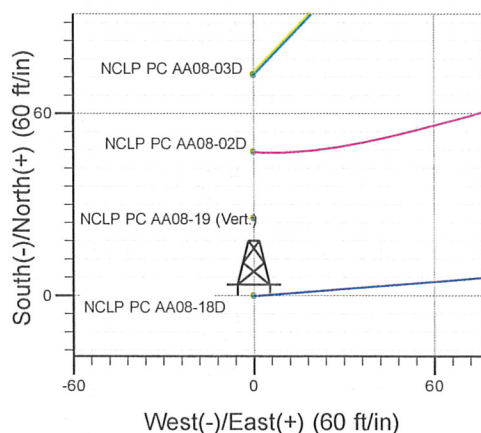
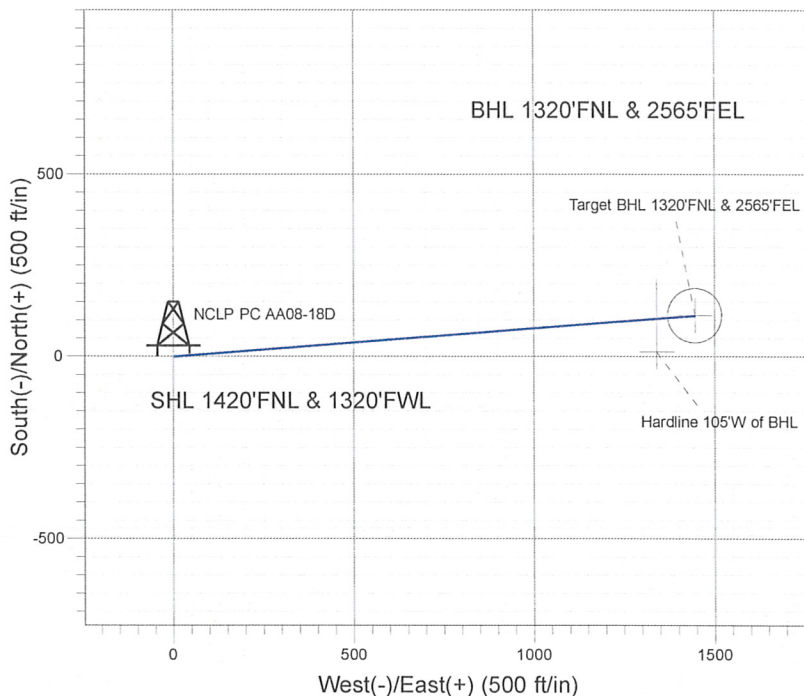


NOBLE ENERGY INC WELD COUNTY CO



NCLP PC AA08-03D Pad Sec.8-T6N-R63W
NCLP PC AA08-18D
Noble NCLP PC AA08-18D Plan #1 (8-5-10)
12:38, August 15 2010



Azimuths to True North
Magnetic North: 8.83°

Magnetic Field
Strength: 53308.6snT
Dip Angle: 67.21°
Date: 8/11/2010
Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Target BHL 1320'FNL & 2565'FEL	5800.0	113.0	1446.1	40° 30' 17.100 N	104° 27' 37.188 W	Point
Hardline 105'W of BHL	6976.0	13.0	1341.1	40° 30' 16.112 N	104° 27' 38.547 W	Polygon
Target Circle 1320'FNL & 2565'FEL	6976.0	113.0	1446.1	40° 30' 17.100 N	104° 27' 37.188 W	Circle (Radius: 75.0)

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	700.0	0.00	0.00	700.0	0.0	0.0	0.00	0.00	0.0	
3	1669.5	19.39	85.53	1651.1	12.7	162.0	2.00	85.53	162.5	
4	5059.6	19.39	85.53	4848.9	100.3	1284.1	0.00	0.00	1288.0	
5	6029.1	0.00	0.00	5800.0	113.0	1446.1	2.00	180.00	1450.5	Target BHL 1320'FNL & 2565'FEL
6	7205.1	0.00	0.00	6976.0	113.0	1446.1	0.00	0.00	1450.5	



Directional

NOBLE ENERGY INC WELD COUNTY CO

SEC.8-T6N-R63W

NCLP PC AA08-03D Pad Sec.8-T6N-R63W

NCLP PC AA08-18D

Wellbore #1

Plan: Noble NCLP PC AA08-18D Plan #1 (8-5-10)

Standard Planning Report

15 August, 2010



Database: EDM den0-adp01 Server Data
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.8-T6N-R63W
Site: NCLP PC AA08-03D Pad Sec.8-T6N-R63W
Well: NCLP PC AA08-18D
Wellbore: Wellbore #1
Design: Noble NCLP PC AA08-18D Plan #1 (8-5-10)

Local Co-ordinate Reference: Well NCLP PC AA08-18D
TVD Reference: WELL @ 4716.0ft (Original Well Elev)
MD Reference: WELL @ 4716.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Project	SEC.8-T6N-R63W, Weld County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	NCLP PC AA08-03D Pad Sec.8-T6N-R63W				
Site Position:		Northing:	1,428,358.79 ft	Latitude:	40° 30' 16.704 N
From:	Lat/Long	Easting:	3,287,659.37 ft	Longitude:	104° 27' 55.908 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.67 °

Well	NCLP PC AA08-18D					
Well Position	+N/-S	-72.9 ft	Northing:	1,428,285.93 ft	Latitude:	40° 30' 15.984 N
	+E/-W	0.0 ft	Easting:	3,287,660.22 ft	Longitude:	104° 27' 55.908 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,703.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/11/2010	8.83	67.21	53,309

Design: Noble NCLP PC AA08-18D Plan #1 (8-5-10)

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	85.53

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	
700.0	0.00	0.00	700.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,669.5	19.39	85.53	1,651.1	12.7	162.0	2.00	2.00	0.00	85.53	
5,059.6	19.39	85.53	4,848.9	100.3	1,284.1	0.00	0.00	0.00	0.00	
6,029.1	0.00	0.00	5,800.0	113.0	1,446.1	2.00	-2.00	0.00	180.00	Target BHL 1320'FI
7,205.1	0.00	0.00	6,976.0	113.0	1,446.1	0.00	0.00	0.00	0.00	

Database: EDM den0-adp01 Server Data
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.8-T6N-R63W
Site: NCLP PC AA08-03D Pad Sec.8-T6N-R63W
Well: NCLP PC AA08-18D
Wellbore: Wellbore #1
Design: Noble NCLP PC AA08-18D Plan #1 (8-5-10)

Local Co-ordinate Reference: Well NCLP PC AA08-18D
TVD Reference: WELL @ 4716.0ft (Original Well Elev)
MD Reference: WELL @ 4716.0ft (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
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
8 5/8"									
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
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
720.0	0.40	85.53	720.0	0.0	0.1	0.1	2.00	2.00	0.00
760.0	1.20	85.53	760.0	0.0	0.6	0.6	2.00	2.00	0.00
800.0	2.00	85.53	800.0	0.1	1.7	1.7	2.00	2.00	0.00
840.0	2.80	85.53	839.9	0.3	3.4	3.4	2.00	2.00	0.00
880.0	3.60	85.53	879.9	0.4	5.6	5.7	2.00	2.00	0.00
920.0	4.40	85.53	919.8	0.7	8.4	8.4	2.00	2.00	0.00
960.0	5.20	85.53	959.6	0.9	11.8	11.8	2.00	2.00	0.00
1,000.0	6.00	85.53	999.5	1.2	15.6	15.7	2.00	2.00	0.00
1,040.0	6.80	85.53	1,039.2	1.6	20.1	20.2	2.00	2.00	0.00
1,080.0	7.60	85.53	1,078.9	2.0	25.1	25.2	2.00	2.00	0.00
1,120.0	8.40	85.53	1,118.5	2.4	30.6	30.7	2.00	2.00	0.00
1,160.0	9.20	85.53	1,158.0	2.9	36.7	36.9	2.00	2.00	0.00
1,200.0	10.00	85.53	1,197.5	3.4	43.4	43.5	2.00	2.00	0.00
1,240.0	10.80	85.53	1,236.8	4.0	50.6	50.7	2.00	2.00	0.00
1,280.0	11.60	85.53	1,276.0	4.6	58.3	58.5	2.00	2.00	0.00
1,320.0	12.40	85.53	1,315.2	5.2	66.6	66.8	2.00	2.00	0.00
1,360.0	13.20	85.53	1,354.2	5.9	75.5	75.7	2.00	2.00	0.00
1,400.0	14.00	85.53	1,393.1	6.6	84.8	85.1	2.00	2.00	0.00
1,440.0	14.80	85.53	1,431.8	7.4	94.8	95.0	2.00	2.00	0.00
1,480.0	15.60	85.53	1,470.4	8.2	105.2	105.5	2.00	2.00	0.00
1,520.0	16.40	85.53	1,508.8	9.1	116.2	116.6	2.00	2.00	0.00
1,560.0	17.20	85.53	1,547.1	10.0	127.7	128.1	2.00	2.00	0.00
1,600.0	18.00	85.53	1,585.3	10.9	139.8	140.2	2.00	2.00	0.00
1,640.0	18.80	85.53	1,623.2	11.9	152.4	152.8	2.00	2.00	0.00
1,669.5	19.39	85.53	1,651.1	12.7	162.0	162.5	2.00	2.00	0.00
1,680.0	19.39	85.53	1,661.0	12.9	165.5	166.0	0.00	0.00	0.00
1,720.0	19.39	85.53	1,698.7	14.0	178.7	179.3	0.00	0.00	0.00
1,760.0	19.39	85.53	1,736.5	15.0	191.9	192.5	0.00	0.00	0.00
1,800.0	19.39	85.53	1,774.2	16.0	205.2	205.8	0.00	0.00	0.00
1,840.0	19.39	85.53	1,811.9	17.1	218.4	219.1	0.00	0.00	0.00
1,880.0	19.39	85.53	1,849.7	18.1	231.7	232.4	0.00	0.00	0.00
1,920.0	19.39	85.53	1,887.4	19.1	244.9	245.7	0.00	0.00	0.00
1,960.0	19.39	85.53	1,925.1	20.2	258.1	258.9	0.00	0.00	0.00

Database: EDM den0-adp01 Server Data
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.8-T6N-R63W
Site: NCLP PC AA08-03D Pad Sec.8-T6N-R63W
Well: NCLP PC AA08-18D
Wellbore: Wellbore #1
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MD Reference: WELL @ 4716.0ft (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)
2,000.0	19.39	85.53	1,962.9	21.2	271.4	272.2	0.00	0.00	0.00
2,040.0	19.39	85.53	2,000.6	22.2	284.6	285.5	0.00	0.00	0.00
2,080.0	19.39	85.53	2,038.3	23.3	297.9	298.8	0.00	0.00	0.00
2,120.0	19.39	85.53	2,076.0	24.3	311.1	312.1	0.00	0.00	0.00
2,160.0	19.39	85.53	2,113.8	25.3	324.3	325.3	0.00	0.00	0.00
2,200.0	19.39	85.53	2,151.5	26.4	337.6	338.6	0.00	0.00	0.00
2,240.0	19.39	85.53	2,189.2	27.4	350.8	351.9	0.00	0.00	0.00
2,280.0	19.39	85.53	2,227.0	28.4	364.1	365.2	0.00	0.00	0.00
2,320.0	19.39	85.53	2,264.7	29.5	377.3	378.5	0.00	0.00	0.00
2,360.0	19.39	85.53	2,302.4	30.5	390.5	391.7	0.00	0.00	0.00
2,400.0	19.39	85.53	2,340.2	31.5	403.8	405.0	0.00	0.00	0.00
2,440.0	19.39	85.53	2,377.9	32.6	417.0	418.3	0.00	0.00	0.00
2,480.0	19.39	85.53	2,415.6	33.6	430.3	431.6	0.00	0.00	0.00
2,520.0	19.39	85.53	2,453.4	34.7	443.5	444.9	0.00	0.00	0.00
2,560.0	19.39	85.53	2,491.1	35.7	456.7	458.1	0.00	0.00	0.00
2,600.0	19.39	85.53	2,528.8	36.7	470.0	471.4	0.00	0.00	0.00
2,640.0	19.39	85.53	2,566.6	37.8	483.2	484.7	0.00	0.00	0.00
2,680.0	19.39	85.53	2,604.3	38.8	496.5	498.0	0.00	0.00	0.00
2,720.0	19.39	85.53	2,642.0	39.8	509.7	511.3	0.00	0.00	0.00
2,760.0	19.39	85.53	2,679.7	40.9	522.9	524.5	0.00	0.00	0.00
2,800.0	19.39	85.53	2,717.5	41.9	536.2	537.8	0.00	0.00	0.00
2,840.0	19.39	85.53	2,755.2	42.9	549.4	551.1	0.00	0.00	0.00
2,880.0	19.39	85.53	2,792.9	44.0	562.7	564.4	0.00	0.00	0.00
2,920.0	19.39	85.53	2,830.7	45.0	575.9	577.7	0.00	0.00	0.00
2,960.0	19.39	85.53	2,868.4	46.0	589.1	590.9	0.00	0.00	0.00
3,000.0	19.39	85.53	2,906.1	47.1	602.4	604.2	0.00	0.00	0.00
3,040.0	19.39	85.53	2,943.9	48.1	615.6	617.5	0.00	0.00	0.00
3,080.0	19.39	85.53	2,981.6	49.1	628.9	630.8	0.00	0.00	0.00
3,120.0	19.39	85.53	3,019.3	50.2	642.1	644.1	0.00	0.00	0.00
3,160.0	19.39	85.53	3,057.1	51.2	655.3	657.3	0.00	0.00	0.00
3,200.0	19.39	85.53	3,094.8	52.2	668.6	670.6	0.00	0.00	0.00
3,240.0	19.39	85.53	3,132.5	53.3	681.8	683.9	0.00	0.00	0.00
3,280.0	19.39	85.53	3,170.3	54.3	695.1	697.2	0.00	0.00	0.00
3,320.0	19.39	85.53	3,208.0	55.3	708.3	710.4	0.00	0.00	0.00
3,360.0	19.39	85.53	3,245.7	56.4	721.5	723.7	0.00	0.00	0.00
3,400.0	19.39	85.53	3,283.4	57.4	734.8	737.0	0.00	0.00	0.00
3,440.0	19.39	85.53	3,321.2	58.4	748.0	750.3	0.00	0.00	0.00
3,480.0	19.39	85.53	3,358.9	59.5	761.2	763.6	0.00	0.00	0.00
3,520.0	19.39	85.53	3,396.6	60.5	774.5	776.8	0.00	0.00	0.00
3,560.0	19.39	85.53	3,434.4	61.5	787.7	790.1	0.00	0.00	0.00
3,600.0	19.39	85.53	3,472.1	62.6	801.0	803.4	0.00	0.00	0.00
3,640.0	19.39	85.53	3,509.8	63.6	814.2	816.7	0.00	0.00	0.00
3,680.0	19.39	85.53	3,547.6	64.7	827.4	830.0	0.00	0.00	0.00
3,720.0	19.39	85.53	3,585.3	65.7	840.7	843.2	0.00	0.00	0.00
3,760.0	19.39	85.53	3,623.0	66.7	853.9	856.5	0.00	0.00	0.00
3,800.0	19.39	85.53	3,660.8	67.8	867.2	869.8	0.00	0.00	0.00
3,840.0	19.39	85.53	3,698.5	68.8	880.4	883.1	0.00	0.00	0.00
3,880.0	19.39	85.53	3,736.2	69.8	893.6	896.4	0.00	0.00	0.00
3,920.0	19.39	85.53	3,774.0	70.9	906.9	909.6	0.00	0.00	0.00
3,960.0	19.39	85.53	3,811.7	71.9	920.1	922.9	0.00	0.00	0.00
4,000.0	19.39	85.53	3,849.4	72.9	933.4	936.2	0.00	0.00	0.00
4,040.0	19.39	85.53	3,887.1	74.0	946.6	949.5	0.00	0.00	0.00
4,080.0	19.39	85.53	3,924.9	75.0	959.8	962.8	0.00	0.00	0.00
4,120.0	19.39	85.53	3,962.6	76.0	973.1	976.0	0.00	0.00	0.00

Database: EDM den0-adp01 Server Data
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.8-T6N-R63W
Site: NCLP PC AA08-03D Pad Sec.8-T6N-R63W
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MD Reference: WELL @ 4716.0ft (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)
4,160.0	19.39	85.53	4,000.3	77.1	986.3	989.3	0.00	0.00	0.00
4,200.0	19.39	85.53	4,038.1	78.1	999.6	1,002.6	0.00	0.00	0.00
4,240.0	19.39	85.53	4,075.8	79.1	1,012.8	1,015.9	0.00	0.00	0.00
4,280.0	19.39	85.53	4,113.5	80.2	1,026.0	1,029.2	0.00	0.00	0.00
4,320.0	19.39	85.53	4,151.3	81.2	1,039.3	1,042.4	0.00	0.00	0.00
4,360.0	19.39	85.53	4,189.0	82.2	1,052.5	1,055.7	0.00	0.00	0.00
4,400.0	19.39	85.53	4,226.7	83.3	1,065.8	1,069.0	0.00	0.00	0.00
4,440.0	19.39	85.53	4,264.5	84.3	1,079.0	1,082.3	0.00	0.00	0.00
4,480.0	19.39	85.53	4,302.2	85.3	1,092.2	1,095.6	0.00	0.00	0.00
4,520.0	19.39	85.53	4,339.9	86.4	1,105.5	1,108.8	0.00	0.00	0.00
4,560.0	19.39	85.53	4,377.7	87.4	1,118.7	1,122.1	0.00	0.00	0.00
4,600.0	19.39	85.53	4,415.4	88.4	1,132.0	1,135.4	0.00	0.00	0.00
4,640.0	19.39	85.53	4,453.1	89.5	1,145.2	1,148.7	0.00	0.00	0.00
4,680.0	19.39	85.53	4,490.8	90.5	1,158.4	1,162.0	0.00	0.00	0.00
4,720.0	19.39	85.53	4,528.6	91.5	1,171.7	1,175.2	0.00	0.00	0.00
4,760.0	19.39	85.53	4,566.3	92.6	1,184.9	1,188.5	0.00	0.00	0.00
4,800.0	19.39	85.53	4,604.0	93.6	1,198.2	1,201.8	0.00	0.00	0.00
4,840.0	19.39	85.53	4,641.8	94.7	1,211.4	1,215.1	0.00	0.00	0.00
4,880.0	19.39	85.53	4,679.5	95.7	1,224.6	1,228.4	0.00	0.00	0.00
4,920.0	19.39	85.53	4,717.2	96.7	1,237.9	1,241.6	0.00	0.00	0.00
4,960.0	19.39	85.53	4,755.0	97.8	1,251.1	1,254.9	0.00	0.00	0.00
5,000.0	19.39	85.53	4,792.7	98.8	1,264.4	1,268.2	0.00	0.00	0.00
5,040.0	19.39	85.53	4,830.4	99.8	1,277.6	1,281.5	0.00	0.00	0.00
5,059.6	19.39	85.53	4,848.9	100.3	1,284.1	1,288.0	0.00	0.00	0.00
5,080.0	18.98	85.53	4,868.2	100.9	1,290.8	1,294.7	2.00	-2.00	0.00
5,120.0	18.18	85.53	4,906.1	101.8	1,303.5	1,307.4	2.00	-2.00	0.00
5,160.0	17.38	85.53	4,944.2	102.8	1,315.6	1,319.7	2.00	-2.00	0.00
5,200.0	16.58	85.53	4,982.4	103.7	1,327.3	1,331.3	2.00	-2.00	0.00
5,240.0	15.78	85.53	5,020.9	104.6	1,338.4	1,342.5	2.00	-2.00	0.00
5,280.0	14.98	85.53	5,059.4	105.4	1,349.0	1,353.1	2.00	-2.00	0.00
5,320.0	14.18	85.53	5,098.1	106.2	1,359.0	1,363.2	2.00	-2.00	0.00
5,360.0	13.38	85.53	5,137.0	106.9	1,368.5	1,372.7	2.00	-2.00	0.00
5,400.0	12.58	85.53	5,176.0	107.6	1,377.5	1,381.7	2.00	-2.00	0.00
5,440.0	11.78	85.53	5,215.1	108.3	1,385.9	1,390.1	2.00	-2.00	0.00
5,480.0	10.98	85.53	5,254.3	108.9	1,393.8	1,398.0	2.00	-2.00	0.00
5,520.0	10.18	85.53	5,293.6	109.5	1,401.1	1,405.4	2.00	-2.00	0.00
5,560.0	9.38	85.53	5,333.0	110.0	1,407.9	1,412.2	2.00	-2.00	0.00
5,600.0	8.58	85.53	5,372.5	110.5	1,414.1	1,418.4	2.00	-2.00	0.00
5,640.0	7.78	85.53	5,412.1	110.9	1,419.8	1,424.1	2.00	-2.00	0.00
5,680.0	6.98	85.53	5,451.8	111.3	1,424.9	1,429.2	2.00	-2.00	0.00
5,720.0	6.18	85.53	5,491.5	111.7	1,429.5	1,433.8	2.00	-2.00	0.00
5,760.0	5.38	85.53	5,531.3	112.0	1,433.5	1,437.8	2.00	-2.00	0.00
5,800.0	4.58	85.53	5,571.2	112.3	1,436.9	1,441.3	2.00	-2.00	0.00
5,840.0	3.78	85.53	5,611.1	112.5	1,439.8	1,444.2	2.00	-2.00	0.00
5,880.0	2.98	85.53	5,651.0	112.7	1,442.2	1,446.6	2.00	-2.00	0.00
5,920.0	2.18	85.53	5,690.9	112.8	1,444.0	1,448.4	2.00	-2.00	0.00
5,960.0	1.38	85.53	5,730.9	112.9	1,445.2	1,449.6	2.00	-2.00	0.00
6,000.0	0.58	85.53	5,770.9	113.0	1,445.9	1,450.3	2.00	-2.00	0.00
6,029.1	0.00	0.00	5,800.0	113.0	1,446.1	1,450.5	2.00	-2.00	0.00
Target BHL 1320'FNL & 2565'FEL									
6,040.0	0.00	0.00	5,810.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
6,080.0	0.00	0.00	5,850.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
6,120.0	0.00	0.00	5,890.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
6,160.0	0.00	0.00	5,930.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00

Database: EDM den0-adp01 Server Data
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.8-T6N-R63W
Site: NCLP PC AA08-03D Pad Sec.8-T6N-R63W
Well: NCLP PC AA08-18D
Wellbore: Wellbore #1
Design: Noble NCLP PC AA08-18D Plan #1 (8-5-10)

Local Co-ordinate Reference: Well NCLP PC AA08-18D
TVD Reference: WELL @ 4716.0ft (Original Well Elev)
MD Reference: WELL @ 4716.0ft (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)
6,200.0	0.00	0.00	5,970.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
6,240.0	0.00	0.00	6,010.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
6,280.0	0.00	0.00	6,050.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
6,320.0	0.00	0.00	6,090.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
6,360.0	0.00	0.00	6,130.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
6,400.0	0.00	0.00	6,170.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
6,440.0	0.00	0.00	6,210.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
6,480.0	0.00	0.00	6,250.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
6,520.0	0.00	0.00	6,290.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
6,560.0	0.00	0.00	6,330.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
6,600.0	0.00	0.00	6,370.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
6,640.0	0.00	0.00	6,410.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
6,680.0	0.00	0.00	6,450.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
6,720.0	0.00	0.00	6,490.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
6,750.1	0.00	0.00	6,521.0	113.0	1,446.1	1,450.5	0.00	0.00	0.00
Niobrara									
6,760.0	0.00	0.00	6,530.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
6,800.0	0.00	0.00	6,570.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
6,840.0	0.00	0.00	6,610.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
6,880.0	0.00	0.00	6,650.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
6,920.0	0.00	0.00	6,690.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
6,960.0	0.00	0.00	6,730.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
7,000.0	0.00	0.00	6,770.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
7,040.0	0.00	0.00	6,810.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
7,055.1	0.00	0.00	6,826.0	113.0	1,446.1	1,450.5	0.00	0.00	0.00
Codell									
7,080.0	0.00	0.00	6,850.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
7,120.0	0.00	0.00	6,890.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
7,160.0	0.00	0.00	6,930.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
7,200.0	0.00	0.00	6,970.9	113.0	1,446.1	1,450.5	0.00	0.00	0.00
7,205.1	0.00	0.00	6,976.0	113.0	1,446.1	1,450.5	0.00	0.00	0.00

Hardline 105°W of BHL - Target Circle 1320°FNL & 2565°FEL

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 105°W of BH	0.00	0.00	6,976.0	13.0	1,341.1	1,428,314.57	3,289,001.03	40° 30' 16.112 N	104° 27' 38.547 W
- plan misses target center by 145.0ft at 7205.1ft MD (6976.0 TVD, 113.0 N, 1446.1 E)									
- Polygon									
Point 1			6,976.0	0.0	0.0	1,428,314.57	3,289,001.03		
Point 2			6,976.0	200.0	0.0	1,428,514.55	3,288,998.70		
Target BHL 1320°FNL	0.00	0.00	5,800.0	113.0	1,446.1	1,428,415.78	3,289,104.82	40° 30' 17.100 N	104° 27' 37.188 W
- plan hits target center									
- Point									
Target Circle 1320°FN	0.00	0.00	6,976.0	113.0	1,446.1	1,428,415.78	3,289,104.82	40° 30' 17.100 N	104° 27' 37.188 W
- plan hits target center									
- Circle (radius 75.0)									

Database: EDM den0-adp01 Server Data
 Company: NOBLE ENERGY INC WELD COUNTY CO
 Project: SEC.8-T6N-R63W
 Site: NCLP PC AA08-03D Pad Sec.8-T6N-R63W
 Well: NCLP PC AA08-18D
 Wellbore: Wellbore #1
 Design: Noble NCLP PC AA08-18D Plan #1 (8-5-10)

Local Co-ordinate Reference: Well NCLP PC AA08-18D
 TVD Reference: WELL @ 4716.0ft (Original Well Elev)
 MD Reference: WELL @ 4716.0ft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
500.0	500.0	8 5/8"	8-5/8	12-1/4

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
6,750.1	6,521.0	Niobrara		0.00	
7,055.1	6,826.0	Codell		0.00	