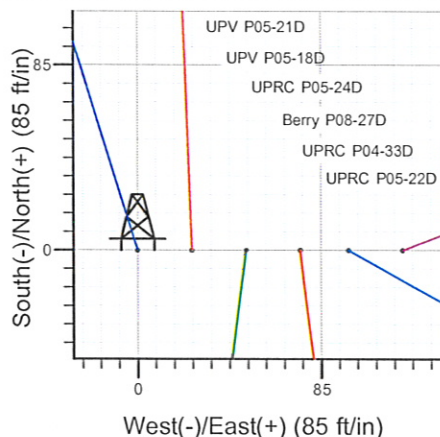
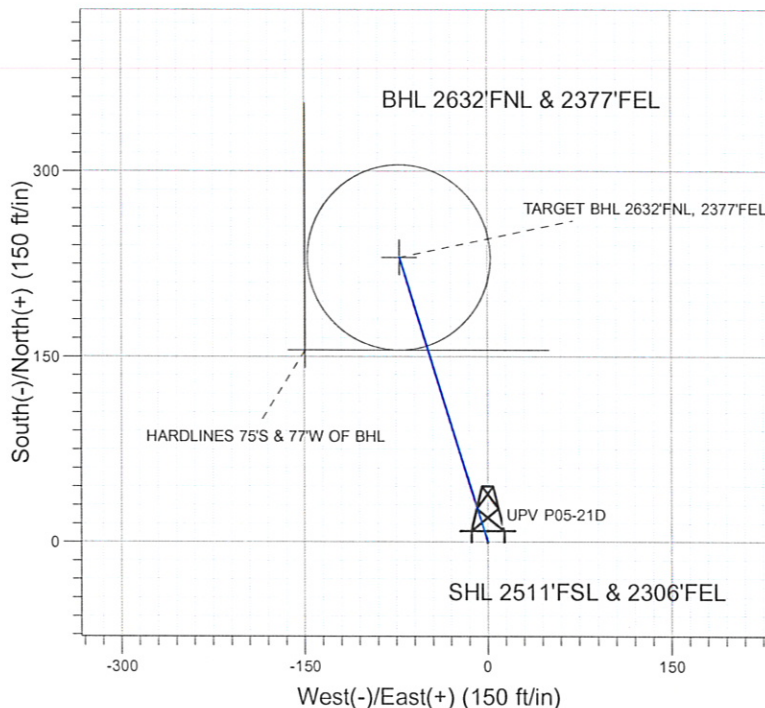
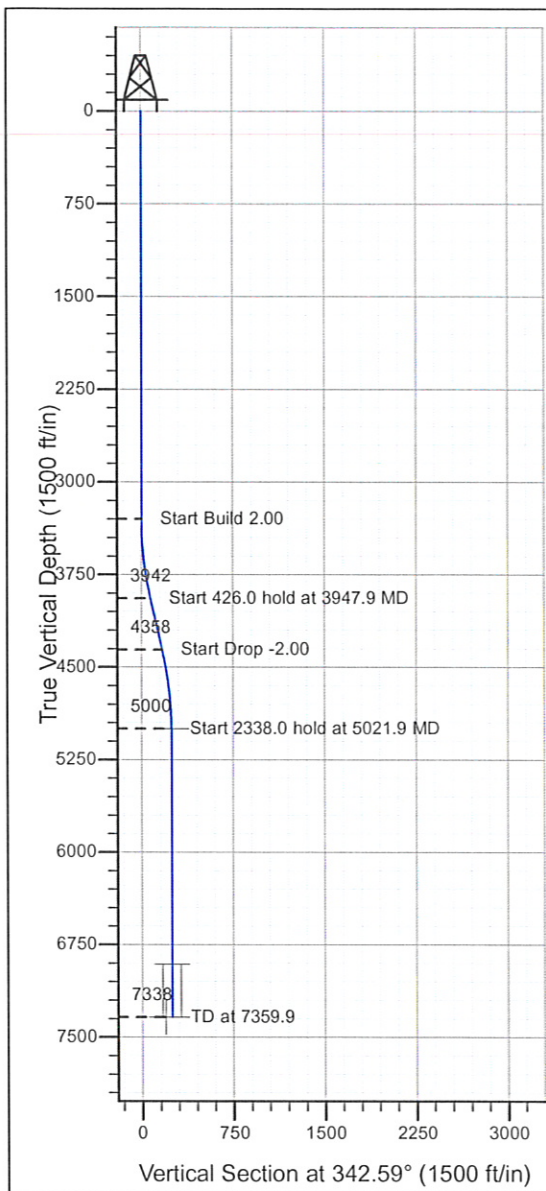


## Well Name:UPV P05-21D

Surface Location: UPV P05-21D Pad Sec.5-T3N-R67W  
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone  
 Ground Elevation: 4875.0  
 +N/-S+E/-W Northing Easting Latitude Longitude Slot  
 0.0 0.0 1336119.84 3163796.04 40° 15' 16.416 N104° 54' 47.304 W  
 Original Well Elev WELL @ 4888.0ft (Original Well Elev)

## NOBLE ENERGY INC WELD COUNTY CO



UPV P05-21D Pad Sec.5-T3N-R67W  
 UPV P05-21D  
 Noble UPV P05-21D Plan #2 (11-16-09)  
 10:51, November 17 2009



Azimuths to True North  
 Magnetic North: 9.12°

Magnetic Field  
 Strength: 53231.9snT  
 Dip Angle: 66.97°  
 Date: 10/19/2009  
 Model: IGRF200510

### WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 2632'FNL, 2377'FEL	5000.0	230.4	-72.2	40° 15' 18.693 N	104° 54' 48.236 W	Point
TARGET CIRCLE UPV P05-21D	6908.0	230.4	-72.2	40° 15' 18.693 N	104° 54' 48.235 W	Circle (Radius: 75.0)
HARDLINES 75'S & 77'W OF BHL	7338.0	155.4	-149.2	40° 15' 17.952 N	104° 54' 49.228 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	3300.0	0.00	0.00	3300.0	0.0	0.0	0.00	0.00	0.0	
3	3947.9	12.96	342.59	3942.4	69.6	-21.8	2.00	342.59	73.0	
4	4373.9	12.96	342.59	4357.6	160.8	-50.4	0.00	0.00	168.5	
5	5021.9	0.00	0.00	5000.0	230.4	-72.2	2.00	180.00	241.4	TARGET BHL 2632'FNL, 2377'FEL
6	7359.9	0.00	0.00	7338.0	230.4	-72.2	0.00	0.00	241.4	



## **Directional**

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

**SEC.5-T3N-R67W**

**UPV P05-21D Pad Sec.5-T3N-R67W**

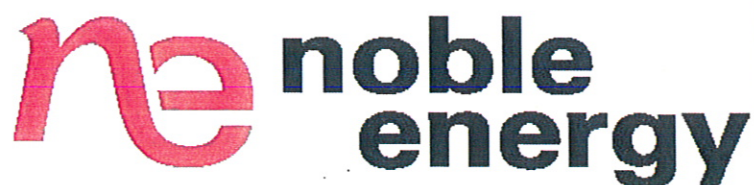
**UPV P05-21D**

**Wellbore #1**

**Plan: Noble UPV P05-21D Plan #2 (11-16-09)**

### **Standard Planning Report**

**17 November, 2009**





Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well UPV P05-21D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4888.0ft (Original Well Elev)
Project:	SEC.5-T3N-R67W	MD Reference:	WELL @ 4888.0ft (Original Well Elev)
Site:	UPV P05-21D Pad Sec.5-T3N-R67W	North Reference:	True
Well:	UPV P05-21D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble UPV P05-21D Plan #2 (11-16-09)		

Project	SEC.5-T3N-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	UPV P05-21D Pad Sec.5-T3N-R67W		
Site Position:		Northing:	1,336,119.85 ft
From:	Lat/Long	Easting:	3,163,796.04 ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	40° 15' 16.416 N
		Longitude:	104° 54' 47.304 W
		Grid Convergence:	0.38 °

Well	UPV P05-21D		
Well Position	+N/-S	0.0 ft	Northing:
	+E/-W	0.0 ft	Easting:
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft
		Latitude:	40° 15' 16.416 N
		Longitude:	104° 54' 47.304 W
		Ground Level:	4,875.0 ft

Wellbore	Wellbore #1		
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	10/19/2009	9.12	66.97	53,232

Design	Noble UPV P05-21D Plan #2 (11-16-09)		
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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	342.59

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	
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,947.9	12.96	342.59	3,942.4	69.6	-21.8	2.00	2.00	0.00	342.59	
4,373.9	12.96	342.59	4,357.6	160.8	-50.4	0.00	0.00	0.00	0.00	
5,021.9	0.00	0.00	5,000.0	230.4	-72.2	2.00	-2.00	0.00	180.00	TARGET BHL 2632
7,359.9	0.00	0.00	7,338.0	230.4	-72.2	0.00	0.00	0.00	0.00	

Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well UPV P05-21D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4888.0ft (Original Well Elev)
Project:	SEC.5-T3N-R67W	MD Reference:	WELL @ 4888.0ft (Original Well Elev)
Site:	UPV P05-21D Pad Sec.5-T3N-R67W	North Reference:	True
Well:	UPV P05-21D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble UPV P05-21D Plan #2 (11-16-09)		

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	0.00	0.00	1,240.0	0.0	0.0	0.0	0.00	0.00	0.00
1,280.0	0.00	0.00	1,280.0	0.0	0.0	0.0	0.00	0.00	0.00
1,320.0	0.00	0.00	1,320.0	0.0	0.0	0.0	0.00	0.00	0.00
1,360.0	0.00	0.00	1,360.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,440.0	0.00	0.00	1,440.0	0.0	0.0	0.0	0.00	0.00	0.00
1,480.0	0.00	0.00	1,480.0	0.0	0.0	0.0	0.00	0.00	0.00
1,520.0	0.00	0.00	1,520.0	0.0	0.0	0.0	0.00	0.00	0.00
1,560.0	0.00	0.00	1,560.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,640.0	0.00	0.00	1,640.0	0.0	0.0	0.0	0.00	0.00	0.00
1,680.0	0.00	0.00	1,680.0	0.0	0.0	0.0	0.00	0.00	0.00
1,720.0	0.00	0.00	1,720.0	0.0	0.0	0.0	0.00	0.00	0.00
1,760.0	0.00	0.00	1,760.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,840.0	0.00	0.00	1,840.0	0.0	0.0	0.0	0.00	0.00	0.00
1,880.0	0.00	0.00	1,880.0	0.0	0.0	0.0	0.00	0.00	0.00
1,920.0	0.00	0.00	1,920.0	0.0	0.0	0.0	0.00	0.00	0.00
1,960.0	0.00	0.00	1,960.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,040.0	0.00	0.00	2,040.0	0.0	0.0	0.0	0.00	0.00	0.00
2,080.0	0.00	0.00	2,080.0	0.0	0.0	0.0	0.00	0.00	0.00
2,120.0	0.00	0.00	2,120.0	0.0	0.0	0.0	0.00	0.00	0.00



Database: EDM den0-adp01 Server Data  
Company: NOBLE ENERGY INC WELD COUNTY CO  
Project: SEC.5-T3N-R67W  
Site: UPV P05-21D Pad Sec.5-T3N-R67W  
Well: UPV P05-21D  
Wellbore: Wellbore #1  
Design: Noble UPV P05-21D Plan #2 (11-16-09)

Local Co-ordinate Reference: Well UPV P05-21D  
TVD Reference: WELL @ 4888.0ft (Original Well Elev)  
MD Reference: WELL @ 4888.0ft (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)
2,160.0	0.00	0.00	2,160.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,240.0	0.00	0.00	2,240.0	0.0	0.0	0.0	0.00	0.00	0.00
2,280.0	0.00	0.00	2,280.0	0.0	0.0	0.0	0.00	0.00	0.00
2,320.0	0.00	0.00	2,320.0	0.0	0.0	0.0	0.00	0.00	0.00
2,360.0	0.00	0.00	2,360.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,440.0	0.00	0.00	2,440.0	0.0	0.0	0.0	0.00	0.00	0.00
2,480.0	0.00	0.00	2,480.0	0.0	0.0	0.0	0.00	0.00	0.00
2,520.0	0.00	0.00	2,520.0	0.0	0.0	0.0	0.00	0.00	0.00
2,560.0	0.00	0.00	2,560.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,640.0	0.00	0.00	2,640.0	0.0	0.0	0.0	0.00	0.00	0.00
2,680.0	0.00	0.00	2,680.0	0.0	0.0	0.0	0.00	0.00	0.00
2,720.0	0.00	0.00	2,720.0	0.0	0.0	0.0	0.00	0.00	0.00
2,760.0	0.00	0.00	2,760.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,840.0	0.00	0.00	2,840.0	0.0	0.0	0.0	0.00	0.00	0.00
2,880.0	0.00	0.00	2,880.0	0.0	0.0	0.0	0.00	0.00	0.00
2,920.0	0.00	0.00	2,920.0	0.0	0.0	0.0	0.00	0.00	0.00
2,960.0	0.00	0.00	2,960.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,040.0	0.00	0.00	3,040.0	0.0	0.0	0.0	0.00	0.00	0.00
3,080.0	0.00	0.00	3,080.0	0.0	0.0	0.0	0.00	0.00	0.00
3,120.0	0.00	0.00	3,120.0	0.0	0.0	0.0	0.00	0.00	0.00
3,160.0	0.00	0.00	3,160.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,240.0	0.00	0.00	3,240.0	0.0	0.0	0.0	0.00	0.00	0.00
3,280.0	0.00	0.00	3,280.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,320.0	0.40	342.59	3,320.0	0.1	0.0	0.1	2.00	2.00	0.00
3,360.0	1.20	342.59	3,360.0	0.6	-0.2	0.6	2.00	2.00	0.00
3,400.0	2.00	342.59	3,400.0	1.7	-0.5	1.7	2.00	2.00	0.00
3,440.0	2.80	342.59	3,439.9	3.3	-1.0	3.4	2.00	2.00	0.00
3,480.0	3.60	342.59	3,479.9	5.4	-1.7	5.7	2.00	2.00	0.00
3,520.0	4.40	342.59	3,519.8	8.1	-2.5	8.4	2.00	2.00	0.00
3,560.0	5.20	342.59	3,559.6	11.3	-3.5	11.8	2.00	2.00	0.00
3,600.0	6.00	342.59	3,599.5	15.0	-4.7	15.7	2.00	2.00	0.00
3,640.0	6.80	342.59	3,639.2	19.2	-6.0	20.2	2.00	2.00	0.00
3,680.0	7.60	342.59	3,678.9	24.0	-7.5	25.2	2.00	2.00	0.00
3,720.0	8.40	342.59	3,718.5	29.3	-9.2	30.7	2.00	2.00	0.00
3,760.0	9.20	342.59	3,758.0	35.2	-11.0	36.9	2.00	2.00	0.00
3,800.0	10.00	342.59	3,797.5	41.5	-13.0	43.5	2.00	2.00	0.00
3,840.0	10.80	342.59	3,836.8	48.4	-15.2	50.7	2.00	2.00	0.00
3,880.0	11.60	342.59	3,876.0	55.8	-17.5	58.5	2.00	2.00	0.00
3,920.0	12.40	342.59	3,915.2	63.8	-20.0	66.8	2.00	2.00	0.00
3,947.9	12.96	342.59	3,942.4	69.6	-21.8	73.0	2.00	2.00	0.00
3,960.0	12.96	342.59	3,954.2	72.2	-22.6	75.7	0.00	0.00	0.00
4,000.0	12.96	342.59	3,993.2	80.8	-25.3	84.6	0.00	0.00	0.00
4,040.0	12.96	342.59	4,032.1	89.3	-28.0	93.6	0.00	0.00	0.00
4,080.0	12.96	342.59	4,071.1	97.9	-30.7	102.6	0.00	0.00	0.00
4,120.0	12.96	342.59	4,110.1	106.4	-33.4	111.5	0.00	0.00	0.00
4,160.0	12.96	342.59	4,149.1	115.0	-36.1	120.5	0.00	0.00	0.00
4,200.0	12.96	342.59	4,188.1	123.6	-38.7	129.5	0.00	0.00	0.00

Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well UPV P05-21D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4888.0ft (Original Well Elev)
Project:	SEC.5-T3N-R67W	MD Reference:	WELL @ 4888.0ft (Original Well Elev)
Site:	UPV P05-21D Pad Sec.5-T3N-R67W	North Reference:	True
Well:	UPV P05-21D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble UPV P05-21D Plan #2 (11-16-09)		

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	12.96	342.59	4,227.1	132.1	-41.4	138.5	0.00	0.00	0.00
4,280.0	12.96	342.59	4,266.0	140.7	-44.1	147.4	0.00	0.00	0.00
4,320.0	12.96	342.59	4,305.0	149.2	-46.8	156.4	0.00	0.00	0.00
4,360.0	12.96	342.59	4,344.0	157.8	-49.5	165.4	0.00	0.00	0.00
4,373.9	12.96	342.59	4,357.6	160.8	-50.4	168.5	0.00	0.00	0.00
4,400.0	12.44	342.59	4,383.0	166.2	-52.1	174.2	2.00	-2.00	0.00
4,440.0	11.64	342.59	4,422.1	174.2	-54.6	182.6	2.00	-2.00	0.00
4,480.0	10.84	342.59	4,461.4	181.6	-57.0	190.4	2.00	-2.00	0.00
4,520.0	10.04	342.59	4,500.7	188.5	-59.1	197.6	2.00	-2.00	0.00
4,560.0	9.24	342.59	4,540.1	194.9	-61.1	204.3	2.00	-2.00	0.00
4,600.0	8.44	342.59	4,579.7	200.8	-63.0	210.4	2.00	-2.00	0.00
4,640.0	7.64	342.59	4,619.3	206.1	-64.6	216.0	2.00	-2.00	0.00
4,680.0	6.84	342.59	4,658.9	210.9	-66.1	221.1	2.00	-2.00	0.00
4,720.0	6.04	342.59	4,698.7	215.2	-67.5	225.6	2.00	-2.00	0.00
4,760.0	5.24	342.59	4,738.5	219.0	-68.7	229.5	2.00	-2.00	0.00
4,800.0	4.44	342.59	4,778.4	222.2	-69.7	232.9	2.00	-2.00	0.00
4,840.0	3.64	342.59	4,818.3	224.9	-70.5	235.7	2.00	-2.00	0.00
4,880.0	2.84	342.59	4,858.2	227.0	-71.2	237.9	2.00	-2.00	0.00
4,920.0	2.04	342.59	4,898.2	228.7	-71.7	239.6	2.00	-2.00	0.00
4,960.0	1.24	342.59	4,938.1	229.8	-72.0	240.8	2.00	-2.00	0.00
5,000.0	0.44	342.59	4,978.1	230.3	-72.2	241.4	2.00	-2.00	0.00
5,021.9	0.00	0.00	5,000.0	230.4	-72.2	241.4	2.00	-2.00	0.00
TARGET BHL 2632'FNL, 2377'FEL									
5,040.0	0.00	0.00	5,018.1	230.4	-72.2	241.4	0.00	0.00	0.00
5,080.0	0.00	0.00	5,058.1	230.4	-72.2	241.4	0.00	0.00	0.00
5,120.0	0.00	0.00	5,098.1	230.4	-72.2	241.4	0.00	0.00	0.00
5,160.0	0.00	0.00	5,138.1	230.4	-72.2	241.4	0.00	0.00	0.00
5,200.0	0.00	0.00	5,178.1	230.4	-72.2	241.4	0.00	0.00	0.00
5,240.0	0.00	0.00	5,218.1	230.4	-72.2	241.4	0.00	0.00	0.00
5,280.0	0.00	0.00	5,258.1	230.4	-72.2	241.4	0.00	0.00	0.00
5,320.0	0.00	0.00	5,298.1	230.4	-72.2	241.4	0.00	0.00	0.00
5,360.0	0.00	0.00	5,338.1	230.4	-72.2	241.4	0.00	0.00	0.00
5,400.0	0.00	0.00	5,378.1	230.4	-72.2	241.4	0.00	0.00	0.00
5,440.0	0.00	0.00	5,418.1	230.4	-72.2	241.4	0.00	0.00	0.00
5,480.0	0.00	0.00	5,458.1	230.4	-72.2	241.4	0.00	0.00	0.00
5,520.0	0.00	0.00	5,498.1	230.4	-72.2	241.4	0.00	0.00	0.00
5,560.0	0.00	0.00	5,538.1	230.4	-72.2	241.4	0.00	0.00	0.00
5,600.0	0.00	0.00	5,578.1	230.4	-72.2	241.4	0.00	0.00	0.00
5,640.0	0.00	0.00	5,618.1	230.4	-72.2	241.4	0.00	0.00	0.00
5,680.0	0.00	0.00	5,658.1	230.4	-72.2	241.4	0.00	0.00	0.00
5,720.0	0.00	0.00	5,698.1	230.4	-72.2	241.4	0.00	0.00	0.00
5,760.0	0.00	0.00	5,738.1	230.4	-72.2	241.4	0.00	0.00	0.00
5,800.0	0.00	0.00	5,778.1	230.4	-72.2	241.4	0.00	0.00	0.00
5,840.0	0.00	0.00	5,818.1	230.4	-72.2	241.4	0.00	0.00	0.00
5,880.0	0.00	0.00	5,858.1	230.4	-72.2	241.4	0.00	0.00	0.00
5,920.0	0.00	0.00	5,898.1	230.4	-72.2	241.4	0.00	0.00	0.00
5,960.0	0.00	0.00	5,938.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,000.0	0.00	0.00	5,978.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,040.0	0.00	0.00	6,018.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,080.0	0.00	0.00	6,058.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,120.0	0.00	0.00	6,098.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,160.0	0.00	0.00	6,138.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,200.0	0.00	0.00	6,178.1	230.4	-72.2	241.4	0.00	0.00	0.00



Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well UPV P05-21D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4888.0ft (Original Well Elev)
Project:	SEC.5-T3N-R67W	MD Reference:	WELL @ 4888.0ft (Original Well Elev)
Site:	UPV P05-21D Pad Sec.5-T3N-R67W	North Reference:	True
Well:	UPV P05-21D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble UPV P05-21D Plan #2 (11-16-09)		

**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	6,218.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,280.0	0.00	0.00	6,258.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,320.0	0.00	0.00	6,298.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,360.0	0.00	0.00	6,338.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,400.0	0.00	0.00	6,378.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,440.0	0.00	0.00	6,418.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,480.0	0.00	0.00	6,458.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,520.0	0.00	0.00	6,498.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,560.0	0.00	0.00	6,538.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,600.0	0.00	0.00	6,578.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,640.0	0.00	0.00	6,618.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,680.0	0.00	0.00	6,658.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,720.0	0.00	0.00	6,698.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,760.0	0.00	0.00	6,738.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,800.0	0.00	0.00	6,778.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,840.0	0.00	0.00	6,818.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,880.0	0.00	0.00	6,858.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,920.0	0.00	0.00	6,898.1	230.4	-72.2	241.4	0.00	0.00	0.00
6,929.9	0.00	0.00	6,908.0	230.4	-72.2	241.4	0.00	0.00	0.00
<b>NIOBRARA - TARGET CIRCLE UPV P05-21D</b>									
6,960.0	0.00	0.00	6,938.1	230.4	-72.2	241.4	0.00	0.00	0.00
7,000.0	0.00	0.00	6,978.1	230.4	-72.2	241.4	0.00	0.00	0.00
7,040.0	0.00	0.00	7,018.1	230.4	-72.2	241.4	0.00	0.00	0.00
7,080.0	0.00	0.00	7,058.1	230.4	-72.2	241.4	0.00	0.00	0.00
7,120.0	0.00	0.00	7,098.1	230.4	-72.2	241.4	0.00	0.00	0.00
7,160.0	0.00	0.00	7,138.1	230.4	-72.2	241.4	0.00	0.00	0.00
7,200.0	0.00	0.00	7,178.1	230.4	-72.2	241.4	0.00	0.00	0.00
7,209.9	0.00	0.00	7,188.0	230.4	-72.2	241.4	0.00	0.00	0.00
<b>CODELL</b>									
7,240.0	0.00	0.00	7,218.1	230.4	-72.2	241.4	0.00	0.00	0.00
7,280.0	0.00	0.00	7,258.1	230.4	-72.2	241.4	0.00	0.00	0.00
7,320.0	0.00	0.00	7,298.1	230.4	-72.2	241.4	0.00	0.00	0.00
7,359.9	0.00	0.00	7,338.0	230.4	-72.2	241.4	0.00	0.00	0.00
<b>HARDLINES 75'S &amp; 77'W OF BHL</b>									

Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well UPV P05-21D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4888.0ft (Original Well Elev)
Project:	SEC.5-T3N-R67W	MD Reference:	WELL @ 4888.0ft (Original Well Elev)
Site:	UPV P05-21D Pad Sec.5-T3N-R67W	North Reference:	True
Well:	UPV P05-21D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble UPV P05-21D Plan #2 (11-16-09)		

#### 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
TARGET CIRCLE UP - plan hits target center - Circle (radius 75.0)	0.00	0.00	6,908.0	230.4	-72.2	1,336,349.75	3,163,722.32	40° 15' 18.693 N	104° 54' 48.235 W
TARGET BHL 2632'F - plan hits target center - Point	0.00	0.00	5,000.0	230.4	-72.2	1,336,349.74	3,163,722.27	40° 15' 18.693 N	104° 54' 48.236 W
HARDLINES 75'S & 7 - plan misses target center by 107.5ft at 7359.9ft MD (7338.0 TVD, 230.4 N, -72.2 E) - Polygon	0.00	0.00	7,338.0	155.4	-149.2	1,336,274.24	3,163,645.82	40° 15' 17.952 N	104° 54' 49.228 W
Point 1			7,338.0	0.0	0.0	1,336,274.24	3,163,645.82		
Point 2			7,338.0	0.0	200.0	1,336,275.57	3,163,845.81		
Point 3			7,338.0	0.0	0.0	1,336,274.24	3,163,645.82		
Point 4			7,338.0	200.0	0.0	1,336,474.23	3,163,644.49		

#### Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
6,929.9	6,908.0	NIOBRARA		0.00	
7,209.9	7,188.0	CODELL		0.00	