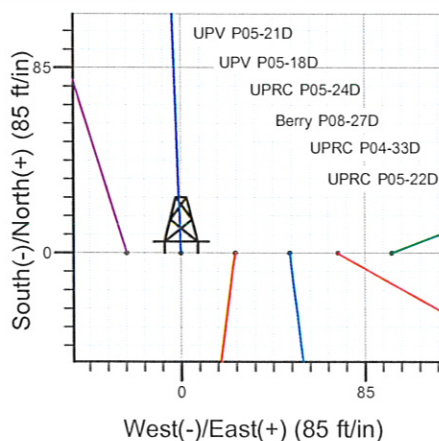
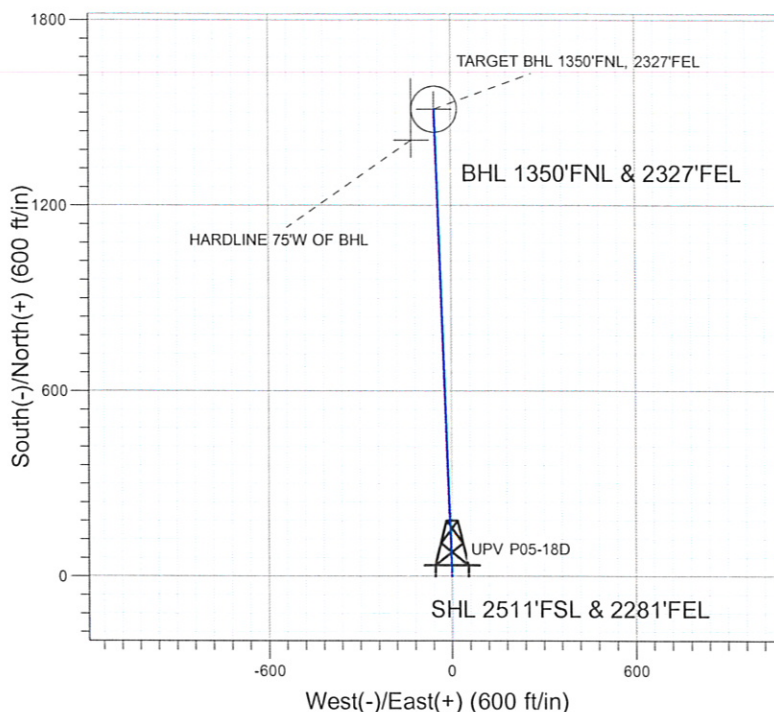
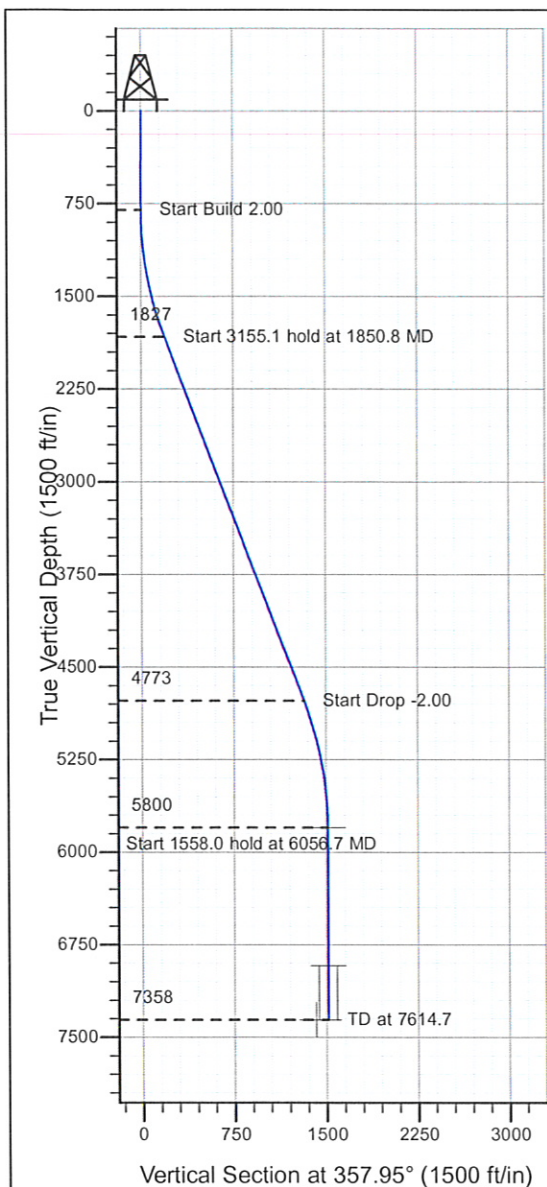


Well Name:UPV P05-18D

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
 -S+E/W Northing Easting Latitude Longitude S
 0.01336120.01 3163821.16 40° 15' 16.416 N 104° 54' 46.980 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 P05-18D
Noble UPV P05-18D Plan #2 (11-16-09)
10:19, 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 1350'FNL, 2327'FEL	5800.0	1511.6	-54.1	40° 15' 31.354 N	104° 54' 47.678 W	Point
TARGET CIRCLE UPV P05-18D	6918.0	1511.6	-54.1	40° 15' 31.353 N	104° 54' 47.678 W	Circle (Radius: 75.0)
HARDLINE 75'W OF BHL	7358.0	1411.6	-129.1	40° 15' 30.365 N	104° 54' 48.645 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	1850.8	21.02	357.95	1827.4	190.4	-6.8	2.00	357.95	190.6	
4	5005.9	21.02	357.95	4772.6	1321.2	-47.3	0.00	0.00	1322.1	
5	6056.7	0.00	0.00	5800.0	1511.6	-54.1	2.00	180.00	1512.6	TARGET BHL 1350°FNL, 2327°FEL
6	7614.7	0.00	0.00	7358.0	1511.6	-54.1	0.00	0.00	1512.6	



Directional

NOBLE ENERGY INC WELD COUNTY CO

SEC.5-T3N-R67W

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

UPV P05-18D

Wellbore #1

Plan: Noble UPV P05-18D Plan #2 (11-16-09)

Standard Planning Report

17 November, 2009



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 P05-18D
 Wellbore: Wellbore #1
 Design: Noble UPV P05-18D Plan #2 (11-16-09)

Local Co-ordinate Reference: Well UPV P05-18D
 TVD Reference: WELL @ 4888.0ft (Original Well Elev)
 MD Reference: WELL @ 4888.0ft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

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	Latitude:	40° 15' 16.416 N
From:	Lat/Long	Easting:	3,163,796.04 ft	Longitude:	104° 54' 47.304 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.38 °

Well	UPV P05-18D					
Well Position	+N/-S	0.0 ft	Northing:	1,336,120.01 ft	Latitude:	40° 15' 16.416 N
	+E/-W	25.1 ft	Easting:	3,163,821.16 ft	Longitude:	104° 54' 46.980 W
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft	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 P05-18D 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	357.95	

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	
1,850.8	21.02	357.95	1,827.4	190.4	-6.8	2.00	2.00	0.00	357.95	
5,005.9	21.02	357.95	4,772.6	1,321.2	-47.3	0.00	0.00	0.00	0.00	
6,056.7	0.00	0.00	5,800.0	1,511.6	-54.1	2.00	-2.00	0.00	180.00	TARGET BHL 135C
7,614.7	0.00	0.00	7,358.0	1,511.6	-54.1	0.00	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 P05-18D
Wellbore: Wellbore #1
Design: Noble UPV P05-18D Plan #2 (11-16-09)

Local Co-ordinate Reference: Well UPV P05-18D
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)
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	357.95	840.0	0.3	0.0	0.3	2.00	2.00	0.00
880.0	1.60	357.95	880.0	1.1	0.0	1.1	2.00	2.00	0.00
920.0	2.40	357.95	920.0	2.5	-0.1	2.5	2.00	2.00	0.00
960.0	3.20	357.95	959.9	4.5	-0.2	4.5	2.00	2.00	0.00
1,000.0	4.00	357.95	999.8	7.0	-0.2	7.0	2.00	2.00	0.00
1,040.0	4.80	357.95	1,039.7	10.0	-0.4	10.0	2.00	2.00	0.00
1,080.0	5.60	357.95	1,079.6	13.7	-0.5	13.7	2.00	2.00	0.00
1,120.0	6.40	357.95	1,119.3	17.8	-0.6	17.9	2.00	2.00	0.00
1,160.0	7.20	357.95	1,159.1	22.6	-0.8	22.6	2.00	2.00	0.00
1,200.0	8.00	357.95	1,198.7	27.9	-1.0	27.9	2.00	2.00	0.00
1,240.0	8.80	357.95	1,238.3	33.7	-1.2	33.7	2.00	2.00	0.00
1,280.0	9.60	357.95	1,277.8	40.1	-1.4	40.1	2.00	2.00	0.00
1,320.0	10.40	357.95	1,317.1	47.0	-1.7	47.1	2.00	2.00	0.00
1,360.0	11.20	357.95	1,356.4	54.5	-2.0	54.6	2.00	2.00	0.00
1,400.0	12.00	357.95	1,395.6	62.6	-2.2	62.6	2.00	2.00	0.00
1,440.0	12.80	357.95	1,434.7	71.1	-2.5	71.2	2.00	2.00	0.00
1,480.0	13.60	357.95	1,473.6	80.3	-2.9	80.3	2.00	2.00	0.00
1,520.0	14.40	357.95	1,512.4	89.9	-3.2	90.0	2.00	2.00	0.00
1,560.0	15.20	357.95	1,551.1	100.2	-3.6	100.2	2.00	2.00	0.00
1,600.0	16.00	357.95	1,589.6	110.9	-4.0	111.0	2.00	2.00	0.00
1,640.0	16.80	357.95	1,628.0	122.2	-4.4	122.3	2.00	2.00	0.00
1,680.0	17.60	357.95	1,666.2	134.0	-4.8	134.1	2.00	2.00	0.00
1,720.0	18.40	357.95	1,704.3	146.4	-5.2	146.5	2.00	2.00	0.00
1,760.0	19.20	357.95	1,742.1	159.2	-5.7	159.3	2.00	2.00	0.00
1,800.0	20.00	357.95	1,779.8	172.7	-6.2	172.8	2.00	2.00	0.00
1,840.0	20.80	357.95	1,817.3	186.6	-6.7	186.7	2.00	2.00	0.00
1,850.8	21.02	357.95	1,827.4	190.4	-6.8	190.6	2.00	2.00	0.00
1,880.0	21.02	357.95	1,854.7	200.9	-7.2	201.0	0.00	0.00	0.00
1,920.0	21.02	357.95	1,892.0	215.2	-7.7	215.4	0.00	0.00	0.00
1,960.0	21.02	357.95	1,929.3	229.6	-8.2	229.7	0.00	0.00	0.00
2,000.0	21.02	357.95	1,966.7	243.9	-8.7	244.1	0.00	0.00	0.00
2,040.0	21.02	357.95	2,004.0	258.3	-9.2	258.4	0.00	0.00	0.00
2,080.0	21.02	357.95	2,041.3	272.6	-9.8	272.8	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 P05-18D
Wellbore: Wellbore #1
Design: Noble UPV P05-18D Plan #2 (11-16-09)

Local Co-ordinate Reference: Well UPV P05-18D
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)
2,120.0	21.02	357.95	2,078.7	286.9	-10.3	287.1	0.00	0.00	0.00
2,160.0	21.02	357.95	2,116.0	301.3	-10.8	301.5	0.00	0.00	0.00
2,200.0	21.02	357.95	2,153.4	315.6	-11.3	315.8	0.00	0.00	0.00
2,240.0	21.02	357.95	2,190.7	329.9	-11.8	330.1	0.00	0.00	0.00
2,280.0	21.02	357.95	2,228.0	344.3	-12.3	344.5	0.00	0.00	0.00
2,320.0	21.02	357.95	2,265.4	358.6	-12.8	358.8	0.00	0.00	0.00
2,360.0	21.02	357.95	2,302.7	372.9	-13.4	373.2	0.00	0.00	0.00
2,400.0	21.02	357.95	2,340.1	387.3	-13.9	387.5	0.00	0.00	0.00
2,440.0	21.02	357.95	2,377.4	401.6	-14.4	401.9	0.00	0.00	0.00
2,480.0	21.02	357.95	2,414.7	415.9	-14.9	416.2	0.00	0.00	0.00
2,520.0	21.02	357.95	2,452.1	430.3	-15.4	430.6	0.00	0.00	0.00
2,560.0	21.02	357.95	2,489.4	444.6	-15.9	444.9	0.00	0.00	0.00
2,600.0	21.02	357.95	2,526.8	459.0	-16.4	459.2	0.00	0.00	0.00
2,640.0	21.02	357.95	2,564.1	473.3	-16.9	473.6	0.00	0.00	0.00
2,680.0	21.02	357.95	2,601.4	487.6	-17.5	487.9	0.00	0.00	0.00
2,720.0	21.02	357.95	2,638.8	502.0	-18.0	502.3	0.00	0.00	0.00
2,760.0	21.02	357.95	2,676.1	516.3	-18.5	516.6	0.00	0.00	0.00
2,800.0	21.02	357.95	2,713.5	530.6	-19.0	531.0	0.00	0.00	0.00
2,840.0	21.02	357.95	2,750.8	545.0	-19.5	545.3	0.00	0.00	0.00
2,880.0	21.02	357.95	2,788.1	559.3	-20.0	559.7	0.00	0.00	0.00
2,920.0	21.02	357.95	2,825.5	573.6	-20.5	574.0	0.00	0.00	0.00
2,960.0	21.02	357.95	2,862.8	588.0	-21.1	588.3	0.00	0.00	0.00
3,000.0	21.02	357.95	2,900.2	602.3	-21.6	602.7	0.00	0.00	0.00
3,040.0	21.02	357.95	2,937.5	616.6	-22.1	617.0	0.00	0.00	0.00
3,080.0	21.02	357.95	2,974.8	631.0	-22.6	631.4	0.00	0.00	0.00
3,120.0	21.02	357.95	3,012.2	645.3	-23.1	645.7	0.00	0.00	0.00
3,160.0	21.02	357.95	3,049.5	659.7	-23.6	660.1	0.00	0.00	0.00
3,200.0	21.02	357.95	3,086.9	674.0	-24.1	674.4	0.00	0.00	0.00
3,240.0	21.02	357.95	3,124.2	688.3	-24.7	688.8	0.00	0.00	0.00
3,280.0	21.02	357.95	3,161.5	702.7	-25.2	703.1	0.00	0.00	0.00
3,320.0	21.02	357.95	3,198.9	717.0	-25.7	717.5	0.00	0.00	0.00
3,360.0	21.02	357.95	3,236.2	731.3	-26.2	731.8	0.00	0.00	0.00
3,400.0	21.02	357.95	3,273.5	745.7	-26.7	746.1	0.00	0.00	0.00
3,440.0	21.02	357.95	3,310.9	760.0	-27.2	760.5	0.00	0.00	0.00
3,480.0	21.02	357.95	3,348.2	774.3	-27.7	774.8	0.00	0.00	0.00
3,520.0	21.02	357.95	3,385.6	788.7	-28.2	789.2	0.00	0.00	0.00
3,560.0	21.02	357.95	3,422.9	803.0	-28.8	803.5	0.00	0.00	0.00
3,600.0	21.02	357.95	3,460.2	817.3	-29.3	817.9	0.00	0.00	0.00
3,640.0	21.02	357.95	3,497.6	831.7	-29.8	832.2	0.00	0.00	0.00
3,680.0	21.02	357.95	3,534.9	846.0	-30.3	846.6	0.00	0.00	0.00
3,720.0	21.02	357.95	3,572.3	860.3	-30.8	860.9	0.00	0.00	0.00
3,760.0	21.02	357.95	3,609.6	874.7	-31.3	875.2	0.00	0.00	0.00
3,800.0	21.02	357.95	3,646.9	889.0	-31.8	889.6	0.00	0.00	0.00
3,840.0	21.02	357.95	3,684.3	903.4	-32.4	903.9	0.00	0.00	0.00
3,880.0	21.02	357.95	3,721.6	917.7	-32.9	918.3	0.00	0.00	0.00
3,920.0	21.02	357.95	3,759.0	932.0	-33.4	932.6	0.00	0.00	0.00
3,960.0	21.02	357.95	3,796.3	946.4	-33.9	947.0	0.00	0.00	0.00
4,000.0	21.02	357.95	3,833.6	960.7	-34.4	961.3	0.00	0.00	0.00
4,040.0	21.02	357.95	3,871.0	975.0	-34.9	975.7	0.00	0.00	0.00
4,080.0	21.02	357.95	3,908.3	989.4	-35.4	990.0	0.00	0.00	0.00
4,120.0	21.02	357.95	3,945.7	1,003.7	-35.9	1,004.4	0.00	0.00	0.00
4,160.0	21.02	357.95	3,983.0	1,018.0	-36.5	1,018.7	0.00	0.00	0.00
4,200.0	21.02	357.95	4,020.3	1,032.4	-37.0	1,033.0	0.00	0.00	0.00
4,240.0	21.02	357.95	4,057.7	1,046.7	-37.5	1,047.4	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
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Local Co-ordinate Reference: Well UPV P05-18D
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)
4,280.0	21.02	357.95	4,095.0	1,061.0	-38.0	1,061.7	0.00	0.00	0.00
4,320.0	21.02	357.95	4,132.4	1,075.4	-38.5	1,076.1	0.00	0.00	0.00
4,360.0	21.02	357.95	4,169.7	1,089.7	-39.0	1,090.4	0.00	0.00	0.00
4,400.0	21.02	357.95	4,207.0	1,104.1	-39.5	1,104.8	0.00	0.00	0.00
4,440.0	21.02	357.95	4,244.4	1,118.4	-40.1	1,119.1	0.00	0.00	0.00
4,480.0	21.02	357.95	4,281.7	1,132.7	-40.6	1,133.5	0.00	0.00	0.00
4,520.0	21.02	357.95	4,319.0	1,147.1	-41.1	1,147.8	0.00	0.00	0.00
4,560.0	21.02	357.95	4,356.4	1,161.4	-41.6	1,162.1	0.00	0.00	0.00
4,600.0	21.02	357.95	4,393.7	1,175.7	-42.1	1,176.5	0.00	0.00	0.00
4,640.0	21.02	357.95	4,431.1	1,190.1	-42.6	1,190.8	0.00	0.00	0.00
4,680.0	21.02	357.95	4,468.4	1,204.4	-43.1	1,205.2	0.00	0.00	0.00
4,720.0	21.02	357.95	4,505.7	1,218.7	-43.6	1,219.5	0.00	0.00	0.00
4,760.0	21.02	357.95	4,543.1	1,233.1	-44.2	1,233.9	0.00	0.00	0.00
4,800.0	21.02	357.95	4,580.4	1,247.4	-44.7	1,248.2	0.00	0.00	0.00
4,840.0	21.02	357.95	4,617.8	1,261.7	-45.2	1,262.6	0.00	0.00	0.00
4,880.0	21.02	357.95	4,655.1	1,276.1	-45.7	1,276.9	0.00	0.00	0.00
4,920.0	21.02	357.95	4,692.4	1,290.4	-46.2	1,291.2	0.00	0.00	0.00
4,960.0	21.02	357.95	4,729.8	1,304.8	-46.7	1,305.6	0.00	0.00	0.00
5,000.0	21.02	357.95	4,767.1	1,319.1	-47.2	1,319.9	0.00	0.00	0.00
5,005.9	21.02	357.95	4,772.6	1,321.2	-47.3	1,322.1	0.00	0.00	0.00
5,040.0	20.33	357.95	4,804.5	1,333.2	-47.7	1,334.1	2.00	-2.00	0.00
5,080.0	19.53	357.95	4,842.1	1,346.9	-48.2	1,347.7	2.00	-2.00	0.00
5,120.0	18.73	357.95	4,879.9	1,360.0	-48.7	1,360.8	2.00	-2.00	0.00
5,160.0	17.93	357.95	4,917.9	1,372.5	-49.2	1,373.4	2.00	-2.00	0.00
5,200.0	17.13	357.95	4,956.0	1,384.6	-49.6	1,385.5	2.00	-2.00	0.00
5,240.0	16.33	357.95	4,994.3	1,396.1	-50.0	1,397.0	2.00	-2.00	0.00
5,280.0	15.53	357.95	5,032.8	1,407.1	-50.4	1,408.0	2.00	-2.00	0.00
5,320.0	14.73	357.95	5,071.4	1,417.5	-50.8	1,418.4	2.00	-2.00	0.00
5,360.0	13.93	357.95	5,110.2	1,427.4	-51.1	1,428.3	2.00	-2.00	0.00
5,400.0	13.13	357.95	5,149.1	1,436.8	-51.5	1,437.7	2.00	-2.00	0.00
5,440.0	12.33	357.95	5,188.1	1,445.6	-51.8	1,446.5	2.00	-2.00	0.00
5,480.0	11.53	357.95	5,227.2	1,453.8	-52.1	1,454.8	2.00	-2.00	0.00
5,520.0	10.73	357.95	5,266.5	1,461.6	-52.3	1,462.5	2.00	-2.00	0.00
5,560.0	9.93	357.95	5,305.8	1,468.7	-52.6	1,469.7	2.00	-2.00	0.00
5,600.0	9.13	357.95	5,345.3	1,475.3	-52.8	1,476.3	2.00	-2.00	0.00
5,640.0	8.33	357.95	5,384.8	1,481.4	-53.1	1,482.4	2.00	-2.00	0.00
5,680.0	7.53	357.95	5,424.4	1,486.9	-53.2	1,487.9	2.00	-2.00	0.00
5,720.0	6.73	357.95	5,464.1	1,491.9	-53.4	1,492.8	2.00	-2.00	0.00
5,760.0	5.93	357.95	5,503.9	1,496.3	-53.6	1,497.3	2.00	-2.00	0.00
5,800.0	5.13	357.95	5,543.7	1,500.2	-53.7	1,501.1	2.00	-2.00	0.00
5,840.0	4.33	357.95	5,583.5	1,503.5	-53.8	1,504.4	2.00	-2.00	0.00
5,880.0	3.53	357.95	5,623.4	1,506.2	-53.9	1,507.2	2.00	-2.00	0.00
5,920.0	2.73	357.95	5,663.4	1,508.4	-54.0	1,509.4	2.00	-2.00	0.00
5,960.0	1.93	357.95	5,703.3	1,510.0	-54.1	1,511.0	2.00	-2.00	0.00
6,000.0	1.13	357.95	5,743.3	1,511.1	-54.1	1,512.0	2.00	-2.00	0.00
6,040.0	0.33	357.95	5,783.3	1,511.6	-54.1	1,512.6	2.00	-2.00	0.00
6,056.7	0.00	0.00	5,800.0	1,511.6	-54.1	1,512.6	2.00	-2.00	12.30
TARGET BHL 1350'FNL, 2327'FEL									
6,080.0	0.00	0.00	5,823.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
6,120.0	0.00	0.00	5,863.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
6,160.0	0.00	0.00	5,903.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
6,200.0	0.00	0.00	5,943.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
6,240.0	0.00	0.00	5,983.3	1,511.6	-54.1	1,512.6	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 P05-18D
Wellbore: Wellbore #1
Design: Noble UPV P05-18D Plan #2 (11-16-09)

Local Co-ordinate Reference: Well UPV P05-18D
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)
6,280.0	0.00	0.00	6,023.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
6,320.0	0.00	0.00	6,063.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
6,360.0	0.00	0.00	6,103.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
6,400.0	0.00	0.00	6,143.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
6,440.0	0.00	0.00	6,183.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
6,480.0	0.00	0.00	6,223.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
6,520.0	0.00	0.00	6,263.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
6,560.0	0.00	0.00	6,303.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
6,600.0	0.00	0.00	6,343.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
6,640.0	0.00	0.00	6,383.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
6,680.0	0.00	0.00	6,423.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
6,720.0	0.00	0.00	6,463.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
6,760.0	0.00	0.00	6,503.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
6,800.0	0.00	0.00	6,543.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
6,840.0	0.00	0.00	6,583.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
6,880.0	0.00	0.00	6,623.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
6,920.0	0.00	0.00	6,663.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
6,960.0	0.00	0.00	6,703.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
7,000.0	0.00	0.00	6,743.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
7,040.0	0.00	0.00	6,783.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
7,080.0	0.00	0.00	6,823.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
7,120.0	0.00	0.00	6,863.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
7,160.0	0.00	0.00	6,903.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
7,174.7	0.00	0.00	6,918.0	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
NIOBRARA - TARGET CIRCLE UPV P05-18D									
7,200.0	0.00	0.00	6,943.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
7,240.0	0.00	0.00	6,983.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
7,280.0	0.00	0.00	7,023.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
7,320.0	0.00	0.00	7,063.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
7,360.0	0.00	0.00	7,103.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
7,400.0	0.00	0.00	7,143.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
7,440.0	0.00	0.00	7,183.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
7,464.7	0.00	0.00	7,208.0	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
CODELL									
7,480.0	0.00	0.00	7,223.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
7,520.0	0.00	0.00	7,263.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
7,560.0	0.00	0.00	7,303.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
7,600.0	0.00	0.00	7,343.3	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
7,614.7	0.00	0.00	7,358.0	1,511.6	-54.1	1,512.6	0.00	0.00	0.00
HARDLINE 75'W OF BHL									

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 P05-18D
Wellbore: Wellbore #1
Design: Noble UPV P05-18D Plan #2 (11-16-09)

Local Co-ordinate Reference: Well UPV P05-18D
TVD Reference: WELL @ 4888.0ft (Original Well Elev)
MD Reference: WELL @ 4888.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Targets

Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
TARGET CIRCLE UP	0.00	0.00	6,918.0	1,511.6	-54.1	1,337,631.15	3,163,757.05	40° 15' 31.353 N	104° 54' 47.678 W
- plan misses target center by 0.1ft at 7174.7ft MD (6918.0 TVD, 1511.6 N, -54.1 E)									
- Circle (radius 75.0)									
TARGET BHL 1350'F	0.00	0.00	5,800.0	1,511.6	-54.1	1,337,631.19	3,163,757.02	40° 15' 31.354 N	104° 54' 47.678 W
- plan hits target center									
- Point									
HARDLINE 75'W OF I	0.00	0.00	7,358.0	1,411.6	-129.1	1,337,530.66	3,163,682.72	40° 15' 30.365 N	104° 54' 48.645 W
- plan misses target center by 125.0ft at 7614.7ft MD (7358.0 TVD, 1511.6 N, -54.1 E)									
- Polygon									
Point 1			7,358.0	0.0	0.0	1,337,530.66	3,163,682.72		
Point 2			7,358.0	200.0	0.0	1,337,730.65	3,163,681.40		

Formations

Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(ft)	(ft)			(°)	(°)
7,174.7	6,918.0	NIOBRARA		0.00	
7,464.7	7,208.0	CODELL		0.00	