

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	400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	
3	650.0	5.00	90.00	649.7	0.0	10.9	2.00	90.00	10.2	
4	1810.9	27.84	69.36	1756.4	96.9	319.4	2.00	-24.68	333.2	
5	4984.0	27.84	69.36	4562.3	619.2	1705.9	0.00	0.00	1814.8	
6	6375.8	0.00	0.00	5900.0	736.0	2016.1	2.00	180.00	2146.2	Target BHL 660'FNL & 1980'FEL
7	7441.8	0.00	0.00	6966.0	736.0	2016.1	0.00	0.00	2146.2	



Directional

NOBLE ENERGY INC WELD COUNTY CO

SEC.8-T6N-R63W

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

NCLP PC AA08-02D

Wellbore #1

Plan: NCLP PC AA08-02D 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 AA08-02D
 Wellbore: Wellbore #1
 Design: NCLP PC AA08-02D Plan #1 (8-5-10)

Local Co-ordinate Reference: Well NCLP PC AA08-02D
 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
From:	Lat/Long	Easting:	3,287,659.37 ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	40° 30' 16.704 N
		Longitude:	104° 27' 55.908 W
		Grid Convergence:	0.67 °

Well	NCLP PC AA08-02D		
Well Position	+N/-S	-25.5 ft	Northing:
	+E/-W	0.0 ft	Easting:
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft
		Latitude:	40° 30' 16.452 N
		Longitude:	104° 27' 55.908 W
		Ground Level:	4,703.0 ft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2010	8/15/2010	8.82
			Dip Angle
			(°)
			67.21
			Field Strength
			(nT)
			53,307

Design	NCLP PC AA08-02D Plan #1 (8-5-10)		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0.0	0.0	0.0
			Direction
			(°)
			69.94

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(ft)	(ft)	Rate	Rate	Rate	(°)	
(ft)			(ft)			(°/100ft)	(°/100ft)	(°/100ft)		
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
650.0	5.00	90.00	649.7	0.0	10.9	2.00	2.00	0.00	90.00	
1,810.9	27.84	69.36	1,756.4	96.9	319.4	2.00	1.97	-1.78	-24.68	
4,984.0	27.84	69.36	4,562.3	619.2	1,705.9	0.00	0.00	0.00	0.00	
6,375.8	0.00	0.00	5,900.0	736.0	2,016.1	2.00	-2.00	0.00	180.00	Target BHL 660'FN
7,441.8	0.00	0.00	6,966.0	736.0	2,016.1	0.00	0.00	0.00	0.00	

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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	0.80	90.00	440.0	0.0	0.3	0.3	2.00	2.00	0.00
480.0	1.60	90.00	480.0	0.0	1.1	1.0	2.00	2.00	0.00
500.0	2.00	90.00	500.0	0.0	1.7	1.6	2.00	2.00	0.00
8 5/8"									
520.0	2.40	90.00	520.0	0.0	2.5	2.4	2.00	2.00	0.00
560.0	3.20	90.00	559.9	0.0	4.5	4.2	2.00	2.00	0.00
600.0	4.00	90.00	599.8	0.0	7.0	6.6	2.00	2.00	0.00
640.0	4.80	90.00	639.7	0.0	10.0	9.4	2.00	2.00	0.00
650.0	5.00	90.00	649.7	0.0	10.9	10.2	2.00	2.00	0.00
680.0	5.55	87.41	679.6	0.1	13.7	12.9	2.00	1.84	-8.64
720.0	6.30	84.67	719.3	0.4	17.8	16.8	2.00	1.87	-6.86
760.0	7.06	82.51	759.1	0.9	22.4	21.3	2.00	1.90	-5.40
800.0	7.83	80.77	798.7	1.6	27.5	26.4	2.00	1.92	-4.35
840.0	8.60	79.34	838.3	2.6	33.2	32.0	2.00	1.93	-3.57
880.0	9.38	78.14	877.8	3.9	39.3	38.2	2.00	1.94	-2.99
920.0	10.16	77.13	917.3	5.3	45.9	44.9	2.00	1.95	-2.53
960.0	10.94	76.26	956.6	7.0	53.0	52.2	2.00	1.96	-2.17
1,000.0	11.73	75.51	995.8	8.9	60.7	60.0	2.00	1.97	-1.89
1,040.0	12.52	74.84	1,034.9	11.1	68.8	68.4	2.00	1.97	-1.65
1,080.0	13.31	74.26	1,073.9	13.4	77.4	77.3	2.00	1.97	-1.46
1,120.0	14.10	73.74	1,112.8	16.1	86.5	86.8	2.00	1.98	-1.30
1,160.0	14.89	73.28	1,151.5	18.9	96.1	96.8	2.00	1.98	-1.16
1,200.0	15.68	72.86	1,190.1	22.0	106.2	107.3	2.00	1.98	-1.05
1,240.0	16.47	72.48	1,228.5	25.3	116.8	118.3	2.00	1.98	-0.95
1,280.0	17.27	72.13	1,266.8	28.8	127.8	129.9	2.00	1.98	-0.86
1,320.0	18.06	71.82	1,304.9	32.6	139.4	142.1	2.00	1.99	-0.79
1,360.0	18.86	71.53	1,342.8	36.5	151.4	154.7	2.00	1.99	-0.73
1,400.0	19.65	71.26	1,380.6	40.8	163.9	167.9	2.00	1.99	-0.67
1,440.0	20.45	71.01	1,418.2	45.2	176.9	181.6	2.00	1.99	-0.62
1,480.0	21.24	70.78	1,455.5	49.8	190.3	195.9	2.00	1.99	-0.57
1,520.0	22.04	70.57	1,492.7	54.7	204.2	210.6	2.00	1.99	-0.54
1,560.0	22.84	70.37	1,529.7	59.8	218.6	225.9	2.00	1.99	-0.50
1,600.0	23.63	70.18	1,566.5	65.2	233.5	241.7	2.00	1.99	-0.47
1,640.0	24.43	70.00	1,603.0	70.7	248.8	258.0	2.00	1.99	-0.44
1,680.0	25.23	69.84	1,639.3	76.5	264.6	274.7	2.00	1.99	-0.41
1,720.0	26.02	69.68	1,675.4	82.5	280.8	292.0	2.00	1.99	-0.39
1,760.0	26.82	69.54	1,711.2	88.7	297.5	309.8	2.00	1.99	-0.37
1,800.0	27.62	69.40	1,746.7	95.1	314.6	328.1	2.00	1.99	-0.35
1,810.9	27.84	69.36	1,756.4	96.9	319.4	333.2	2.00	1.99	-0.34
1,840.0	27.84	69.36	1,782.1	101.7	332.1	346.8	0.00	0.00	0.00
1,880.0	27.84	69.36	1,817.5	108.2	349.6	365.5	0.00	0.00	0.00
1,920.0	27.84	69.36	1,852.9	114.8	367.0	384.2	0.00	0.00	0.00
1,960.0	27.84	69.36	1,888.2	121.4	384.5	402.8	0.00	0.00	0.00

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Well: NCLP PC AA08-02D
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Design: NCLP PC AA08-02D Plan #1 (8-5-10)

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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)
2,000.0	27.84	69.36	1,923.6	128.0	402.0	421.5	0.00	0.00	0.00
2,040.0	27.84	69.36	1,959.0	134.6	419.5	440.2	0.00	0.00	0.00
2,080.0	27.84	69.36	1,994.4	141.2	436.9	458.9	0.00	0.00	0.00
2,120.0	27.84	69.36	2,029.7	147.7	454.4	477.5	0.00	0.00	0.00
2,160.0	27.84	69.36	2,065.1	154.3	471.9	496.2	0.00	0.00	0.00
2,200.0	27.84	69.36	2,100.5	160.9	489.4	514.9	0.00	0.00	0.00
2,240.0	27.84	69.36	2,135.8	167.5	506.9	533.6	0.00	0.00	0.00
2,280.0	27.84	69.36	2,171.2	174.1	524.3	552.2	0.00	0.00	0.00
2,320.0	27.84	69.36	2,206.6	180.7	541.8	570.9	0.00	0.00	0.00
2,360.0	27.84	69.36	2,242.0	187.3	559.3	589.6	0.00	0.00	0.00
2,400.0	27.84	69.36	2,277.3	193.8	576.8	608.3	0.00	0.00	0.00
2,440.0	27.84	69.36	2,312.7	200.4	594.3	626.9	0.00	0.00	0.00
2,480.0	27.84	69.36	2,348.1	207.0	611.7	645.6	0.00	0.00	0.00
2,520.0	27.84	69.36	2,383.4	213.6	629.2	664.3	0.00	0.00	0.00
2,560.0	27.84	69.36	2,418.8	220.2	646.7	683.0	0.00	0.00	0.00
2,600.0	27.84	69.36	2,454.2	226.8	664.2	701.7	0.00	0.00	0.00
2,640.0	27.84	69.36	2,489.6	233.3	681.6	720.3	0.00	0.00	0.00
2,680.0	27.84	69.36	2,524.9	239.9	699.1	739.0	0.00	0.00	0.00
2,720.0	27.84	69.36	2,560.3	246.5	716.6	757.7	0.00	0.00	0.00
2,760.0	27.84	69.36	2,595.7	253.1	734.1	776.4	0.00	0.00	0.00
2,800.0	27.84	69.36	2,631.0	259.7	751.6	795.0	0.00	0.00	0.00
2,840.0	27.84	69.36	2,666.4	266.3	769.0	813.7	0.00	0.00	0.00
2,880.0	27.84	69.36	2,701.8	272.8	786.5	832.4	0.00	0.00	0.00
2,920.0	27.84	69.36	2,737.2	279.4	804.0	851.1	0.00	0.00	0.00
2,960.0	27.84	69.36	2,772.5	286.0	821.5	869.7	0.00	0.00	0.00
3,000.0	27.84	69.36	2,807.9	292.6	839.0	888.4	0.00	0.00	0.00
3,040.0	27.84	69.36	2,843.3	299.2	856.4	907.1	0.00	0.00	0.00
3,080.0	27.84	69.36	2,878.6	305.8	873.9	925.8	0.00	0.00	0.00
3,120.0	27.84	69.36	2,914.0	312.3	891.4	944.5	0.00	0.00	0.00
3,160.0	27.84	69.36	2,949.4	318.9	908.9	963.1	0.00	0.00	0.00
3,200.0	27.84	69.36	2,984.8	325.5	926.3	981.8	0.00	0.00	0.00
3,240.0	27.84	69.36	3,020.1	332.1	943.8	1,000.5	0.00	0.00	0.00
3,280.0	27.84	69.36	3,055.5	338.7	961.3	1,019.2	0.00	0.00	0.00
3,320.0	27.84	69.36	3,090.9	345.3	978.8	1,037.8	0.00	0.00	0.00
3,360.0	27.84	69.36	3,126.2	351.9	996.3	1,056.5	0.00	0.00	0.00
3,400.0	27.84	69.36	3,161.6	358.4	1,013.7	1,075.2	0.00	0.00	0.00
3,440.0	27.84	69.36	3,197.0	365.0	1,031.2	1,093.9	0.00	0.00	0.00
3,480.0	27.84	69.36	3,232.4	371.6	1,048.7	1,112.5	0.00	0.00	0.00
3,520.0	27.84	69.36	3,267.7	378.2	1,066.2	1,131.2	0.00	0.00	0.00
3,560.0	27.84	69.36	3,303.1	384.8	1,083.7	1,149.9	0.00	0.00	0.00
3,600.0	27.84	69.36	3,338.5	391.4	1,101.1	1,168.6	0.00	0.00	0.00
3,640.0	27.84	69.36	3,373.9	397.9	1,118.6	1,187.2	0.00	0.00	0.00
3,680.0	27.84	69.36	3,409.2	404.5	1,136.1	1,205.9	0.00	0.00	0.00
3,720.0	27.84	69.36	3,444.6	411.1	1,153.6	1,224.6	0.00	0.00	0.00
3,760.0	27.84	69.36	3,480.0	417.7	1,171.0	1,243.3	0.00	0.00	0.00
3,800.0	27.84	69.36	3,515.3	424.3	1,188.5	1,262.0	0.00	0.00	0.00
3,840.0	27.84	69.36	3,550.7	430.9	1,206.0	1,280.6	0.00	0.00	0.00
3,880.0	27.84	69.36	3,586.1	437.4	1,223.5	1,299.3	0.00	0.00	0.00
3,920.0	27.84	69.36	3,621.5	444.0	1,241.0	1,318.0	0.00	0.00	0.00
3,960.0	27.84	69.36	3,656.8	450.6	1,258.4	1,336.7	0.00	0.00	0.00
4,000.0	27.84	69.36	3,692.2	457.2	1,275.9	1,355.3	0.00	0.00	0.00
4,040.0	27.84	69.36	3,727.6	463.8	1,293.4	1,374.0	0.00	0.00	0.00
4,080.0	27.84	69.36	3,762.9	470.4	1,310.9	1,392.7	0.00	0.00	0.00
4,120.0	27.84	69.36	3,798.3	477.0	1,328.4	1,411.4	0.00	0.00	0.00

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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	27.84	69.36	3,833.7	483.5	1,345.8	1,430.0	0.00	0.00	0.00
4,200.0	27.84	69.36	3,869.1	490.1	1,363.3	1,448.7	0.00	0.00	0.00
4,240.0	27.84	69.36	3,904.4	496.7	1,380.8	1,467.4	0.00	0.00	0.00
4,280.0	27.84	69.36	3,939.8	503.3	1,398.3	1,486.1	0.00	0.00	0.00
4,320.0	27.84	69.36	3,975.2	509.9	1,415.8	1,504.8	0.00	0.00	0.00
4,360.0	27.84	69.36	4,010.5	516.5	1,433.2	1,523.4	0.00	0.00	0.00
4,400.0	27.84	69.36	4,045.9	523.0	1,450.7	1,542.1	0.00	0.00	0.00
4,440.0	27.84	69.36	4,081.3	529.6	1,468.2	1,560.8	0.00	0.00	0.00
4,480.0	27.84	69.36	4,116.7	536.2	1,485.7	1,579.5	0.00	0.00	0.00
4,520.0	27.84	69.36	4,152.0	542.8	1,503.1	1,598.1	0.00	0.00	0.00
4,560.0	27.84	69.36	4,187.4	549.4	1,520.6	1,616.8	0.00	0.00	0.00
4,600.0	27.84	69.36	4,222.8	556.0	1,538.1	1,635.5	0.00	0.00	0.00
4,640.0	27.84	69.36	4,258.1	562.5	1,555.6	1,654.2	0.00	0.00	0.00
4,680.0	27.84	69.36	4,293.5	569.1	1,573.1	1,672.8	0.00	0.00	0.00
4,720.0	27.84	69.36	4,328.9	575.7	1,590.5	1,691.5	0.00	0.00	0.00
4,760.0	27.84	69.36	4,364.3	582.3	1,608.0	1,710.2	0.00	0.00	0.00
4,800.0	27.84	69.36	4,399.6	588.9	1,625.5	1,728.9	0.00	0.00	0.00
4,840.0	27.84	69.36	4,435.0	595.5	1,643.0	1,747.5	0.00	0.00	0.00
4,880.0	27.84	69.36	4,470.4	602.0	1,660.5	1,766.2	0.00	0.00	0.00
4,920.0	27.84	69.36	4,505.7	608.6	1,677.9	1,784.9	0.00	0.00	0.00
4,960.0	27.84	69.36	4,541.1	615.2	1,695.4	1,803.6	0.00	0.00	0.00
4,984.0	27.84	69.36	4,562.3	619.2	1,705.9	1,814.8	0.00	0.00	0.00
5,000.0	27.52	69.36	4,576.5	621.8	1,712.9	1,822.2	2.00	-2.00	0.00
5,040.0	26.72	69.36	4,612.1	628.2	1,729.9	1,840.4	2.00	-2.00	0.00
5,080.0	25.92	69.36	4,648.0	634.5	1,746.5	1,858.2	2.00	-2.00	0.00
5,120.0	25.12	69.36	4,684.1	640.5	1,762.6	1,875.4	2.00	-2.00	0.00
5,160.0	24.32	69.36	4,720.4	646.4	1,778.3	1,892.1	2.00	-2.00	0.00
5,200.0	23.52	69.36	4,757.0	652.1	1,793.5	1,908.3	2.00	-2.00	0.00
5,240.0	22.72	69.36	4,793.7	657.7	1,808.2	1,924.0	2.00	-2.00	0.00
5,280.0	21.92	69.36	4,830.8	663.0	1,822.4	1,939.2	2.00	-2.00	0.00
5,320.0	21.12	69.36	4,868.0	668.2	1,836.1	1,953.9	2.00	-2.00	0.00
5,360.0	20.32	69.36	4,905.4	673.2	1,849.3	1,968.1	2.00	-2.00	0.00
5,400.0	19.52	69.36	4,943.0	678.0	1,862.1	1,981.7	2.00	-2.00	0.00
5,440.0	18.72	69.36	4,980.8	682.6	1,874.3	1,994.8	2.00	-2.00	0.00
5,480.0	17.92	69.36	5,018.8	687.0	1,886.1	2,007.3	2.00	-2.00	0.00
5,520.0	17.12	69.36	5,056.9	691.3	1,897.4	2,019.4	2.00	-2.00	0.00
5,560.0	16.32	69.36	5,095.2	695.3	1,908.1	2,030.9	2.00	-2.00	0.00
5,600.0	15.52	69.36	5,133.7	699.2	1,918.4	2,041.9	2.00	-2.00	0.00
5,640.0	14.72	69.36	5,172.3	702.9	1,928.2	2,052.3	2.00	-2.00	0.00
5,680.0	13.92	69.36	5,211.0	706.4	1,937.4	2,062.2	2.00	-2.00	0.00
5,720.0	13.12	69.36	5,249.9	709.7	1,946.2	2,071.5	2.00	-2.00	0.00
5,760.0	12.32	69.36	5,289.0	712.8	1,954.4	2,080.3	2.00	-2.00	0.00
5,800.0	11.52	69.36	5,328.1	715.7	1,962.1	2,088.6	2.00	-2.00	0.00
5,840.0	10.72	69.36	5,367.3	718.4	1,969.3	2,096.3	2.00	-2.00	0.00
5,880.0	9.92	69.36	5,406.7	720.9	1,976.1	2,103.5	2.00	-2.00	0.00
5,920.0	9.12	69.36	5,446.1	723.3	1,982.2	2,110.1	2.00	-2.00	0.00
5,960.0	8.32	69.36	5,485.7	725.4	1,987.9	2,116.1	2.00	-2.00	0.00
6,000.0	7.52	69.36	5,525.3	727.3	1,993.1	2,121.6	2.00	-2.00	0.00
6,040.0	6.72	69.36	5,565.0	729.1	1,997.7	2,126.6	2.00	-2.00	0.00
6,080.0	5.92	69.36	5,604.8	730.6	2,001.8	2,131.0	2.00	-2.00	0.00
6,120.0	5.12	69.36	5,644.6	732.0	2,005.4	2,134.8	2.00	-2.00	0.00
6,160.0	4.32	69.36	5,684.4	733.2	2,008.5	2,138.1	2.00	-2.00	0.00
6,200.0	3.52	69.36	5,724.3	734.1	2,011.1	2,140.9	2.00	-2.00	0.00
6,240.0	2.72	69.36	5,764.3	734.9	2,013.1	2,143.0	2.00	-2.00	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 AA08-02D
Wellbore: Wellbore #1
Design: NCLP PC AA08-02D Plan #1 (8-5-10)

Local Co-ordinate Reference: Well NCLP PC AA08-02D
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)
6,280.0	1.92	69.36	5,804.2	735.5	2,014.6	2,144.6	2.00	-2.00	0.00
6,320.0	1.12	69.36	5,844.2	735.8	2,015.6	2,145.7	2.00	-2.00	0.00
6,360.0	0.32	69.36	5,884.2	736.0	2,016.1	2,146.2	2.00	-2.00	0.00
6,375.8	0.00	0.00	5,900.0	736.0	2,016.1	2,146.2	2.00	-2.00	0.00
Target BHL 660'FNL & 1980'FEL									
6,400.0	0.00	0.00	5,924.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
6,440.0	0.00	0.00	5,964.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
6,480.0	0.00	0.00	6,004.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
6,520.0	0.00	0.00	6,044.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
6,560.0	0.00	0.00	6,084.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
6,600.0	0.00	0.00	6,124.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
6,640.0	0.00	0.00	6,164.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
6,680.0	0.00	0.00	6,204.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
6,720.0	0.00	0.00	6,244.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
6,760.0	0.00	0.00	6,284.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
6,800.0	0.00	0.00	6,324.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
6,840.0	0.00	0.00	6,364.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
6,880.0	0.00	0.00	6,404.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
6,920.0	0.00	0.00	6,444.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
6,960.0	0.00	0.00	6,484.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
6,986.8	0.00	0.00	6,511.0	736.0	2,016.1	2,146.2	0.00	0.00	0.00
Niobrara - Target Circle 660'FNL & 1980'FEL									
6,991.8	0.00	0.00	6,516.0	736.0	2,016.1	2,146.2	0.00	0.00	0.00
Legal Box 400' x 400' 660'FNL, 1995'FEL									
7,000.0	0.00	0.00	6,524.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
7,040.0	0.00	0.00	6,564.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
7,080.0	0.00	0.00	6,604.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
7,120.0	0.00	0.00	6,644.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
7,160.0	0.00	0.00	6,684.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
7,200.0	0.00	0.00	6,724.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
7,240.0	0.00	0.00	6,764.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
7,280.0	0.00	0.00	6,804.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
7,291.8	0.00	0.00	6,816.0	736.0	2,016.1	2,146.2	0.00	0.00	0.00
Codell									
7,320.0	0.00	0.00	6,844.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
7,360.0	0.00	0.00	6,884.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
7,400.0	0.00	0.00	6,924.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
7,440.0	0.00	0.00	6,964.2	736.0	2,016.1	2,146.2	0.00	0.00	0.00
7,441.8	0.00	0.00	6,966.0	736.0	2,016.1	2,146.2	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 AA08-02D
Wellbore: Wellbore #1
Design: NCLP PC AA08-02D Plan #1 (8-5-10)

Local Co-ordinate Reference: Well NCLP PC AA08-02D
TVD Reference: WELL @ 4716.0ft (Original Well Elev)
MD Reference: WELL @ 4716.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Legal Box 400' x 400'	0.00	0.00	6,516.0	736.0	2,001.1	1,429,092.55	3,289,651.98	40° 30' 23.724 N	104° 27' 30.002 W
- plan misses target center by 15.0ft at 6991.8ft MD (6516.0 TVD, 736.0 N, 2016.1 E)									
- Rectangle (sides W400.0 H400.0 D455.0)									
Target Circle 660'FNL	0.00	0.00	6,511.0	736.0	2,016.1	1,429,092.74	3,289,666.97	40° 30' 23.724 N	104° 27' 29.808 W
- plan hits target center									
- Circle (radius 75.0)									
Target BHL 660'FNL	0.00	0.00	5,900.0	736.0	2,016.1	1,429,092.74	3,289,666.97	40° 30' 23.724 N	104° 27' 29.808 W
- plan hits target center									
- Point									

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 (°)
6,986.8	6,511.0	Niobrara		0.00	
7,291.8	6,816.0	Codell		0.00	