3,200.0	17.38	357.92	3,130.5	498.3	-18.1	498.6	0.00	0.00	0.00
3,240.0	17.38	357.92	3,168.7	510.2	-18.5	510.5	0.00	0.00	0.00
3,280.0	17.38	357.92	3,206.9	522.2	-19.0	522.5	0.00	0.00	0.00
3,320.0	17.38	357.92	3,245.0	534.1	-19.4	534.4	0.00	0.00	0.00
3,360.0	17.38	357.92	3,283.2	546.0	-19.8	546.4	0.00	0.00	0.00
3,400.0	17.38	357.92	3,321.4	558.0	-20.3	558.3	0.00	0.00	0.00
3,440.0	17.38	357.92	3,359.5	569.9	-20.7	570.3	0.00	0.00	0.00
3,480.0	17.38	357.92	3,397.7	581.9	-21.1	582.3	0.00	0.00	0.00
3,520.0	17.38	357.92	3,435.9	593.8	-21.6	594.2	0.00	0.00	0.00
3,560.0	17.38	357.92	3,474.1	605.8	-22.0	606.2	0.00	0.00	0.00
3,600.0	17.38	357.92	3,512.2	617.7	-22.4	618.1	0.00	0.00	0.00
3,640.0	17.38	357.92	3,550.4	629.6	-22.9	630.1	0.00	0.00	0.00
3,680.0	17.38	357.92	3,588.6	641.6	-23.3	642.0	0.00	0.00	0.00
3,720.0	17.38	357.92	3,626.8	653.5	-23.7	654.0	0.00	0.00	0.00
3,760.0	17.38	357.92	3,664.9	665.5	-24.2	665.9	0.00	0.00	0.00
3,800.0	17.38	357.92	3,703.1	677.4	-24.6	677.9	0.00	0.00	0.00
3,840.0	17.38	357.92	3,741.3	689.4	-25.0	689.8	0.00	0.00	0.00
3,880.0	17.38	357.92	3,779.4	701.3	-25.5	701.8	0.00	0.00	0.00
3,920.0	17.38	357.92	3,817.6	713.2	-25.9	713.7	0.00	0.00	0.00
3,960.0	17.38	357.92	3,855.8	725.2	-26.3	725.7	0.00	0.00	0.00
4,000.0	17.38	357.92	3,894.0	737.1	-26.8	737.6	0.00	0.00	0.00
4,040.0	17.38	357.92	3,932.1	749.1	-27.2	749.6	0.00	0.00	0.00
4,080.0	17.38	357.92	3,970.3	761.0	-27.6	761.5	0.00	0.00	0.00
4,120.0	17.38	357.92	4,008.5	773.0	-28.1	773.5	0.00	0.00	0.00
4,160.0	17.38	357.92	4,046.7	784.9	-28.5	785.4	0.00	0.00	0.00
4,200.0	17.38	357.92	4,084.8	796.8	-28.9	797.4	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Scott N27-27D
<b>Company:</b>	NOBLE ENERGY INC WELD COUNTY CO	<b>TVD Reference:</b>	WELL @ 4977.0ft (Original Well Elev)
<b>Project:</b>	SEC.27-T5N-R67W	<b>MD Reference:</b>	WELL @ 4977.0ft (Original Well Elev)
<b>Site:</b>	Blehm N26-31D Pad Sec.27-T5N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	Scott N27-27D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Noble Scott N27-27D Plan #1 (10-19-10)		

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	17.38	357.92	4,123.0	808.8	-29.4	809.3	0.00	0.00	0.00
4,280.0	17.38	357.92	4,161.2	820.7	-29.8	821.3	0.00	0.00	0.00
4,320.0	17.38	357.92	4,199.3	832.7	-30.2	833.2	0.00	0.00	0.00
4,360.0	17.38	357.92	4,237.5	844.6	-30.7	845.2	0.00	0.00	0.00
4,400.0	17.38	357.92	4,275.7	856.6	-31.1	857.1	0.00	0.00	0.00
4,440.0	17.38	357.92	4,313.9	868.5	-31.5	869.1	0.00	0.00	0.00
4,480.0	17.38	357.92	4,352.0	880.5	-32.0	881.0	0.00	0.00	0.00
4,520.0	17.38	357.92	4,390.2	892.4	-32.4	893.0	0.00	0.00	0.00
4,560.0	17.38	357.92	4,428.4	904.3	-32.8	904.9	0.00	0.00	0.00
4,600.0	17.38	357.92	4,466.6	916.3	-33.3	916.9	0.00	0.00	0.00
4,640.0	17.38	357.92	4,504.7	928.2	-33.7	928.8	0.00	0.00	0.00
4,680.0	17.38	357.92	4,542.9	940.2	-34.1	940.8	0.00	0.00	0.00
4,720.0	17.38	357.92	4,581.1	952.1	-34.6	952.7	0.00	0.00	0.00
4,760.0	17.38	357.92	4,619.2	964.1	-35.0	964.7	0.00	0.00	0.00
4,800.0	17.38	357.92	4,657.4	976.0	-35.4	976.6	0.00	0.00	0.00
4,840.0	17.38	357.92	4,695.6	987.9	-35.9	988.6	0.00	0.00	0.00
4,880.0	17.38	357.92	4,733.8	999.9	-36.3	1,000.5	0.00	0.00	0.00
4,920.0	17.38	357.92	4,771.9	1,011.8	-36.7	1,012.5	0.00	0.00	0.00
4,960.0	17.38	357.92	4,810.1	1,023.8	-37.2	1,024.4	0.00	0.00	0.00
5,000.0	17.38	357.92	4,848.3	1,035.7	-37.6	1,036.4	0.00	0.00	0.00
5,040.0	17.38	357.92	4,886.5	1,047.7	-38.0	1,048.3	0.00	0.00	0.00
5,080.0	17.38	357.92	4,924.6	1,059.6	-38.5	1,060.3	0.00	0.00	0.00
5,120.0	17.38	357.92	4,962.8	1,071.5	-38.9	1,072.3	0.00	0.00	0.00
5,160.0	17.38	357.92	5,001.0	1,083.5	-39.3	1,084.2	0.00	0.00	0.00
5,200.0	17.38	357.92	5,039.1	1,095.4	-39.8	1,096.2	0.00	0.00	0.00
5,205.1	17.38	357.92	5,044.1	1,097.0	-39.8	1,097.7	0.00	0.00	0.00
5,240.0	16.69	357.92	5,077.4	1,107.2	-40.2	1,107.9	2.00	-2.00	0.00
5,280.0	15.89	357.92	5,115.8	1,118.4	-40.6	1,119.1	2.00	-2.00	0.00
5,320.0	15.09	357.92	5,154.3	1,129.1	-41.0	1,129.8	2.00	-2.00	0.00
5,360.0	14.29	357.92	5,193.0	1,139.2	-41.4	1,139.9	2.00	-2.00	0.00
5,400.0	13.49	357.92	5,231.8	1,148.8	-41.7	1,149.5	2.00	-2.00	0.00
5,440.0	12.69	357.92	5,270.8	1,157.8	-42.0	1,158.6	2.00	-2.00	0.00
5,480.0	11.89	357.92	5,309.9	1,166.3	-42.3	1,167.1	2.00	-2.00	0.00
5,520.0	11.09	357.92	5,349.1	1,174.3	-42.6	1,175.1	2.00	-2.00	0.00
5,560.0	10.29	357.92	5,388.4	1,181.7	-42.9	1,182.5	2.00	-2.00	0.00
5,600.0	9.49	357.92	5,427.8	1,188.6	-43.2	1,189.4	2.00	-2.00	0.00
5,640.0	8.69	357.92	5,467.3	1,194.9	-43.4	1,195.7	2.00	-2.00	0.00
5,680.0	7.89	357.92	5,506.9	1,200.7	-43.6	1,201.4	2.00	-2.00	0.00
5,720.0	7.09	357.92	5,546.5	1,205.9	-43.8	1,206.7	2.00	-2.00	0.00
5,760.0	6.29	357.92	5,586.3	1,210.5	-44.0	1,211.3	2.00	-2.00	0.00
5,800.0	5.49	357.92	5,626.1	1,214.6	-44.1	1,215.4	2.00	-2.00	0.00
5,840.0	4.69	357.92	5,665.9	1,218.2	-44.2	1,219.0	2.00	-2.00	0.00
5,880.0	3.89	357.92	5,705.8	1,221.2	-44.3	1,222.0	2.00	-2.00	0.00
5,920.0	3.09	357.92	5,745.7	1,223.6	-44.4	1,224.4	2.00	-2.00	0.00
5,960.0	2.29	357.92	5,785.7	1,225.5	-44.5	1,226.3	2.00	-2.00	0.00
6,000.0	1.49	357.92	5,825.6	1,226.8	-44.5	1,227.6	2.00	-2.00	0.00
6,040.0	0.69	357.92	5,865.6	1,227.5	-44.6	1,228.3	2.00	-2.00	0.00
6,074.4	0.00	0.00	5,900.0	1,227.7	-44.6	1,228.5	2.00	-2.00	0.00
6,080.0	0.00	0.00	5,905.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
6,120.0	0.00	0.00	5,945.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
6,160.0	0.00	0.00	5,985.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
6,200.0	0.00	0.00	6,025.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
6,240.0	0.00	0.00	6,065.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
6,280.0	0.00	0.00	6,105.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Scott N27-27D
<b>Company:</b>	NOBLE ENERGY INC WELD COUNTY CO	<b>TVD Reference:</b>	WELL @ 4977.0ft (Original Well Elev)
<b>Project:</b>	SEC.27-T5N-R67W	<b>MD Reference:</b>	WELL @ 4977.0ft (Original Well Elev)
<b>Site:</b>	Blehm N26-31D Pad Sec.27-T5N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	Scott N27-27D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Noble Scott N27-27D Plan #1 (10-19-10)		

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)
6,320.0	0.00	0.00	6,145.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
6,360.0	0.00	0.00	6,185.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
6,400.0	0.00	0.00	6,225.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
6,440.0	0.00	0.00	6,265.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
6,480.0	0.00	0.00	6,305.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
6,520.0	0.00	0.00	6,345.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
6,560.0	0.00	0.00	6,385.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
6,600.0	0.00	0.00	6,425.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
6,640.0	0.00	0.00	6,465.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
6,680.0	0.00	0.00	6,505.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
6,720.0	0.00	0.00	6,545.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
6,760.0	0.00	0.00	6,585.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
6,800.0	0.00	0.00	6,625.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
6,840.0	0.00	0.00	6,665.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
6,880.0	0.00	0.00	6,705.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
6,920.0	0.00	0.00	6,745.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
6,960.0	0.00	0.00	6,785.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
7,000.0	0.00	0.00	6,825.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
7,040.0	0.00	0.00	6,865.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
7,080.0	0.00	0.00	6,905.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
7,120.0	0.00	0.00	6,945.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
7,160.0	0.00	0.00	6,985.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
7,200.0	0.00	0.00	7,025.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
7,240.0	0.00	0.00	7,065.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
7,280.0	0.00	0.00	7,105.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
7,320.0	0.00	0.00	7,145.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
7,360.0	0.00	0.00	7,185.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
7,400.0	0.00	0.00	7,225.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
7,440.0	0.00	0.00	7,265.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
7,480.0	0.00	0.00	7,305.6	1,227.7	-44.6	1,228.5	0.00	0.00	0.00
7,496.4	0.00	0.00	7,322.0	1,227.7	-44.6	1,228.5	0.00	0.00	0.00

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 75'FNL	0.00	0.00	5,900.0	1,227.7	-44.6	1,381,058.38	3,174,247.32	40° 22' 39.792 N	104° 52' 28.416 W
- plan hits target									
- Point									
HARD LINES 75'N of	0.00	0.00	7,322.0	1,302.7	55.4	1,381,134.04	3,174,346.76	40° 22' 40.533 N	104° 52' 27.124 W
- plan misses by 125.0ft at 7496.4ft MD (7322.0 TVD, 1227.7 N, -44.6 E)									
- Polygon									
Point 1			7,322.0	0.0	0.0	1,381,134.04	3,174,346.76		
Point 2			7,322.0	0.0	-200.0	1,381,132.63	3,174,146.78		
TARGET CIRCLE 75'	0.00	0.00	6,862.0	1,227.7	-44.6	1,381,058.38	3,174,247.32	40° 22' 39.792 N	104° 52' 28.416 W
- plan hits target									
- Circle (radius 75.0)									

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Scott N27-27D
<b>Company:</b>	NOBLE ENERGY INC WELD COUNTY CO	<b>TVD Reference:</b>	WELL @ 4977.0ft (Original Well Elev)
<b>Project:</b>	SEC.27-T5N-R67W	<b>MD Reference:</b>	WELL @ 4977.0ft (Original Well Elev)
<b>Site:</b>	Blehm N26-31D Pad Sec.27-T5N-R67W	<b>North Reference:</b>	True
<b>Well:</b>	Scott N27-27D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Noble Scott N27-27D Plan #1 (10-19-10)		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
600.0	600.0	8 5/8"	8-5/8	12-1/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
7,036.4	6,862.0	NIOBRARA		0.00		
7,346.4	7,172.0	CODELL		0.00		