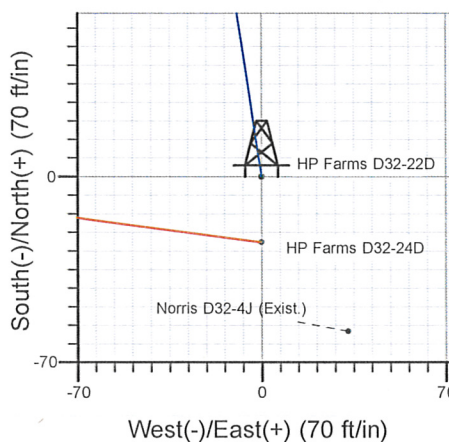
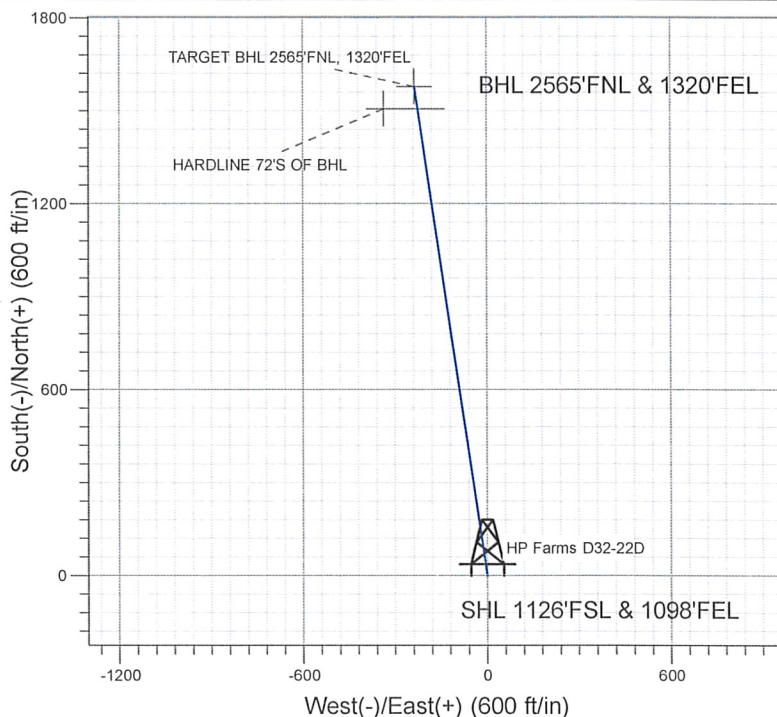
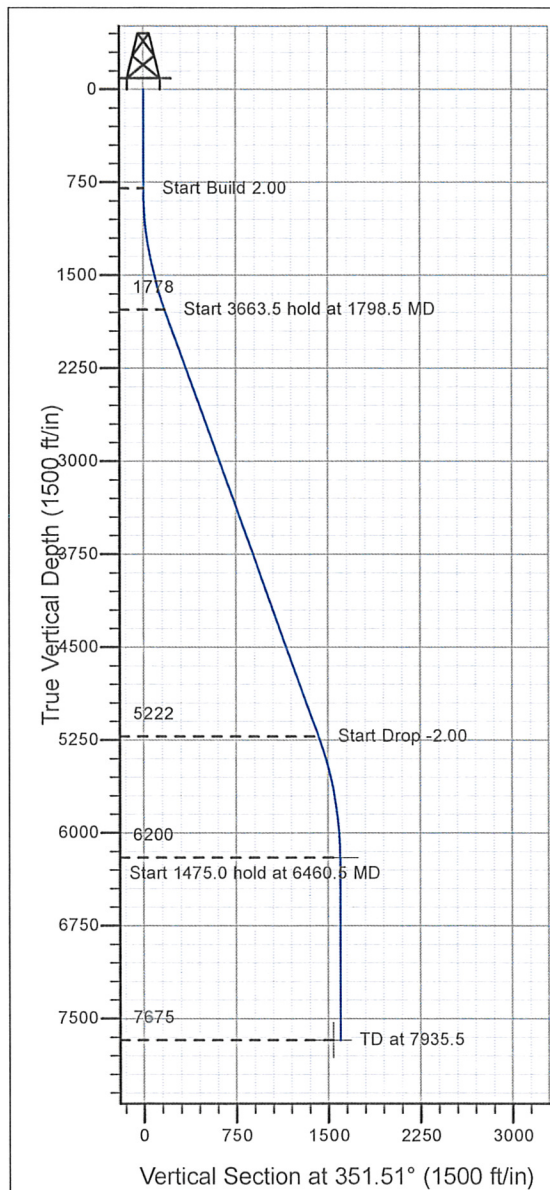


Well Name: HP Farms D32-22D

Surface Location: HP Farms D32-22D Pad Sec.32-T3N-R64W
 North American Datum 1983 , US State Plane 1983 , Wyoming Western Zone
 Ground Elevation: 4862.0
 +N/-S+E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 258567.66 4165675.42 40° 10' 39.486 N 104° 34' 10.944 W
 Original Well Elev WELL @ 4875.0ft (Original Well Elev)

NOBLE ENERGY INC WELD COUNTY CO



HP Farms D32-22D Pad Sec.32-T3N-R64W
 HP Farms D32-22D
 Plan #1 (06-12-09)
 14:49, June 24 2009



Azimuths to True North
 Magnetic North: 8.97°
 Magnetic Field
 Strength: 53265.2snT
 Dip Angle: 66.98°
 Date: 6/12/2009
 Model: IGRF200510

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 2565'FNL, 1320'FEL	6200.0	1578.2	-235.6	40° 10' 55.082 N	104° 34' 13.979 W	Point
HARDLINE 72'S OF BHL	7675.0	1506.2	-335.6	40° 10' 54.370 N	104° 34' 15.267 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	800.0	0.00	0.00	800.0	0.0	0.0	0.00	0.00	0.0	
3	1798.5	19.97	351.51	1778.4	170.4	-25.4	2.00	351.51	172.3	
4	5462.0	19.97	351.51	5221.6	1407.8	-210.2	0.00	0.00	1423.4	
5	6460.5	0.00	0.00	6200.0	1578.2	-235.6	2.00	180.00	1595.7	TARGET BHL 2565'FNL, 1320'FEL
6	7935.5	0.00	0.00	7675.0	1578.2	-235.6	0.00	0.00	1595.7	



Directional

NOBLE ENERGY INC WELD COUNTY CO

SEC.32-T3N-R64W

HP Farms D32-22D Pad Sec.32-T3N-R64W

HP Farms D32-22D

Wellbore #1

Plan: Plan #1 (06-12-09)

Standard Planning Report

24 June, 2009



Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well HP Farms D32-22D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4875.0ft (Original Well Elev)
Project:	SEC.32-T3N-R64W	MD Reference:	WELL @ 4875.0ft (Original Well Elev)
Site:	HP Farms D32-22D Pad Sec.32-T3N-R64W	North Reference:	True
Well:	HP Farms D32-22D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (06-12-09)		

Project	SEC.32-T3N-R64W, Weld County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Wyoming Western Zone		Using geodetic scale factor

Site		HP Farms D32-22D Pad Sec.32-T3N-R64W			
Site Position:		Northing:	258,567.66ft	Latitude:	40° 10' 39.486 N
From:	Lat/Long	Easting:	4,165,675.42 ft	Longitude:	104° 34' 10.945 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	3.56 °

Well	HP Farms D32-22D					
Well Position	+N/-S	0.0 ft	Northing:	258,567.66 ft	Latitude:	40° 10' 39.486 N
	+E/-W	0.0 ft	Easting:	4,165,675.42 ft	Longitude:	104° 34' 10.944 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,862.0 ft

Wellbore	Wellbore #1
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	6/12/2009	8.97	66.98	53,265

Design	Plan #1 (06-12-09)
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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	351.51

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	
800.0	0.00	0.00	800.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,798.5	19.97	351.51	1,778.4	170.4	-25.4	2.00	2.00	0.00	351.51	
5,462.0	19.97	351.51	5,221.6	1,407.8	-210.2	0.00	0.00	0.00	0.00	
6,460.5	0.00	0.00	6,200.0	1,578.2	-235.6	2.00	-2.00	0.00	180.00	TARGET BHL 2565
7,935.5	0.00	0.00	7,675.0	1,578.2	-235.6	0.00	0.00	0.00	0.00	

Database: EDM den0-adp01 Server Data
 Company: NOBLE ENERGY INC WELD COUNTY CO
 Project: SEC.32-T3N-R64W
 Site: HP Farms D32-22D Pad Sec.32-T3N-R64W
 Well: HP Farms D32-22D
 Wellbore: Wellbore #1
 Design: Plan #1 (06-12-09)

Local Co-ordinate Reference: Well HP Farms D32-22D
 TVD Reference: WELL @ 4875.0ft (Original Well Elev)
 MD Reference: WELL @ 4875.0ft (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	0.80	351.51	840.0	0.3	0.0	0.3	2.00	2.00	0.00
880.0	1.60	351.51	880.0	1.1	-0.2	1.1	2.00	2.00	0.00
920.0	2.40	351.51	920.0	2.5	-0.4	2.5	2.00	2.00	0.00
960.0	3.20	351.51	959.9	4.4	-0.7	4.5	2.00	2.00	0.00
1,000.0	4.00	351.51	999.8	6.9	-1.0	7.0	2.00	2.00	0.00
1,040.0	4.80	351.51	1,039.7	9.9	-1.5	10.0	2.00	2.00	0.00
1,080.0	5.60	351.51	1,079.6	13.5	-2.0	13.7	2.00	2.00	0.00
1,120.0	6.40	351.51	1,119.3	17.7	-2.6	17.9	2.00	2.00	0.00
1,160.0	7.20	351.51	1,159.1	22.3	-3.3	22.6	2.00	2.00	0.00
1,200.0	8.00	351.51	1,198.7	27.6	-4.1	27.9	2.00	2.00	0.00
1,240.0	8.80	351.51	1,238.3	33.4	-5.0	33.7	2.00	2.00	0.00
1,280.0	9.60	351.51	1,277.8	39.7	-5.9	40.1	2.00	2.00	0.00
1,320.0	10.40	351.51	1,317.1	46.5	-6.9	47.1	2.00	2.00	0.00
1,360.0	11.20	351.51	1,356.4	54.0	-8.1	54.6	2.00	2.00	0.00
1,400.0	12.00	351.51	1,395.6	61.9	-9.2	62.6	2.00	2.00	0.00
1,440.0	12.80	351.51	1,434.7	70.4	-10.5	71.2	2.00	2.00	0.00
1,480.0	13.60	351.51	1,473.6	79.4	-11.9	80.3	2.00	2.00	0.00
1,520.0	14.40	351.51	1,512.4	89.0	-13.3	90.0	2.00	2.00	0.00
1,560.0	15.20	351.51	1,551.1	99.1	-14.8	100.2	2.00	2.00	0.00
1,600.0	16.00	351.51	1,589.6	109.8	-16.4	111.0	2.00	2.00	0.00
1,640.0	16.80	351.51	1,628.0	120.9	-18.1	122.3	2.00	2.00	0.00
1,680.0	17.60	351.51	1,666.2	132.6	-19.8	134.1	2.00	2.00	0.00
1,720.0	18.40	351.51	1,704.3	144.9	-21.6	146.5	2.00	2.00	0.00
1,760.0	19.20	351.51	1,742.1	157.6	-23.5	159.3	2.00	2.00	0.00
1,798.5	19.97	351.51	1,778.4	170.4	-25.4	172.3	2.00	2.00	0.00
1,800.0	19.97	351.51	1,779.8	170.9	-25.5	172.8	0.00	0.00	0.00
1,840.0	19.97	351.51	1,817.4	184.4	-27.5	186.4	0.00	0.00	0.00
1,880.0	19.97	351.51	1,855.0	197.9	-29.5	200.1	0.00	0.00	0.00
1,920.0	19.97	351.51	1,892.6	211.4	-31.6	213.8	0.00	0.00	0.00
1,960.0	19.97	351.51	1,930.2	224.9	-33.6	227.4	0.00	0.00	0.00
2,000.0	19.97	351.51	1,967.8	238.4	-35.6	241.1	0.00	0.00	0.00
2,040.0	19.97	351.51	2,005.4	251.9	-37.6	254.7	0.00	0.00	0.00
2,080.0	19.97	351.51	2,043.0	265.5	-39.6	268.4	0.00	0.00	0.00

Database: EDM den0-adp01 Server Data
 Company: NOBLE ENERGY INC WELD COUNTY CO
 Project: SEC.32-T3N-R64W
 Site: HP Farms D32-22D Pad Sec.32-T3N-R64W
 Well: HP Farms D32-22D
 Wellbore: Wellbore #1
 Design: Plan #1 (06-12-09)

Local Co-ordinate Reference: Well HP Farms D32-22D
 TVD Reference: WELL @ 4875.0ft (Original Well Elev)
 MD Reference: WELL @ 4875.0ft (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	19.97	351.51	2,080.6	279.0	-41.6	282.1	0.00	0.00	0.00
2,160.0	19.97	351.51	2,118.2	292.5	-43.7	295.7	0.00	0.00	0.00
2,200.0	19.97	351.51	2,155.8	306.0	-45.7	309.4	0.00	0.00	0.00
2,240.0	19.97	351.51	2,193.4	319.5	-47.7	323.0	0.00	0.00	0.00
2,280.0	19.97	351.51	2,231.0	333.0	-49.7	336.7	0.00	0.00	0.00
2,320.0	19.97	351.51	2,268.5	346.5	-51.7	350.4	0.00	0.00	0.00
2,360.0	19.97	351.51	2,306.1	360.0	-53.7	364.0	0.00	0.00	0.00
2,400.0	19.97	351.51	2,343.7	373.5	-55.8	377.7	0.00	0.00	0.00
2,440.0	19.97	351.51	2,381.3	387.1	-57.8	391.3	0.00	0.00	0.00
2,480.0	19.97	351.51	2,418.9	400.6	-59.8	405.0	0.00	0.00	0.00
2,520.0	19.97	351.51	2,456.5	414.1	-61.8	418.7	0.00	0.00	0.00
2,560.0	19.97	351.51	2,494.1	427.6	-63.8	432.3	0.00	0.00	0.00
2,600.0	19.97	351.51	2,531.7	441.1	-65.8	446.0	0.00	0.00	0.00
2,640.0	19.97	351.51	2,569.3	454.6	-67.9	459.6	0.00	0.00	0.00
2,680.0	19.97	351.51	2,606.9	468.1	-69.9	473.3	0.00	0.00	0.00
2,720.0	19.97	351.51	2,644.5	481.6	-71.9	487.0	0.00	0.00	0.00
2,760.0	19.97	351.51	2,682.1	495.1	-73.9	500.6	0.00	0.00	0.00
2,800.0	19.97	351.51	2,719.7	508.7	-75.9	514.3	0.00	0.00	0.00
2,840.0	19.97	351.51	2,757.3	522.2	-77.9	528.0	0.00	0.00	0.00
2,880.0	19.97	351.51	2,794.9	535.7	-80.0	541.6	0.00	0.00	0.00
2,920.0	19.97	351.51	2,832.5	549.2	-82.0	555.3	0.00	0.00	0.00
2,960.0	19.97	351.51	2,870.1	562.7	-84.0	568.9	0.00	0.00	0.00
3,000.0	19.97	351.51	2,907.7	576.2	-86.0	582.6	0.00	0.00	0.00
3,040.0	19.97	351.51	2,945.3	589.7	-88.0	596.3	0.00	0.00	0.00
3,080.0	19.97	351.51	2,982.9	603.2	-90.0	609.9	0.00	0.00	0.00
3,120.0	19.97	351.51	3,020.4	616.7	-92.1	623.6	0.00	0.00	0.00
3,160.0	19.97	351.51	3,058.0	630.3	-94.1	637.2	0.00	0.00	0.00
3,200.0	19.97	351.51	3,095.6	643.8	-96.1	650.9	0.00	0.00	0.00
3,240.0	19.97	351.51	3,133.2	657.3	-98.1	664.6	0.00	0.00	0.00
3,280.0	19.97	351.51	3,170.8	670.8	-100.1	678.2	0.00	0.00	0.00
3,320.0	19.97	351.51	3,208.4	684.3	-102.2	691.9	0.00	0.00	0.00
3,360.0	19.97	351.51	3,246.0	697.8	-104.2	705.5	0.00	0.00	0.00
3,400.0	19.97	351.51	3,283.6	711.3	-106.2	719.2	0.00	0.00	0.00
3,440.0	19.97	351.51	3,321.2	724.8	-108.2	732.9	0.00	0.00	0.00
3,480.0	19.97	351.51	3,358.8	738.4	-110.2	746.5	0.00	0.00	0.00
3,520.0	19.97	351.51	3,396.4	751.9	-112.2	760.2	0.00	0.00	0.00
3,560.0	19.97	351.51	3,434.0	765.4	-114.3	773.9	0.00	0.00	0.00
3,600.0	19.97	351.51	3,471.6	778.9	-116.3	787.5	0.00	0.00	0.00
3,640.0	19.97	351.51	3,509.2	792.4	-118.3	801.2	0.00	0.00	0.00
3,680.0	19.97	351.51	3,546.8	805.9	-120.3	814.8	0.00	0.00	0.00
3,720.0	19.97	351.51	3,584.4	819.4	-122.3	828.5	0.00	0.00	0.00
3,760.0	19.97	351.51	3,622.0	832.9	-124.3	842.2	0.00	0.00	0.00
3,800.0	19.97	351.51	3,659.6	846.4	-126.4	855.8	0.00	0.00	0.00
3,840.0	19.97	351.51	3,697.2	860.0	-128.4	869.5	0.00	0.00	0.00
3,880.0	19.97	351.51	3,734.7	873.5	-130.4	883.1	0.00	0.00	0.00
3,920.0	19.97	351.51	3,772.3	887.0	-132.4	896.8	0.00	0.00	0.00
3,960.0	19.97	351.51	3,809.9	900.5	-134.4	910.5	0.00	0.00	0.00
4,000.0	19.97	351.51	3,847.5	914.0	-136.4	924.1	0.00	0.00	0.00
4,040.0	19.97	351.51	3,885.1	927.5	-138.5	937.8	0.00	0.00	0.00
4,080.0	19.97	351.51	3,922.7	941.0	-140.5	951.4	0.00	0.00	0.00
4,120.0	19.97	351.51	3,960.3	954.5	-142.5	965.1	0.00	0.00	0.00
4,160.0	19.97	351.51	3,997.9	968.0	-144.5	978.8	0.00	0.00	0.00
4,200.0	19.97	351.51	4,035.5	981.6	-146.5	992.4	0.00	0.00	0.00
4,240.0	19.97	351.51	4,073.1	995.1	-148.5	1,006.1	0.00	0.00	0.00

Database: EDM den0-adp01 Server Data
 Company: NOBLE ENERGY INC WELD COUNTY CO
 Project: SEC.32-T3N-R64W
 Site: HP Farms D32-22D Pad Sec.32-T3N-R64W
 Well: HP Farms D32-22D
 Wellbore: Wellbore #1
 Design: Plan #1 (06-12-09)

Local Co-ordinate Reference: Well HP Farms D32-22D
 TVD Reference: WELL @ 4875.0ft (Original Well Elev)
 MD Reference: WELL @ 4875.0ft (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	19.97	351.51	4,110.7	1,008.6	-150.6	1,019.8	0.00	0.00	0.00
4,320.0	19.97	351.51	4,148.3	1,022.1	-152.6	1,033.4	0.00	0.00	0.00
4,360.0	19.97	351.51	4,185.9	1,035.6	-154.6	1,047.1	0.00	0.00	0.00
4,400.0	19.97	351.51	4,223.5	1,049.1	-156.6	1,060.7	0.00	0.00	0.00
4,440.0	19.97	351.51	4,261.1	1,062.6	-158.6	1,074.4	0.00	0.00	0.00
4,480.0	19.97	351.51	4,298.7	1,076.1	-160.6	1,088.1	0.00	0.00	0.00
4,520.0	19.97	351.51	4,336.3	1,089.6	-162.7	1,101.7	0.00	0.00	0.00
4,560.0	19.97	351.51	4,373.9	1,103.2	-164.7	1,115.4	0.00	0.00	0.00
4,600.0	19.97	351.51	4,411.5	1,116.7	-166.7	1,129.0	0.00	0.00	0.00
4,640.0	19.97	351.51	4,449.1	1,130.2	-168.7	1,142.7	0.00	0.00	0.00
4,680.0	19.97	351.51	4,486.6	1,143.7	-170.7	1,156.4	0.00	0.00	0.00
4,720.0	19.97	351.51	4,524.2	1,157.2	-172.7	1,170.0	0.00	0.00	0.00
4,760.0	19.97	351.51	4,561.8	1,170.7	-174.8	1,183.7	0.00	0.00	0.00
4,800.0	19.97	351.51	4,599.4	1,184.2	-176.8	1,197.3	0.00	0.00	0.00
4,840.0	19.97	351.51	4,637.0	1,197.7	-178.8	1,211.0	0.00	0.00	0.00
4,880.0	19.97	351.51	4,674.6	1,211.2	-180.8	1,224.7	0.00	0.00	0.00
4,920.0	19.97	351.51	4,712.2	1,224.8	-182.8	1,238.3	0.00	0.00	0.00
4,960.0	19.97	351.51	4,749.8	1,238.3	-184.8	1,252.0	0.00	0.00	0.00
5,000.0	19.97	351.51	4,787.4	1,251.8	-186.9	1,265.7	0.00	0.00	0.00
5,040.0	19.97	351.51	4,825.0	1,265.3	-188.9	1,279.3	0.00	0.00	0.00
5,080.0	19.97	351.51	4,862.6	1,278.8	-190.9	1,293.0	0.00	0.00	0.00
5,120.0	19.97	351.51	4,900.2	1,292.3	-192.9	1,306.6	0.00	0.00	0.00
5,160.0	19.97	351.51	4,937.8	1,305.8	-194.9	1,320.3	0.00	0.00	0.00
5,200.0	19.97	351.51	4,975.4	1,319.3	-196.9	1,334.0	0.00	0.00	0.00
5,240.0	19.97	351.51	5,013.0	1,332.8	-199.0	1,347.6	0.00	0.00	0.00
5,280.0	19.97	351.51	5,050.6	1,346.4	-201.0	1,361.3	0.00	0.00	0.00
5,320.0	19.97	351.51	5,088.2	1,359.9	-203.0	1,374.9	0.00	0.00	0.00
5,360.0	19.97	351.51	5,125.8	1,373.4	-205.0	1,388.6	0.00	0.00	0.00
5,400.0	19.97	351.51	5,163.4	1,386.9	-207.0	1,402.3	0.00	0.00	0.00
5,440.0	19.97	351.51	5,201.0	1,400.4	-209.0	1,415.9	0.00	0.00	0.00
5,462.0	19.97	351.51	5,221.6	1,407.8	-210.2	1,423.4	0.00	0.00	0.00
5,480.0	19.61	351.51	5,238.6	1,413.9	-211.1	1,429.5	2.00	-2.00	0.00
5,520.0	18.81	351.51	5,276.3	1,426.9	-213.0	1,442.7	2.00	-2.00	0.00
5,560.0	18.01	351.51	5,314.3	1,439.4	-214.9	1,455.3	2.00	-2.00	0.00
5,600.0	17.21	351.51	5,352.4	1,451.3	-216.7	1,467.4	2.00	-2.00	0.00
5,640.0	16.41	351.51	5,390.7	1,462.8	-218.4	1,479.0	2.00	-2.00	0.00
5,680.0	15.61	351.51	5,429.2	1,473.7	-220.0	1,490.0	2.00	-2.00	0.00
5,720.0	14.81	351.51	5,467.8	1,484.1	-221.5	1,500.5	2.00	-2.00	0.00
5,760.0	14.01	351.51	5,506.5	1,493.9	-223.0	1,510.5	2.00	-2.00	0.00
5,800.0	13.21	351.51	5,545.4	1,503.2	-224.4	1,519.9	2.00	-2.00	0.00
5,840.0	12.41	351.51	5,584.4	1,512.0	-225.7	1,528.8	2.00	-2.00	0.00
5,880.0	11.61	351.51	5,623.5	1,520.2	-226.9	1,537.1	2.00	-2.00	0.00
5,920.0	10.81	351.51	5,662.7	1,527.9	-228.1	1,544.8	2.00	-2.00	0.00
5,960.0	10.01	351.51	5,702.1	1,535.1	-229.2	1,552.1	2.00	-2.00	0.00
6,000.0	9.21	351.51	5,741.5	1,541.7	-230.1	1,558.8	2.00	-2.00	0.00
6,040.0	8.41	351.51	5,781.0	1,547.7	-231.0	1,564.9	2.00	-2.00	0.00
6,080.0	7.61	351.51	5,820.7	1,553.2	-231.9	1,570.5	2.00	-2.00	0.00
6,120.0	6.81	351.51	5,860.3	1,558.2	-232.6	1,575.5	2.00	-2.00	0.00
6,160.0	6.01	351.51	5,900.1	1,562.6	-233.3	1,579.9	2.00	-2.00	0.00
6,200.0	5.21	351.51	5,939.9	1,566.5	-233.8	1,583.8	2.00	-2.00	0.00
6,240.0	4.41	351.51	5,979.8	1,569.8	-234.3	1,587.2	2.00	-2.00	0.00
6,280.0	3.61	351.51	6,019.7	1,572.6	-234.8	1,590.0	2.00	-2.00	0.00
6,320.0	2.81	351.51	6,059.6	1,574.8	-235.1	1,592.2	2.00	-2.00	0.00
6,360.0	2.01	351.51	6,099.6	1,576.5	-235.3	1,593.9	2.00	-2.00	0.00

Database: EDM den0-adp01 Server Data
 Company: NOBLE ENERGY INC WELD COUNTY CO
 Project: SEC.32-T3N-R64W
 Site: HP Farms D32-22D Pad Sec.32-T3N-R64W
 Well: HP Farms D32-22D
 Wellbore: Wellbore #1
 Design: Plan #1 (06-12-09)

Local Co-ordinate Reference: Well HP Farms D32-22D
 TVD Reference: WELL @ 4875.0ft (Original Well Elev)
 MD Reference: WELL @ 4875.0ft (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)
6,400.0	1.21	351.51	6,139.5	1,577.6	-235.5	1,595.0	2.00	-2.00	0.00
6,440.0	0.41	351.51	6,179.5	1,578.1	-235.6	1,595.6	2.00	-2.00	0.00
6,460.5	0.00	0.00	6,200.0	1,578.2	-235.6	1,595.7	2.00	-2.00	41.49
TARGET BHL 2565'FNL, 1320'FEL									
6,480.0	0.00	0.00	6,219.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
6,520.0	0.00	0.00	6,259.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
6,560.0	0.00	0.00	6,299.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
6,600.0	0.00	0.00	6,339.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
6,640.0	0.00	0.00	6,379.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
6,680.0	0.00	0.00	6,419.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
6,720.0	0.00	0.00	6,459.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
6,760.0	0.00	0.00	6,499.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
6,800.0	0.00	0.00	6,539.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
6,840.0	0.00	0.00	6,579.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
6,880.0	0.00	0.00	6,619.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
6,920.0	0.00	0.00	6,659.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
6,960.0	0.00	0.00	6,699.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,000.0	0.00	0.00	6,739.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,040.0	0.00	0.00	6,779.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,052.5	0.00	0.00	6,792.0	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
NIOBRARA									
7,080.0	0.00	0.00	6,819.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,120.0	0.00	0.00	6,859.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,160.0	0.00	0.00	6,899.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,200.0	0.00	0.00	6,939.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,240.0	0.00	0.00	6,979.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,280.0	0.00	0.00	7,019.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,320.0	0.00	0.00	7,059.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,360.0	0.00	0.00	7,099.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,360.5	0.00	0.00	7,100.0	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
CODELL									
7,400.0	0.00	0.00	7,139.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,440.0	0.00	0.00	7,179.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,480.0	0.00	0.00	7,219.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,520.0	0.00	0.00	7,259.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,560.0	0.00	0.00	7,299.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,600.0	0.00	0.00	7,339.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,640.0	0.00	0.00	7,379.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,680.0	0.00	0.00	7,419.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,720.0	0.00	0.00	7,459.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,723.5	0.00	0.00	7,463.0	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
D-SAND									
7,760.0	0.00	0.00	7,499.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,785.5	0.00	0.00	7,525.0	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
J-SAND									
7,800.0	0.00	0.00	7,539.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,840.0	0.00	0.00	7,579.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,880.0	0.00	0.00	7,619.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,920.0	0.00	0.00	7,659.5	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
7,935.5	0.00	0.00	7,675.0	1,578.2	-235.6	1,595.7	0.00	0.00	0.00
HARDLINE 72'S OF BHL									

Database: EDM den0-adp01 Server Data
 Company: NOBLE ENERGY INC WELD COUNTY CO
 Project: SEC.32-T3N-R64W
 Site: HP Farms D32-22D Pad Sec.32-T3N-R64W
 Well: HP Farms D32-22D
 Wellbore: Wellbore #1
 Design: Plan #1 (06-12-09)

Local Co-ordinate Reference: Well HP Farms D32-22D
 TVD Reference: WELL @ 4875.0ft (Original Well Elev)
 MD Reference: WELL @ 4875.0ft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

Targets
Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
HARDLINE 72'S OF E	0.00	0.00	7,675.0	1,506.2	-335.6	260,054.03	4,165,245.77	40° 10' 54.370 N	104° 34' 15.267 W
- plan misses target center by 123.2ft at 7935.5ft MD (7675.0 TVD, 1578.2 N, -235.6 E)									
- Polygon									
Point 1			7,675.0	0.0	0.0	260,054.03	4,165,245.77		
Point 2			7,675.0	0.0	200.0	260,066.49	4,165,445.91		
TARGET BHL 2565'F	0.00	0.00	6,200.0	1,578.2	-235.6	260,132.31	4,165,341.36	40° 10' 55.082 N	104° 34' 13.979 W
- plan hits target center									
- Point									

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
7,052.5	6,792.0	NIOBRARA		0.00	
7,360.5	7,100.0	CODELL		0.00	
7,723.5	7,463.0	D-SAND		0.00	
7,785.5	7,525.0	J-SAND		0.00	