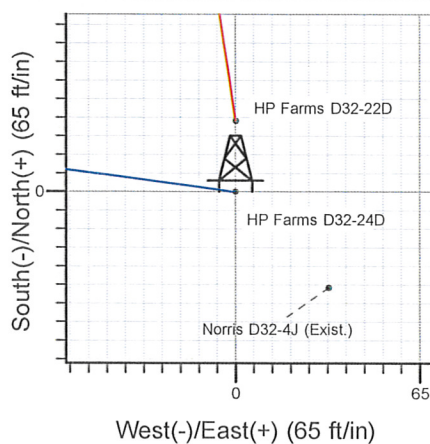
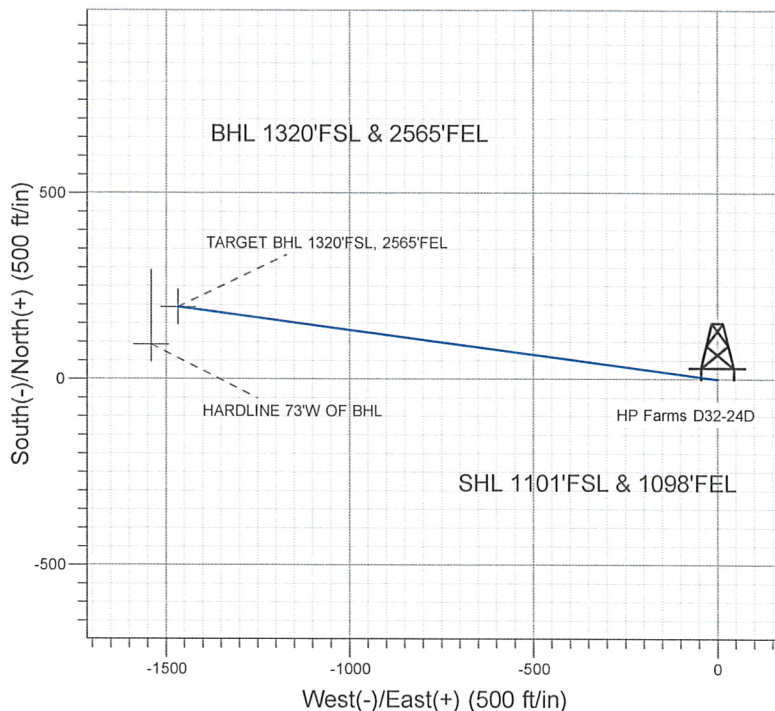
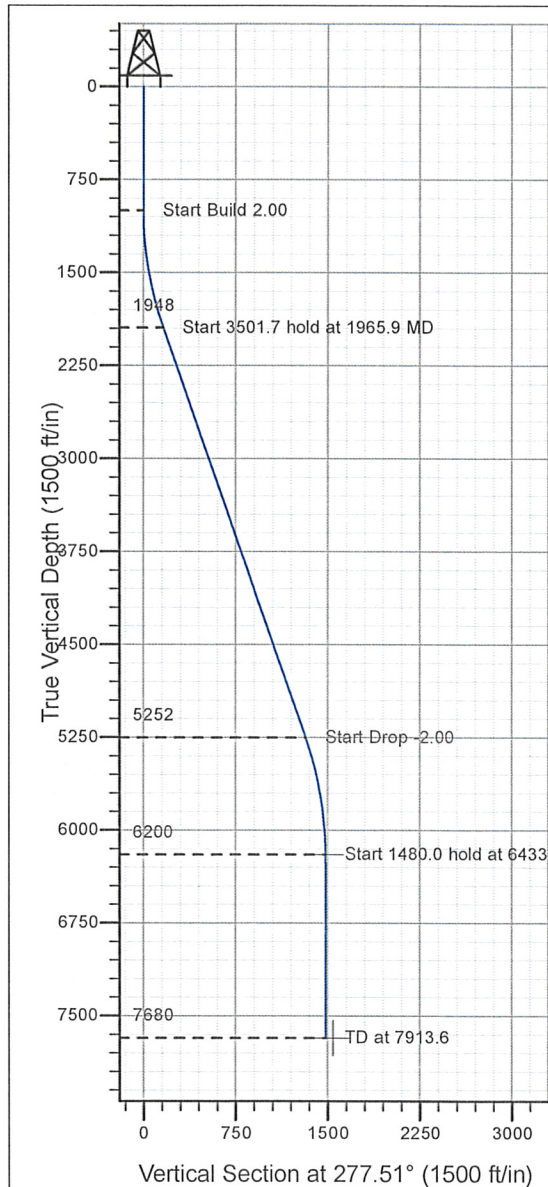


Well Name: HP Farms D32-24D

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 258542.85 4165676.77 40° 10' 39.241 N 104° 34' 10.947 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 D32-24D
 Plan #1 (06-12-09)
 13:41, June 24 2009



Azimuths to True North
 Magnetic North: 8.97°
 Magnetic Field
 Strength: 53265.1snT
 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 1320'FSL, 2565'FEL	6200.0	193.5	-1468.4	40° 10' 41.153 N	104° 34' 29.864 W	Point
HARDLINE 73°W OF BHL	7680.0	93.5	-1541.4	40° 10' 40.165 N	104° 34' 30.805 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	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1965.9	19.32	277.51	1947.7	21.1	-159.9	2.00	277.51	161.3	
4	5467.6	19.32	277.51	5252.3	172.4	-1308.4	0.00	0.00	1319.8	
5	6433.6	0.00	0.00	6200.0	193.5	-1468.4	2.00	180.00	1481.1	TARGET BHL 1320'FSL, 2565'FEL
6	7913.6	0.00	0.00	7680.0	193.5	-1468.4	0.00	0.00	1481.1	



Directional

NOBLE ENERGY INC WELD COUNTY CO

SEC.32-T3N-R64W

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

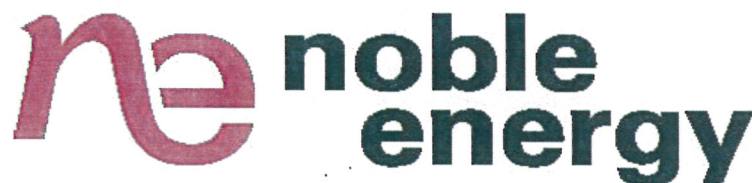
HP Farms D32-24D

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 D32-24D
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 D32-24D	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:	258,567.66 ft
From:	Lat/Long	Easting:	4,165,675.42 ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	40° 10' 39.486 N
		Longitude:	104° 34' 10.945 W
		Grid Convergence:	3.56 °

Well	HP Farms D32-24D		
Well Position	+N/-S	-24.8 ft	Northing:
	+E/-W	-0.2 ft	Easting:
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft
		Latitude:	40° 10' 39.241 N
		Longitude:	104° 34' 10.947 W
		Ground Level:	4,862.0 ft

Wellbore	Wellbore #1		
----------	-------------	--	--

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)		
--------	--------------------	--	--

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	277.51

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	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,965.9	19.32	277.51	1,947.7	21.1	-159.9	2.00	2.00	0.00	277.51	
5,467.6	19.32	277.51	5,252.3	172.4	-1,308.4	0.00	0.00	0.00	0.00	
6,433.6	0.00	0.00	6,200.0	193.5	-1,468.4	2.00	-2.00	0.00	180.00	TARGET BHL 132C
7,913.6	0.00	0.00	7,680.0	193.5	-1,468.4	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 D32-24D
 Wellbore: Wellbore #1
 Design: Plan #1 (06-12-09)

Local Co-ordinate Reference: Well HP Farms D32-24D
 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	0.00	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	0.80	277.51	1,040.0	0.0	-0.3	0.3	2.00	2.00	0.00
1,080.0	1.60	277.51	1,080.0	0.1	-1.1	1.1	2.00	2.00	0.00
1,120.0	2.40	277.51	1,120.0	0.3	-2.5	2.5	2.00	2.00	0.00
1,160.0	3.20	277.51	1,159.9	0.6	-4.4	4.5	2.00	2.00	0.00
1,200.0	4.00	277.51	1,199.8	0.9	-6.9	7.0	2.00	2.00	0.00
1,240.0	4.80	277.51	1,239.7	1.3	-10.0	10.0	2.00	2.00	0.00
1,280.0	5.60	277.51	1,279.6	1.8	-13.6	13.7	2.00	2.00	0.00
1,320.0	6.40	277.51	1,319.3	2.3	-17.7	17.9	2.00	2.00	0.00
1,360.0	7.20	277.51	1,359.1	3.0	-22.4	22.6	2.00	2.00	0.00
1,400.0	8.00	277.51	1,398.7	3.6	-27.6	27.9	2.00	2.00	0.00
1,440.0	8.80	277.51	1,438.3	4.4	-33.4	33.7	2.00	2.00	0.00
1,480.0	9.60	277.51	1,477.8	5.2	-39.8	40.1	2.00	2.00	0.00
1,520.0	10.40	277.51	1,517.1	6.1	-46.7	47.1	2.00	2.00	0.00
1,560.0	11.20	277.51	1,556.4	7.1	-54.1	54.6	2.00	2.00	0.00
1,600.0	12.00	277.51	1,595.6	8.2	-62.1	62.6	2.00	2.00	0.00
1,640.0	12.80	277.51	1,634.7	9.3	-70.6	71.2	2.00	2.00	0.00
1,680.0	13.60	277.51	1,673.6	10.5	-79.6	80.3	2.00	2.00	0.00
1,720.0	14.40	277.51	1,712.4	11.8	-89.2	90.0	2.00	2.00	0.00
1,760.0	15.20	277.51	1,751.1	13.1	-99.4	100.2	2.00	2.00	0.00
1,800.0	16.00	277.51	1,789.6	14.5	-110.0	111.0	2.00	2.00	0.00
1,840.0	16.80	277.51	1,828.0	16.0	-121.2	122.3	2.00	2.00	0.00
1,880.0	17.60	277.51	1,866.2	17.5	-132.9	134.1	2.00	2.00	0.00
1,920.0	18.40	277.51	1,904.3	19.1	-145.2	146.5	2.00	2.00	0.00
1,960.0	19.20	277.51	1,942.1	20.8	-158.0	159.3	2.00	2.00	0.00
1,965.9	19.32	277.51	1,947.7	21.1	-159.9	161.3	2.00	2.00	0.00
2,000.0	19.32	277.51	1,979.9	22.5	-171.1	172.6	0.00	0.00	0.00
2,040.0	19.32	277.51	2,017.6	24.3	-184.2	185.8	0.00	0.00	0.00
2,080.0	19.32	277.51	2,055.4	26.0	-197.3	199.0	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 D32-24D
 Wellbore: Wellbore #1
 Design: Plan #1 (06-12-09)

Local Co-ordinate Reference: Well HP Farms D32-24D
 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	19.32	277.51	2,093.1	27.7	-210.5	212.3	0.00	0.00	0.00
2,160.0	19.32	277.51	2,130.9	29.5	-223.6	225.5	0.00	0.00	0.00
2,200.0	19.32	277.51	2,168.6	31.2	-236.7	238.7	0.00	0.00	0.00
2,240.0	19.32	277.51	2,206.4	32.9	-249.8	252.0	0.00	0.00	0.00
2,280.0	19.32	277.51	2,244.1	34.7	-262.9	265.2	0.00	0.00	0.00
2,320.0	19.32	277.51	2,281.9	36.4	-276.1	278.4	0.00	0.00	0.00
2,360.0	19.32	277.51	2,319.6	38.1	-289.2	291.7	0.00	0.00	0.00
2,400.0	19.32	277.51	2,357.4	39.8	-302.3	304.9	0.00	0.00	0.00
2,440.0	19.32	277.51	2,395.1	41.6	-315.4	318.1	0.00	0.00	0.00
2,480.0	19.32	277.51	2,432.9	43.3	-328.5	331.4	0.00	0.00	0.00
2,520.0	19.32	277.51	2,470.6	45.0	-341.7	344.6	0.00	0.00	0.00
2,560.0	19.32	277.51	2,508.4	46.8	-354.8	357.8	0.00	0.00	0.00
2,600.0	19.32	277.51	2,546.1	48.5	-367.9	371.1	0.00	0.00	0.00
2,640.0	19.32	277.51	2,583.8	50.2	-381.0	384.3	0.00	0.00	0.00
2,680.0	19.32	277.51	2,621.6	51.9	-394.1	397.5	0.00	0.00	0.00
2,720.0	19.32	277.51	2,659.3	53.7	-407.3	410.8	0.00	0.00	0.00
2,760.0	19.32	277.51	2,697.1	55.4	-420.4	424.0	0.00	0.00	0.00
2,800.0	19.32	277.51	2,734.8	57.1	-433.5	437.2	0.00	0.00	0.00
2,840.0	19.32	277.51	2,772.6	58.9	-446.6	450.5	0.00	0.00	0.00
2,880.0	19.32	277.51	2,810.3	60.6	-459.7	463.7	0.00	0.00	0.00
2,920.0	19.32	277.51	2,848.1	62.3	-472.8	476.9	0.00	0.00	0.00
2,960.0	19.32	277.51	2,885.8	64.0	-486.0	490.2	0.00	0.00	0.00
3,000.0	19.32	277.51	2,923.6	65.8	-499.1	503.4	0.00	0.00	0.00
3,040.0	19.32	277.51	2,961.3	67.5	-512.2	516.6	0.00	0.00	0.00
3,080.0	19.32	277.51	2,999.1	69.2	-525.3	529.9	0.00	0.00	0.00
3,120.0	19.32	277.51	3,036.8	71.0	-538.4	543.1	0.00	0.00	0.00
3,160.0	19.32	277.51	3,074.6	72.7	-551.6	556.3	0.00	0.00	0.00
3,200.0	19.32	277.51	3,112.3	74.4	-564.7	569.6	0.00	0.00	0.00
3,240.0	19.32	277.51	3,150.1	76.1	-577.8	582.8	0.00	0.00	0.00
3,280.0	19.32	277.51	3,187.8	77.9	-590.9	596.0	0.00	0.00	0.00
3,320.0	19.32	277.51	3,225.6	79.6	-604.0	609.3	0.00	0.00	0.00
3,360.0	19.32	277.51	3,263.3	81.3	-617.2	622.5	0.00	0.00	0.00
3,400.0	19.32	277.51	3,301.1	83.1	-630.3	635.7	0.00	0.00	0.00
3,440.0	19.32	277.51	3,338.8	84.8	-643.4	649.0	0.00	0.00	0.00
3,480.0	19.32	277.51	3,376.5	86.5	-656.5	662.2	0.00	0.00	0.00
3,520.0	19.32	277.51	3,414.3	88.2	-669.6	675.4	0.00	0.00	0.00
3,560.0	19.32	277.51	3,452.0	90.0	-682.8	688.7	0.00	0.00	0.00
3,600.0	19.32	277.51	3,489.8	91.7	-695.9	701.9	0.00	0.00	0.00
3,640.0	19.32	277.51	3,527.5	93.4	-709.0	715.1	0.00	0.00	0.00
3,680.0	19.32	277.51	3,565.3	95.2	-722.1	728.4	0.00	0.00	0.00
3,720.0	19.32	277.51	3,603.0	96.9	-735.2	741.6	0.00	0.00	0.00
3,760.0	19.32	277.51	3,640.8	98.6	-748.4	754.8	0.00	0.00	0.00
3,800.0	19.32	277.51	3,678.5	100.4	-761.5	768.1	0.00	0.00	0.00
3,840.0	19.32	277.51	3,716.3	102.1	-774.6	781.3	0.00	0.00	0.00
3,880.0	19.32	277.51	3,754.0	103.8	-787.7	794.5	0.00	0.00	0.00
3,920.0	19.32	277.51	3,791.8	105.5	-800.8	807.8	0.00	0.00	0.00
3,960.0	19.32	277.51	3,829.5	107.3	-814.0	821.0	0.00	0.00	0.00
4,000.0	19.32	277.51	3,867.3	109.0	-827.1	834.2	0.00	0.00	0.00
4,040.0	19.32	277.51	3,905.0	110.7	-840.2	847.5	0.00	0.00	0.00
4,080.0	19.32	277.51	3,942.8	112.5	-853.3	860.7	0.00	0.00	0.00
4,120.0	19.32	277.51	3,980.5	114.2	-866.4	873.9	0.00	0.00	0.00
4,160.0	19.32	277.51	4,018.3	115.9	-879.6	887.2	0.00	0.00	0.00
4,200.0	19.32	277.51	4,056.0	117.6	-892.7	900.4	0.00	0.00	0.00
4,240.0	19.32	277.51	4,093.8	119.4	-905.8	913.6	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 D32-24D
 Wellbore: Wellbore #1
 Design: Plan #1 (06-12-09)

Local Co-ordinate Reference:
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:

Well HP Farms D32-24D
 WELL @ 4875.0ft (Original Well Elev)
 WELL @ 4875.0ft (Original Well Elev)
 True
 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	19.32	277.51	4,131.5	121.1	-918.9	926.9	0.00	0.00	0.00
4,320.0	19.32	277.51	4,169.2	122.8	-932.0	940.1	0.00	0.00	0.00
4,360.0	19.32	277.51	4,207.0	124.6	-945.2	953.3	0.00	0.00	0.00
4,400.0	19.32	277.51	4,244.7	126.3	-958.3	966.6	0.00	0.00	0.00
4,440.0	19.32	277.51	4,282.5	128.0	-971.4	979.8	0.00	0.00	0.00
4,480.0	19.32	277.51	4,320.2	129.7	-984.5	993.0	0.00	0.00	0.00
4,520.0	19.32	277.51	4,358.0	131.5	-997.6	1,006.3	0.00	0.00	0.00
4,560.0	19.32	277.51	4,395.7	133.2	-1,010.8	1,019.5	0.00	0.00	0.00
4,600.0	19.32	277.51	4,433.5	134.9	-1,023.9	1,032.7	0.00	0.00	0.00
4,640.0	19.32	277.51	4,471.2	136.7	-1,037.0	1,046.0	0.00	0.00	0.00
4,680.0	19.32	277.51	4,509.0	138.4	-1,050.1	1,059.2	0.00	0.00	0.00
4,720.0	19.32	277.51	4,546.7	140.1	-1,063.2	1,072.4	0.00	0.00	0.00
4,760.0	19.32	277.51	4,584.5	141.8	-1,076.4	1,085.7	0.00	0.00	0.00
4,800.0	19.32	277.51	4,622.2	143.6	-1,089.5	1,098.9	0.00	0.00	0.00
4,840.0	19.32	277.51	4,660.0	145.3	-1,102.6	1,112.1	0.00	0.00	0.00
4,880.0	19.32	277.51	4,697.7	147.0	-1,115.7	1,125.4	0.00	0.00	0.00
4,920.0	19.32	277.51	4,735.5	148.8	-1,128.8	1,138.6	0.00	0.00	0.00
4,960.0	19.32	277.51	4,773.2	150.5	-1,141.9	1,151.8	0.00	0.00	0.00
5,000.0	19.32	277.51	4,811.0	152.2	-1,155.1	1,165.1	0.00	0.00	0.00
5,040.0	19.32	277.51	4,848.7	154.0	-1,168.2	1,178.3	0.00	0.00	0.00
5,080.0	19.32	277.51	4,886.5	155.7	-1,181.3	1,191.5	0.00	0.00	0.00
5,120.0	19.32	277.51	4,924.2	157.4	-1,194.4	1,204.8	0.00	0.00	0.00
5,160.0	19.32	277.51	4,961.9	159.1	-1,207.5	1,218.0	0.00	0.00	0.00
5,200.0	19.32	277.51	4,999.7	160.9	-1,220.7	1,231.2	0.00	0.00	0.00
5,240.0	19.32	277.51	5,037.4	162.6	-1,233.8	1,244.5	0.00	0.00	0.00
5,280.0	19.32	277.51	5,075.2	164.3	-1,246.9	1,257.7	0.00	0.00	0.00
5,320.0	19.32	277.51	5,112.9	166.1	-1,260.0	1,270.9	0.00	0.00	0.00
5,360.0	19.32	277.51	5,150.7	167.8	-1,273.1	1,284.2	0.00	0.00	0.00
5,400.0	19.32	277.51	5,188.4	169.5	-1,286.3	1,297.4	0.00	0.00	0.00
5,440.0	19.32	277.51	5,226.2	171.2	-1,299.4	1,310.6	0.00	0.00	0.00
5,467.6	19.32	277.51	5,252.3	172.4	-1,308.4	1,319.8	0.00	0.00	0.00
5,480.0	19.07	277.51	5,263.9	173.0	-1,312.5	1,323.8	2.00	-2.00	0.00
5,520.0	18.27	277.51	5,301.8	174.6	-1,325.2	1,336.6	2.00	-2.00	0.00
5,560.0	17.47	277.51	5,339.9	176.2	-1,337.3	1,348.9	2.00	-2.00	0.00
5,600.0	16.67	277.51	5,378.1	177.8	-1,349.0	1,360.7	2.00	-2.00	0.00
5,640.0	15.87	277.51	5,416.5	179.2	-1,360.1	1,371.9	2.00	-2.00	0.00
5,680.0	15.07	277.51	5,455.1	180.6	-1,370.7	1,382.5	2.00	-2.00	0.00
5,720.0	14.27	277.51	5,493.8	182.0	-1,380.7	1,392.7	2.00	-2.00	0.00
5,760.0	13.47	277.51	5,532.6	183.2	-1,390.2	1,402.2	2.00	-2.00	0.00
5,800.0	12.67	277.51	5,571.6	184.4	-1,399.2	1,411.3	2.00	-2.00	0.00
5,840.0	11.87	277.51	5,610.7	185.5	-1,407.6	1,419.8	2.00	-2.00	0.00
5,880.0	11.07	277.51	5,649.9	186.5	-1,415.5	1,427.8	2.00	-2.00	0.00
5,920.0	10.27	277.51	5,689.2	187.5	-1,422.9	1,435.2	2.00	-2.00	0.00
5,960.0	9.47	277.51	5,728.6	188.4	-1,429.7	1,442.0	2.00	-2.00	0.00
6,000.0	8.67	277.51	5,768.1	189.2	-1,435.9	1,448.3	2.00	-2.00	0.00
6,040.0	7.87	277.51	5,807.7	190.0	-1,441.6	1,454.1	2.00	-2.00	0.00
6,080.0	7.07	277.51	5,847.3	190.7	-1,446.8	1,459.3	2.00	-2.00	0.00
6,120.0	6.27	277.51	5,887.1	191.3	-1,451.4	1,463.9	2.00	-2.00	0.00
6,160.0	5.47	277.51	5,926.8	191.8	-1,455.4	1,468.0	2.00	-2.00	0.00
6,200.0	4.67	277.51	5,966.7	192.3	-1,458.9	1,471.6	2.00	-2.00	0.00
6,240.0	3.87	277.51	6,006.6	192.7	-1,461.9	1,474.5	2.00	-2.00	0.00
6,280.0	3.07	277.51	6,046.5	193.0	-1,464.3	1,477.0	2.00	-2.00	0.00
6,320.0	2.27	277.51	6,086.5	193.2	-1,466.1	1,478.8	2.00	-2.00	0.00
6,360.0	1.47	277.51	6,126.4	193.4	-1,467.4	1,480.1	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 D32-24D
 Wellbore: Wellbore #1
 Design: Plan #1 (06-12-09)

Local Co-ordinate Reference: Well HP Farms D32-24D
 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	0.67	277.51	6,166.4	193.5	-1,468.2	1,480.9	2.00	-2.00	0.00
6,433.6	0.00	0.00	6,200.0	193.5	-1,468.4	1,481.1	2.00	-2.00	245.72
TARGET BHL 1320'FSL, 2565'FEL									
6,440.0	0.00	0.00	6,206.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
6,480.0	0.00	0.00	6,246.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
6,520.0	0.00	0.00	6,286.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
6,560.0	0.00	0.00	6,326.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
6,600.0	0.00	0.00	6,366.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
6,640.0	0.00	0.00	6,406.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
6,680.0	0.00	0.00	6,446.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
6,720.0	0.00	0.00	6,486.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
6,760.0	0.00	0.00	6,526.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
6,800.0	0.00	0.00	6,566.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
6,840.0	0.00	0.00	6,606.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
6,880.0	0.00	0.00	6,646.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
6,920.0	0.00	0.00	6,686.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
6,960.0	0.00	0.00	6,726.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,000.0	0.00	0.00	6,766.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,040.0	0.00	0.00	6,806.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,057.6	0.00	0.00	6,824.0	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
NIOBRARA									
7,080.0	0.00	0.00	6,846.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,120.0	0.00	0.00	6,886.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,160.0	0.00	0.00	6,926.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,200.0	0.00	0.00	6,966.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,240.0	0.00	0.00	7,006.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,280.0	0.00	0.00	7,046.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,320.0	0.00	0.00	7,086.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,357.6	0.00	0.00	7,124.0	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
CODELL									
7,360.0	0.00	0.00	7,126.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,400.0	0.00	0.00	7,166.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,440.0	0.00	0.00	7,206.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,480.0	0.00	0.00	7,246.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,520.0	0.00	0.00	7,286.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,560.0	0.00	0.00	7,326.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,600.0	0.00	0.00	7,366.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,640.0	0.00	0.00	7,406.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,680.0	0.00	0.00	7,446.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,701.6	0.00	0.00	7,468.0	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
D-SAND									
7,720.0	0.00	0.00	7,486.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,760.0	0.00	0.00	7,526.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,763.6	0.00	0.00	7,530.0	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
J-SAND									
7,800.0	0.00	0.00	7,566.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,840.0	0.00	0.00	7,606.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,880.0	0.00	0.00	7,646.4	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
7,913.6	0.00	0.00	7,680.0	193.5	-1,468.4	1,481.1	0.00	0.00	0.00
HARDLINE 73'W 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 D32-24D
 Wellbore: Wellbore #1
 Design: Plan #1 (06-12-09)

Local Co-ordinate Reference: Well HP Farms D32-24D
 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	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
HARDLINE 73'W OF I	0.00	0.00	7,680.0	93.5	-1,541.4	258,540.41	4,164,128.44	40° 10' 40.165 N	104° 34' 30.805 W
- plan misses target center by 123.8ft at 7913.6ft MD (7680.0 TVD, 193.5 N, -1468.4 E)									
- Polygon									
Point 1			7,680.0	0.0	0.0	258,540.41	4,164,128.44		
Point 2			7,680.0	200.0	0.0	258,740.56	4,164,115.99		
TARGET BHL 1320'F	0.00	0.00	6,200.0	193.5	-1,468.4	258,645.04	4,164,195.29	40° 10' 41.153 N	104° 34' 29.864 W
- plan hits target center									
- Point									

Formations

Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(ft)	(ft)			(°)	(°)
7,057.6	6,824.0	NIOBRARA		0.00	
7,357.6	7,124.0	CODELL		0.00	
7,701.6	7,468.0	D-SAND		0.00	
7,763.6	7,530.0	J-SAND		0.00	