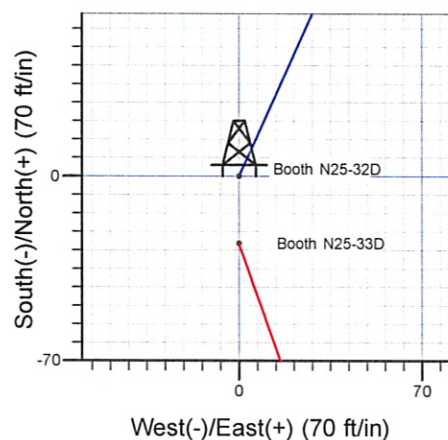
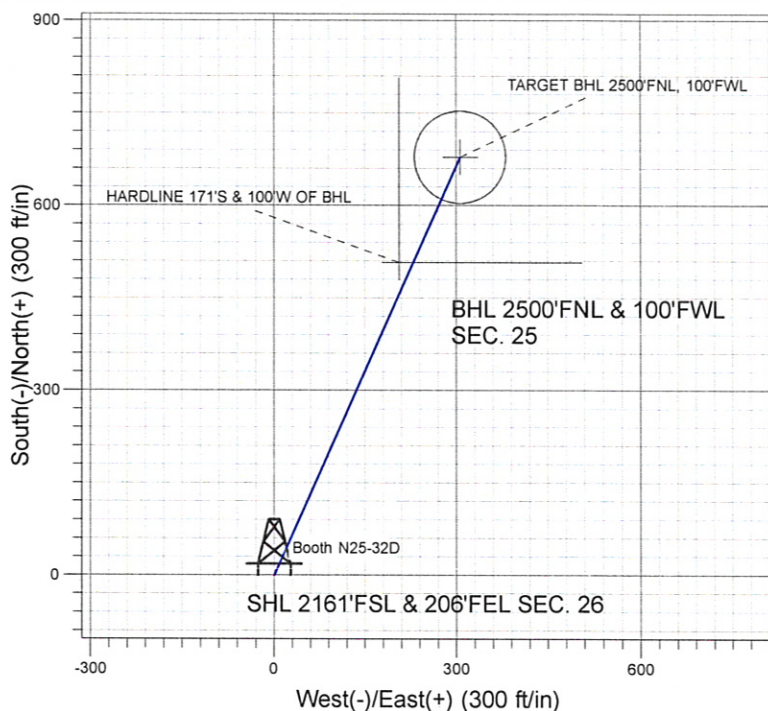
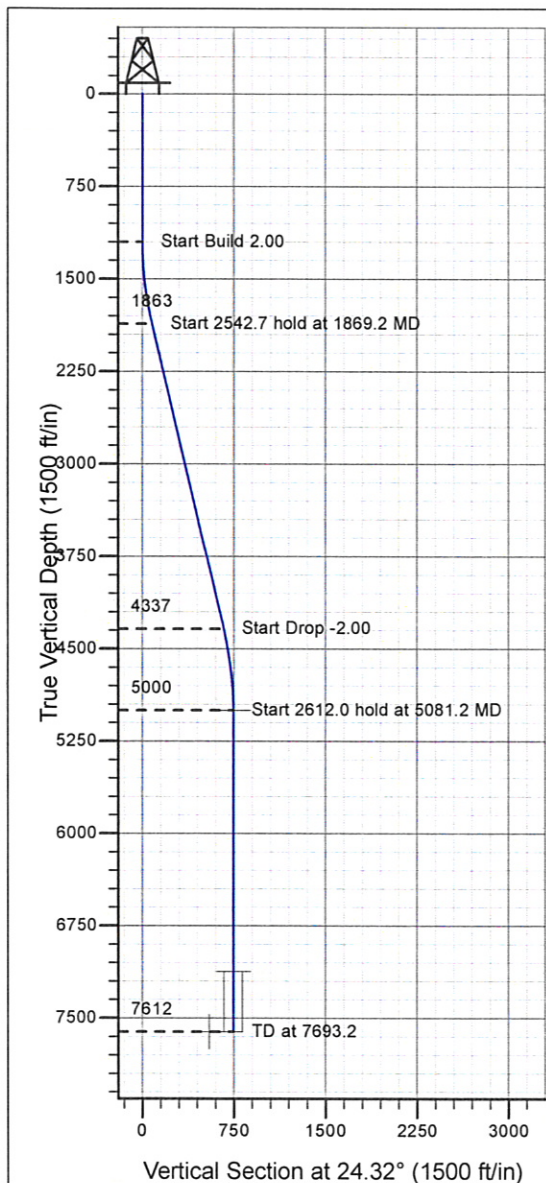


ENSIGN**Directional****Well Name: Booth N25-32D**Surface Location: Booth N25-33D Pad Sec.26-T5N-R67W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4949.0

+N/-S+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.01377985	81.3180636	01 40° 22' 8.976 N	104° 51' 6.156 W	
Original Well Elev WELL @ 4962.0ft (Original Well Elev)					

NOBLE ENERGY INC WELD COUNTY CO

Booth N25-33D Pad Sec.26-T5N-R67W
Booth N25-32D
Noble Booth N25-32D Plan #1 (02-23-10)
16:18, February 23 2010



Azimuths to True North
Magnetic North: 9.07°

Magnetic Field
Strength: 53277.6snT
Dip Angle: 67.07°
Date: 12/31/2009
Model: IGRF200510

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 2500'FNL, 100'FWL	5000.0	678.2	306.5	40° 22' 15.678 N	104° 51' 2.196 W	Point
TARGET CIRCLE 2500'FNL, 100'FWL	7122.0	678.2	306.5	40° 22' 15.678 N	104° 51' 2.196 W	Circle (Radius: 75.0)
HARDLINE 171'S & 100'W OF BHL	7612.0	507.2	206.5	40° 22' 13.988 N	104° 51' 3.488 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	1869.2	13.38	24.32	1863.2	70.9	32.0	2.00	24.32	77.8	
4	4412.0	13.38	24.32	4336.8	607.3	274.5	0.00	0.00	666.4	
5	5081.2	0.00	0.00	5000.0	678.2	306.5	2.00	180.00	744.2	TARGET BHL 2500'FNL, 100'FWL
6	7693.2	0.00	0.00	7612.0	678.2	306.5	0.00	0.00	744.2	



Directional

NOBLE ENERGY INC WELD COUNTY CO

SEC.26-T5N-R67W

Booth N25-33D Pad Sec.26-T5N-R67W

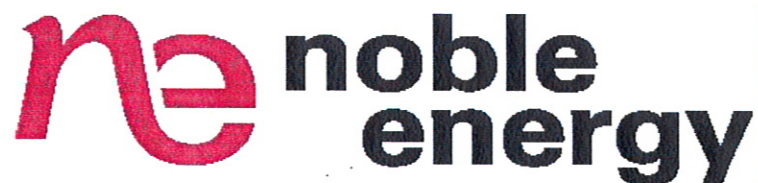
Booth N25-32D

Wellbore #1

Plan: Noble Booth N25-32D Plan #1 (02-23-10)

Standard Planning Report

23 February, 2010



Database: EDM den0-adp01 Server Data
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.26-T5N-R67W
Site: Booth N25-33D Pad Sec.26-T5N-R67W
Well: Booth N25-32D
Wellbore: Wellbore #1
Design: Noble Booth N25-32D Plan #1 (02-23-10)

Local Co-ordinate Reference: Well Booth N25-32D
TVD Reference: WELL @ 4962.0ft (Original Well Elev)
MD Reference: WELL @ 4962.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Project	SEC.26-T5N-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	Booth N25-33D Pad Sec.26-T5N-R67W		
Site Position:		Northing:	1,377,960.32 ft
From:	Lat/Long	Easting:	3,180,636.19 ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	40° 22' 8.724 N
		Longitude:	104° 51' 6.156 W
		Grid Convergence:	0.42 °

Well	Booth N25-32D		
Well Position	+N/-S	25.5 ft	Northing: 1,377,985.81 ft
	+E/-W	0.0 ft	Easting: 3,180,636.01 ft
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft
		Latitude:	40° 22' 8.976 N
		Longitude:	104° 51' 6.156 W
		Ground Level:	4,949.0 ft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
	IGRF200510	12/31/2009	(°)
			9.07
			Dip Angle
			(°)
			67.07
			Field Strength
			(nT)
			53,278

Design Noble Booth N25-32D Plan #1 (02-23-10)

Audit Notes:

Version: Phase: PROTOTYPE Tie On Depth: 0.0

Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	24.32

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	
1,869.2	13.38	24.32	1,863.2	70.9	32.0	2.00	2.00	0.00	24.32	
4,412.0	13.38	24.32	4,336.8	607.3	274.5	0.00	0.00	0.00	0.00	
5,081.2	0.00	0.00	5,000.0	678.2	306.5	2.00	-2.00	0.00	180.00	TARGET BHL 250C
7,693.2	0.00	0.00	7,612.0	678.2	306.5	0.00	0.00	0.00	0.00	

Database: EDM den0-adp01 Server Data
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.26-T5N-R67W
Site: Booth N25-33D Pad Sec.26-T5N-R67W
Well: Booth N25-32D
Wellbore: Wellbore #1
Design: Noble Booth N25-32D Plan #1 (02-23-10)

Local Co-ordinate Reference: Well Booth N25-32D
TVD Reference: WELL @ 4962.0ft (Original Well Elev)
MD Reference: WELL @ 4962.0ft (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)
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	24.32	1,240.0	0.3	0.1	0.3	2.00	2.00	0.00
1,280.0	1.60	24.32	1,280.0	1.0	0.5	1.1	2.00	2.00	0.00
1,320.0	2.40	24.32	1,320.0	2.3	1.0	2.5	2.00	2.00	0.00
1,360.0	3.20	24.32	1,359.9	4.1	1.8	4.5	2.00	2.00	0.00
1,400.0	4.00	24.32	1,399.8	6.4	2.9	7.0	2.00	2.00	0.00
1,440.0	4.80	24.32	1,439.7	9.2	4.1	10.0	2.00	2.00	0.00
1,480.0	5.60	24.32	1,479.6	12.5	5.6	13.7	2.00	2.00	0.00
1,520.0	6.40	24.32	1,519.3	16.3	7.4	17.9	2.00	2.00	0.00
1,560.0	7.20	24.32	1,559.1	20.6	9.3	22.6	2.00	2.00	0.00
1,600.0	8.00	24.32	1,598.7	25.4	11.5	27.9	2.00	2.00	0.00
1,640.0	8.80	24.32	1,638.3	30.7	13.9	33.7	2.00	2.00	0.00
1,680.0	9.60	24.32	1,677.8	36.6	16.5	40.1	2.00	2.00	0.00
1,720.0	10.40	24.32	1,717.1	42.9	19.4	47.1	2.00	2.00	0.00
1,760.0	11.20	24.32	1,756.4	49.7	22.5	54.6	2.00	2.00	0.00
1,800.0	12.00	24.32	1,795.6	57.0	25.8	62.6	2.00	2.00	0.00
1,840.0	12.80	24.32	1,834.7	64.9	29.3	71.2	2.00	2.00	0.00
1,869.2	13.38	24.32	1,863.2	70.9	32.0	77.8	2.00	2.00	0.00
1,880.0	13.38	24.32	1,873.6	73.2	33.1	80.3	0.00	0.00	0.00
1,920.0	13.38	24.32	1,912.6	81.6	36.9	89.6	0.00	0.00	0.00
1,960.0	13.38	24.32	1,951.5	90.1	40.7	98.8	0.00	0.00	0.00
2,000.0	13.38	24.32	1,990.4	98.5	44.5	108.1	0.00	0.00	0.00
2,040.0	13.38	24.32	2,029.3	106.9	48.3	117.3	0.00	0.00	0.00
2,080.0	13.38	24.32	2,068.2	115.4	52.1	126.6	0.00	0.00	0.00

Database: EDM den0-adp01 Server Data
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.26-T5N-R67W
Site: Booth N25-33D Pad Sec.26-T5N-R67W
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Wellbore: Wellbore #1
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MD Reference: WELL @ 4962.0ft (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)
2,120.0	13.38	24.32	2,107.1	123.8	56.0	135.9	0.00	0.00	0.00
2,160.0	13.38	24.32	2,146.0	132.2	59.8	145.1	0.00	0.00	0.00
2,200.0	13.38	24.32	2,184.9	140.7	63.6	154.4	0.00	0.00	0.00
2,240.0	13.38	24.32	2,223.9	149.1	67.4	163.6	0.00	0.00	0.00
2,280.0	13.38	24.32	2,262.8	157.6	71.2	172.9	0.00	0.00	0.00
2,320.0	13.38	24.32	2,301.7	166.0	75.0	182.2	0.00	0.00	0.00
2,360.0	13.38	24.32	2,340.6	174.4	78.8	191.4	0.00	0.00	0.00
2,400.0	13.38	24.32	2,379.5	182.9	82.6	200.7	0.00	0.00	0.00
2,440.0	13.38	24.32	2,418.4	191.3	86.5	209.9	0.00	0.00	0.00
2,480.0	13.38	24.32	2,457.3	199.7	90.3	219.2	0.00	0.00	0.00
2,520.0	13.38	24.32	2,496.3	208.2	94.1	228.5	0.00	0.00	0.00
2,560.0	13.38	24.32	2,535.2	216.6	97.9	237.7	0.00	0.00	0.00
2,600.0	13.38	24.32	2,574.1	225.1	101.7	247.0	0.00	0.00	0.00
2,640.0	13.38	24.32	2,613.0	233.5	105.5	256.2	0.00	0.00	0.00
2,680.0	13.38	24.32	2,651.9	241.9	109.3	265.5	0.00	0.00	0.00
2,720.0	13.38	24.32	2,690.8	250.4	113.2	274.8	0.00	0.00	0.00
2,760.0	13.38	24.32	2,729.7	258.8	117.0	284.0	0.00	0.00	0.00
2,800.0	13.38	24.32	2,768.6	267.2	120.8	293.3	0.00	0.00	0.00
2,840.0	13.38	24.32	2,807.6	275.7	124.6	302.5	0.00	0.00	0.00
2,880.0	13.38	24.32	2,846.5	284.1	128.4	311.8	0.00	0.00	0.00
2,920.0	13.38	24.32	2,885.4	292.6	132.2	321.1	0.00	0.00	0.00
2,960.0	13.38	24.32	2,924.3	301.0	136.0	330.3	0.00	0.00	0.00
3,000.0	13.38	24.32	2,963.2	309.4	139.8	339.6	0.00	0.00	0.00
3,040.0	13.38	24.32	3,002.1	317.9	143.7	348.8	0.00	0.00	0.00
3,080.0	13.38	24.32	3,041.0	326.3	147.5	358.1	0.00	0.00	0.00
3,120.0	13.38	24.32	3,080.0	334.8	151.3	367.4	0.00	0.00	0.00
3,160.0	13.38	24.32	3,118.9	343.2	155.1	376.6	0.00	0.00	0.00
3,200.0	13.38	24.32	3,157.8	351.6	158.9	385.9	0.00	0.00	0.00
3,240.0	13.38	24.32	3,196.7	360.1	162.7	395.1	0.00	0.00	0.00
3,280.0	13.38	24.32	3,235.6	368.5	166.5	404.4	0.00	0.00	0.00
3,320.0	13.38	24.32	3,274.5	376.9	170.4	413.6	0.00	0.00	0.00
3,360.0	13.38	24.32	3,313.4	385.4	174.2	422.9	0.00	0.00	0.00
3,400.0	13.38	24.32	3,352.4	393.8	178.0	432.2	0.00	0.00	0.00
3,440.0	13.38	24.32	3,391.3	402.3	181.8	441.4	0.00	0.00	0.00
3,480.0	13.38	24.32	3,430.2	410.7	185.6	450.7	0.00	0.00	0.00
3,520.0	13.38	24.32	3,469.1	419.1	189.4	459.9	0.00	0.00	0.00
3,560.0	13.38	24.32	3,508.0	427.6	193.2	469.2	0.00	0.00	0.00
3,600.0	13.38	24.32	3,546.9	436.0	197.0	478.5	0.00	0.00	0.00
3,640.0	13.38	24.32	3,585.8	444.4	200.9	487.7	0.00	0.00	0.00
3,680.0	13.38	24.32	3,624.7	452.9	204.7	497.0	0.00	0.00	0.00
3,720.0	13.38	24.32	3,663.7	461.3	208.5	506.2	0.00	0.00	0.00
3,760.0	13.38	24.32	3,702.6	469.8	212.3	515.5	0.00	0.00	0.00
3,800.0	13.38	24.32	3,741.5	478.2	216.1	524.8	0.00	0.00	0.00
3,840.0	13.38	24.32	3,780.4	486.6	219.9	534.0	0.00	0.00	0.00
3,880.0	13.38	24.32	3,819.3	495.1	223.7	543.3	0.00	0.00	0.00
3,920.0	13.38	24.32	3,858.2	503.5	227.6	552.5	0.00	0.00	0.00
3,960.0	13.38	24.32	3,897.1	511.9	231.4	561.8	0.00	0.00	0.00
4,000.0	13.38	24.32	3,936.1	520.4	235.2	571.1	0.00	0.00	0.00
4,040.0	13.38	24.32	3,975.0	528.8	239.0	580.3	0.00	0.00	0.00
4,080.0	13.38	24.32	4,013.9	537.3	242.8	589.6	0.00	0.00	0.00
4,120.0	13.38	24.32	4,052.8	545.7	246.6	598.8	0.00	0.00	0.00
4,160.0	13.38	24.32	4,091.7	554.1	250.4	608.1	0.00	0.00	0.00
4,200.0	13.38	24.32	4,130.6	562.6	254.2	617.4	0.00	0.00	0.00
4,240.0	13.38	24.32	4,169.5	571.0	258.1	626.6	0.00	0.00	0.00

Database: EDM den0-adp01 Server Data
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.26-T5N-R67W
Site: Booth N25-33D Pad Sec.26-T5N-R67W
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TVD Reference: WELL @ 4962.0ft (Original Well Elev)
MD Reference: WELL @ 4962.0ft (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	13.38	24.32	4,208.4	579.4	261.9	635.9	0.00	0.00	0.00
4,320.0	13.38	24.32	4,247.4	587.9	265.7	645.1	0.00	0.00	0.00
4,360.0	13.38	24.32	4,286.3	596.3	269.5	654.4	0.00	0.00	0.00
4,400.0	13.38	24.32	4,325.2	604.8	273.3	663.7	0.00	0.00	0.00
4,412.0	13.38	24.32	4,336.8	607.3	274.5	666.4	0.00	0.00	0.00
4,440.0	12.82	24.32	4,364.1	613.1	277.1	672.8	2.00	-2.00	0.00
4,480.0	12.02	24.32	4,403.2	620.9	280.6	681.4	2.00	-2.00	0.00
4,520.0	11.22	24.32	4,442.4	628.3	283.9	689.4	2.00	-2.00	0.00
4,560.0	10.42	24.32	4,481.7	635.1	287.0	697.0	2.00	-2.00	0.00
4,600.0	9.62	24.32	4,521.1	641.5	289.9	703.9	2.00	-2.00	0.00
4,640.0	8.82	24.32	4,560.5	647.3	292.5	710.3	2.00	-2.00	0.00
4,680.0	8.02	24.32	4,600.1	652.6	295.0	716.2	2.00	-2.00	0.00
4,720.0	7.22	24.32	4,639.7	657.5	297.1	721.5	2.00	-2.00	0.00
4,760.0	6.42	24.32	4,679.5	661.8	299.1	726.3	2.00	-2.00	0.00
4,800.0	5.62	24.32	4,719.2	665.6	300.8	730.4	2.00	-2.00	0.00
4,840.0	4.82	24.32	4,759.1	668.9	302.3	734.1	2.00	-2.00	0.00
4,880.0	4.02	24.32	4,799.0	671.8	303.6	737.2	2.00	-2.00	0.00
4,920.0	3.22	24.32	4,838.9	674.1	304.6	739.7	2.00	-2.00	0.00
4,960.0	2.42	24.32	4,878.8	675.9	305.4	741.7	2.00	-2.00	0.00
5,000.0	1.62	24.32	4,918.8	677.1	306.0	743.1	2.00	-2.00	0.00
5,040.0	0.82	24.32	4,958.8	677.9	306.4	743.9	2.00	-2.00	0.00
5,080.0	0.02	24.32	4,998.8	678.2	306.5	744.2	2.00	-2.00	0.00
5,081.2	0.00	0.00	5,000.0	678.2	306.5	744.2	2.00	-2.00	0.00
TARGET BHL 2500'FNL, 100'FWL									
5,120.0	0.00	0.00	5,038.8	678.2	306.5	744.2	0.00	0.00	0.00
5,160.0	0.00	0.00	5,078.8	678.2	306.5	744.2	0.00	0.00	0.00
5,200.0	0.00	0.00	5,118.8	678.2	306.5	744.2	0.00	0.00	0.00
5,240.0	0.00	0.00	5,158.8	678.2	306.5	744.2	0.00	0.00	0.00
5,280.0	0.00	0.00	5,198.8	678.2	306.5	744.2	0.00	0.00	0.00
5,320.0	0.00	0.00	5,238.8	678.2	306.5	744.2	0.00	0.00	0.00
5,360.0	0.00	0.00	5,278.8	678.2	306.5	744.2	0.00	0.00	0.00
5,400.0	0.00	0.00	5,318.8	678.2	306.5	744.2	0.00	0.00	0.00
5,440.0	0.00	0.00	5,358.8	678.2	306.5	744.2	0.00	0.00	0.00
5,480.0	0.00	0.00	5,398.8	678.2	306.5	744.2	0.00	0.00	0.00
5,520.0	0.00	0.00	5,438.8	678.2	306.5	744.2	0.00	0.00	0.00
5,560.0	0.00	0.00	5,478.8	678.2	306.5	744.2	0.00	0.00	0.00
5,600.0	0.00	0.00	5,518.8	678.2	306.5	744.2	0.00	0.00	0.00
5,640.0	0.00	0.00	5,558.8	678.2	306.5	744.2	0.00	0.00	0.00
5,680.0	0.00	0.00	5,598.8	678.2	306.5	744.2	0.00	0.00	0.00
5,720.0	0.00	0.00	5,638.8	678.2	306.5	744.2	0.00	0.00	0.00
5,760.0	0.00	0.00	5,678.8	678.2	306.5	744.2	0.00	0.00	0.00
5,800.0	0.00	0.00	5,718.8	678.2	306.5	744.2	0.00	0.00	0.00
5,840.0	0.00	0.00	5,758.8	678.2	306.5	744.2	0.00	0.00	0.00
5,880.0	0.00	0.00	5,798.8	678.2	306.5	744.2	0.00	0.00	0.00
5,920.0	0.00	0.00	5,838.8	678.2	306.5	744.2	0.00	0.00	0.00
5,960.0	0.00	0.00	5,878.8	678.2	306.5	744.2	0.00	0.00	0.00
6,000.0	0.00	0.00	5,918.8	678.2	306.5	744.2	0.00	0.00	0.00
6,040.0	0.00	0.00	5,958.8	678.2	306.5	744.2	0.00	0.00	0.00
6,080.0	0.00	0.00	5,998.8	678.2	306.5	744.2	0.00	0.00	0.00
6,120.0	0.00	0.00	6,038.8	678.2	306.5	744.2	0.00	0.00	0.00
6,160.0	0.00	0.00	6,078.8	678.2	306.5	744.2	0.00	0.00	0.00
6,200.0	0.00	0.00	6,118.8	678.2	306.5	744.2	0.00	0.00	0.00
6,240.0	0.00	0.00	6,158.8	678.2	306.5	744.2	0.00	0.00	0.00

Database: EDM den0-adp01 Server Data
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.26-T5N-R67W
Site: Booth N25-33D Pad Sec.26-T5N-R67W
Well: Booth N25-32D
Wellbore: Wellbore #1
Design: Noble Booth N25-32D Plan #1 (02-23-10)

Local Co-ordinate Reference: Well Booth N25-32D
TVD Reference: WELL @ 4962.0ft (Original Well Elev)
MD Reference: WELL @ 4962.0ft (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)
6,280.0	0.00	0.00	6,198.8	678.2	306.5	744.2	0.00	0.00	0.00
6,320.0	0.00	0.00	6,238.8	678.2	306.5	744.2	0.00	0.00	0.00
6,360.0	0.00	0.00	6,278.8	678.2	306.5	744.2	0.00	0.00	0.00
6,400.0	0.00	0.00	6,318.8	678.2	306.5	744.2	0.00	0.00	0.00
6,440.0	0.00	0.00	6,358.8	678.2	306.5	744.2	0.00	0.00	0.00
6,480.0	0.00	0.00	6,398.8	678.2	306.5	744.2	0.00	0.00	0.00
6,520.0	0.00	0.00	6,438.8	678.2	306.5	744.2	0.00	0.00	0.00
6,560.0	0.00	0.00	6,478.8	678.2	306.5	744.2	0.00	0.00	0.00
6,600.0	0.00	0.00	6,518.8	678.2	306.5	744.2	0.00	0.00	0.00
6,640.0	0.00	0.00	6,558.8	678.2	306.5	744.2	0.00	0.00	0.00
6,680.0	0.00	0.00	6,598.8	678.2	306.5	744.2	0.00	0.00	0.00
6,720.0	0.00	0.00	6,638.8	678.2	306.5	744.2	0.00	0.00	0.00
6,760.0	0.00	0.00	6,678.8	678.2	306.5	744.2	0.00	0.00	0.00
6,800.0	0.00	0.00	6,718.8	678.2	306.5	744.2	0.00	0.00	0.00
6,840.0	0.00	0.00	6,758.8	678.2	306.5	744.2	0.00	0.00	0.00
6,880.0	0.00	0.00	6,798.8	678.2	306.5	744.2	0.00	0.00	0.00
6,920.0	0.00	0.00	6,838.8	678.2	306.5	744.2	0.00	0.00	0.00
6,960.0	0.00	0.00	6,878.8	678.2	306.5	744.2	0.00	0.00	0.00
7,000.0	0.00	0.00	6,918.8	678.2	306.5	744.2	0.00	0.00	0.00
7,040.0	0.00	0.00	6,958.8	678.2	306.5	744.2	0.00	0.00	0.00
7,080.0	0.00	0.00	6,998.8	678.2	306.5	744.2	0.00	0.00	0.00
7,120.0	0.00	0.00	7,038.8	678.2	306.5	744.2	0.00	0.00	0.00
7,160.0	0.00	0.00	7,078.8	678.2	306.5	744.2	0.00	0.00	0.00
7,200.0	0.00	0.00	7,118.8	678.2	306.5	744.2	0.00	0.00	0.00
7,203.2	0.00	0.00	7,122.0	678.2	306.5	744.2	0.00	0.00	0.00
NIOBRARA - TARGET CIRCLE 2500'FNL, 100'FWL									
7,240.0	0.00	0.00	7,158.8	678.2	306.5	744.2	0.00	0.00	0.00
7,280.0	0.00	0.00	7,198.8	678.2	306.5	744.2	0.00	0.00	0.00
7,320.0	0.00	0.00	7,238.8	678.2	306.5	744.2	0.00	0.00	0.00
7,360.0	0.00	0.00	7,278.8	678.2	306.5	744.2	0.00	0.00	0.00
7,400.0	0.00	0.00	7,318.8	678.2	306.5	744.2	0.00	0.00	0.00
7,440.0	0.00	0.00	7,358.8	678.2	306.5	744.2	0.00	0.00	0.00
7,480.0	0.00	0.00	7,398.8	678.2	306.5	744.2	0.00	0.00	0.00
7,520.0	0.00	0.00	7,438.8	678.2	306.5	744.2	0.00	0.00	0.00
7,543.2	0.00	0.00	7,462.0	678.2	306.5	744.2	0.00	0.00	0.00
CODELL									
7,560.0	0.00	0.00	7,478.8	678.2	306.5	744.2	0.00	0.00	0.00
7,600.0	0.00	0.00	7,518.8	678.2	306.5	744.2	0.00	0.00	0.00
7,640.0	0.00	0.00	7,558.8	678.2	306.5	744.2	0.00	0.00	0.00
7,680.0	0.00	0.00	7,598.8	678.2	306.5	744.2	0.00	0.00	0.00
7,693.2	0.00	0.00	7,612.0	678.2	306.5	744.2	0.00	0.00	0.00
HARDLINE 171'S & 100'W OF BHL									

Database: EDM den0-adp01 Server Data
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.26-T5N-R67W
Site: Booth N25-33D Pad Sec.26-T5N-R67W
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Design: Noble Booth N25-32D Plan #1 (02-23-10)

Local Co-ordinate Reference: Well Booth N25-32D
TVD Reference: WELL @ 4962.0ft (Original Well Elev)
MD Reference: WELL @ 4962.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

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 CIRCLE 25C	0.00	0.00	7,122.0	678.2	306.5	1,378,666.20	3,180,937.53	40° 22' 15.678 N	104° 51' 2.196 W
- plan hits target center									
- Circle (radius 75.0)									
HARDLINE 171'S & 1	0.00	0.00	7,612.0	507.2	206.5	1,378,494.48	3,180,838.78	40° 22' 13.988 N	104° 51' 3.488 W
- plan misses target center by 198.1ft at 7693.2ft MD (7612.0 TVD, 678.2 N, 306.5 E)									
- Polygon									
Point 1			7,612.0	0.0	0.0	1,378,494.48	3,180,838.78		
Point 2			7,612.0	300.0	0.0	1,378,794.46	3,180,836.59		
Point 3			7,612.0	0.0	0.0	1,378,494.48	3,180,838.78		
Point 4			7,612.0	0.0	300.0	1,378,496.68	3,181,138.76		
TARGET BHL 2500'F	0.00	0.00	5,000.0	678.2	306.5	1,378,666.20	3,180,937.53	40° 22' 15.678 N	104° 51' 2.196 W
- plan hits target center									
- Point									

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
7,203.2	7,122.0	NIOBRARA		0.00	
7,543.2	7,462.0	CODELL		0.00	