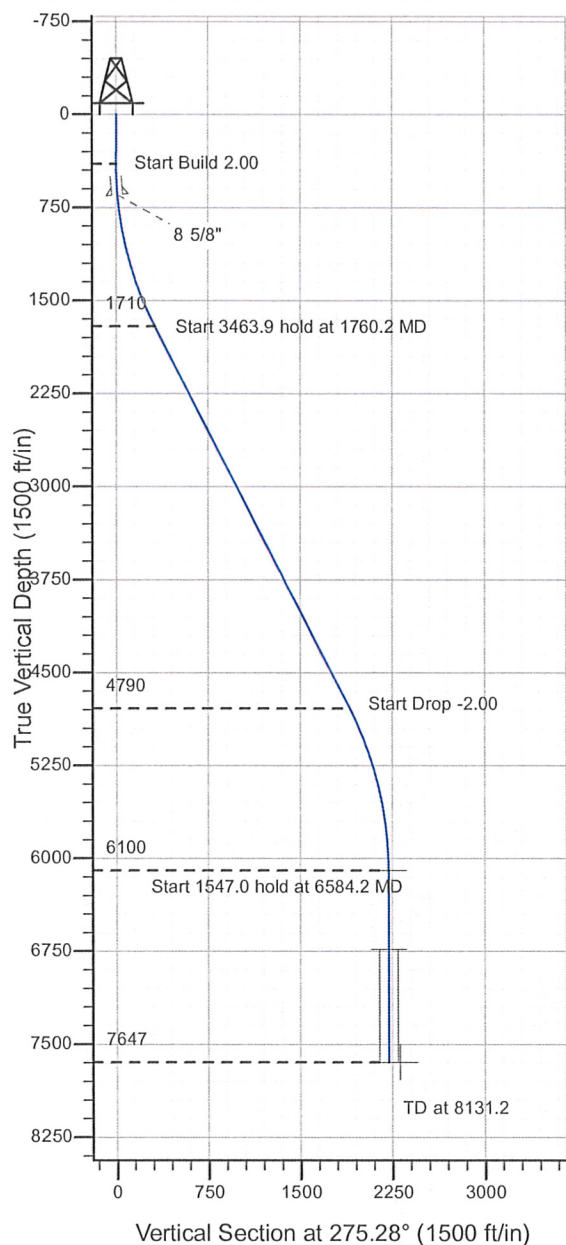
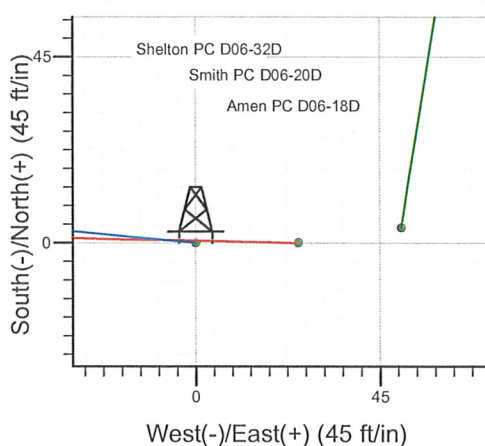
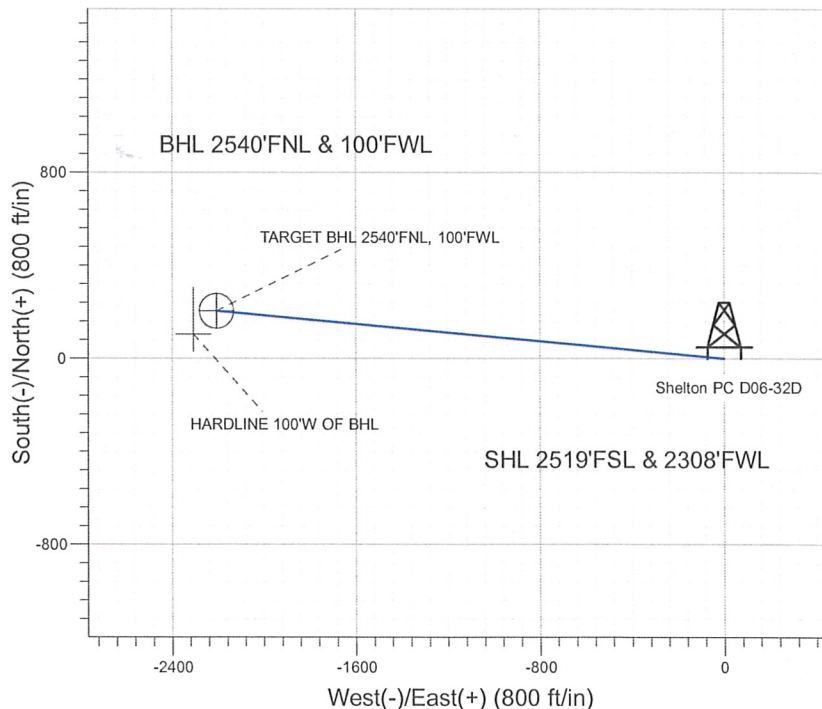


Well Name: Shelton PC D06-32D

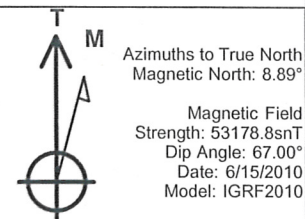
Surface Location: Shelton PC D06-32D Pad Sec.6-T3N-R64W
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
 Ground Elevation: 4824.0
 +N/-S+E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1336650.47 3252810.93 40° 15' 14.256 N 104° 35' 39.156 W
 Original Well Elev WELL @ 4837.0ft (Original Well Elev)



NOBLE ENERGY INC WELD COUNTY CO



Shelton PC D06-32D Pad Sec.6-T3N-R64W
 Shelton PC D06-32D
 Noble Shelton PC D06-32D Plan #1 (06-15-10)
 15:47, June 21 2010



WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 2540'FNL, 100'FWL	6100.0	204.1	-2207.8	40° 15' 16.272 N	104° 36' 7.632 W	Point
TARGET CIRCLE 2540'FNL, 100'FWL	6737.0	204.1	-2207.8	40° 15' 16.272 N	104° 36' 7.631 W	Circle (Radius: 75.0)
HARDLINE 100'W OF BHL	7647.0	104.1	-2307.8	40° 15' 15.284 N	104° 36' 8.921 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	400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	
3	1760.2	27.20	275.28	1709.6	29.2	-315.5	2.00	275.28	316.9	
4	5224.0	27.20	275.28	4790.4	174.9	-1892.3	0.00	0.00	1900.4	
5	6584.2	0.00	0.00	6100.0	204.1	-2207.8	2.00	180.00	2217.3	TARGET BHL 2540'FNL, 100'FWL
6	8131.2	0.00	0.00	7647.0	204.1	-2207.8	0.00	0.00	2217.3	



Directional

**NOBLE ENERGY INC WELD
COUNTY CO**

SEC.6-T3N-R64W

Shelton PC D06-32D Pad Sec.6-T3N-R64W

Shelton PC D06-32D

Wellbore #1

Plan: Noble Shelton PC D06-32D Plan #1 (06-15-10)

Standard Planning Report

21 June, 2010



Database: EDM den0-adp01 Server Data
 Company: NOBLE ENERGY INC WELD COUNTY CO
 Project: SEC.6-T3N-R64W
 Site: Shelton PC D06-32D Pad Sec.6-T3N-R64W
 Well: Shelton PC D06-32D
 Wellbore: Wellbore #1
 Design: Noble Shelton PC D06-32D Plan #1 (06-15-10)

Local Co-ordinate Reference: Well Shelton PC D06-32D
 TVD Reference: WELL @ 4837.0ft (Original Well Elev)
 MD Reference: WELL @ 4837.0ft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

Project	SEC.6-T3N-R64W, 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	Shelton PC D06-32D Pad Sec.6-T3N-R64W				
Site Position:		Northing:	1,336,650.48 ft	Latitude:	40° 15' 14.256 N
From:	Lat/Long	Easting:	3,252,810.93 ft	Longitude:	104° 35' 39.156 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.59 °

Well	Shelton PC D06-32D					
Well Position	+N/-S	0.0 ft	Northing:	1,336,650.47 ft	Latitude:	40° 15' 14.256 N
	+E/-W	0.0 ft	Easting:	3,252,810.93 ft	Longitude:	104° 35' 39.156 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,824.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/15/2010	8.89	67.00	53,179

Design	Noble Shelton PC D06-32D Plan #1 (06-15-10)				
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	275.28	

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	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,760.2	27.20	275.28	1,709.6	29.2	-315.5	2.00	2.00	0.00	275.28	
5,224.0	27.20	275.28	4,790.4	174.9	-1,892.3	0.00	0.00	0.00	0.00	
6,584.2	0.00	0.00	6,100.0	204.1	-2,207.8	2.00	-2.00	0.00	180.00	TARGET BHL 254C
8,131.2	0.00	0.00	7,647.0	204.1	-2,207.8	0.00	0.00	0.00	0.00	

Database: EDM den0-adp01 Server Data
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.6-T3N-R64W
Site: Shelton PC D06-32D Pad Sec.6-T3N-R64W
Well: Shelton PC D06-32D
Wellbore: Wellbore #1
Design: Noble Shelton PC D06-32D Plan #1 (06-15-10)

Local Co-ordinate Reference: Well Shelton PC D06-32D
TVD Reference: WELL @ 4837.0ft (Original Well Elev)
MD Reference: WELL @ 4837.0ft (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	275.28	440.0	0.0	-0.3	0.3	2.00	2.00	0.00
480.0	1.60	275.28	480.0	0.1	-1.1	1.1	2.00	2.00	0.00
520.0	2.40	275.28	520.0	0.2	-2.5	2.5	2.00	2.00	0.00
560.0	3.20	275.28	559.9	0.4	-4.4	4.5	2.00	2.00	0.00
600.0	4.00	275.28	599.8	0.6	-6.9	7.0	2.00	2.00	0.00
640.0	4.80	275.28	639.7	0.9	-10.0	10.0	2.00	2.00	0.00
650.3	5.01	275.28	650.0	1.0	-10.9	10.9	2.00	2.00	0.00
8 5/8"									
680.0	5.60	275.28	679.6	1.3	-13.6	13.7	2.00	2.00	0.00
720.0	6.40	275.28	719.3	1.6	-17.8	17.9	2.00	2.00	0.00
760.0	7.20	275.28	759.1	2.1	-22.5	22.6	2.00	2.00	0.00
800.0	8.00	275.28	798.7	2.6	-27.8	27.9	2.00	2.00	0.00
840.0	8.80	275.28	838.3	3.1	-33.6	33.7	2.00	2.00	0.00
880.0	9.60	275.28	877.8	3.7	-39.9	40.1	2.00	2.00	0.00
920.0	10.40	275.28	917.1	4.3	-46.9	47.1	2.00	2.00	0.00
960.0	11.20	275.28	956.4	5.0	-54.3	54.6	2.00	2.00	0.00
1,000.0	12.00	275.28	995.6	5.8	-62.3	62.6	2.00	2.00	0.00
1,040.0	12.80	275.28	1,034.7	6.6	-70.9	71.2	2.00	2.00	0.00
1,080.0	13.60	275.28	1,073.6	7.4	-80.0	80.3	2.00	2.00	0.00
1,120.0	14.40	275.28	1,112.4	8.3	-89.6	90.0	2.00	2.00	0.00
1,160.0	15.20	275.28	1,151.1	9.2	-99.8	100.2	2.00	2.00	0.00
1,200.0	16.00	275.28	1,189.6	10.2	-110.5	111.0	2.00	2.00	0.00
1,240.0	16.80	275.28	1,228.0	11.3	-121.8	122.3	2.00	2.00	0.00
1,280.0	17.60	275.28	1,266.2	12.3	-133.5	134.1	2.00	2.00	0.00
1,320.0	18.40	275.28	1,304.3	13.5	-145.8	146.5	2.00	2.00	0.00
1,360.0	19.20	275.28	1,342.1	14.7	-158.7	159.3	2.00	2.00	0.00
1,400.0	20.00	275.28	1,379.8	15.9	-172.0	172.8	2.00	2.00	0.00
1,440.0	20.80	275.28	1,417.3	17.2	-185.9	186.7	2.00	2.00	0.00
1,480.0	21.60	275.28	1,454.6	18.5	-200.3	201.2	2.00	2.00	0.00
1,520.0	22.40	275.28	1,491.7	19.9	-215.2	216.2	2.00	2.00	0.00
1,560.0	23.20	275.28	1,528.6	21.3	-230.7	231.7	2.00	2.00	0.00
1,600.0	24.00	275.28	1,565.2	22.8	-246.6	247.7	2.00	2.00	0.00
1,640.0	24.80	275.28	1,601.6	24.3	-263.1	264.2	2.00	2.00	0.00
1,680.0	25.60	275.28	1,637.8	25.9	-280.0	281.2	2.00	2.00	0.00
1,720.0	26.40	275.28	1,673.8	27.5	-297.5	298.8	2.00	2.00	0.00
1,760.0	27.20	275.28	1,709.5	29.2	-315.5	316.8	2.00	2.00	0.00
1,760.2	27.20	275.28	1,709.6	29.2	-315.5	316.9	2.00	2.00	0.00
1,800.0	27.20	275.28	1,745.1	30.8	-333.7	335.1	0.00	0.00	0.00
1,840.0	27.20	275.28	1,780.6	32.5	-351.9	353.4	0.00	0.00	0.00
1,880.0	27.20	275.28	1,816.2	34.2	-370.1	371.7	0.00	0.00	0.00
1,920.0	27.20	275.28	1,851.8	35.9	-388.3	389.9	0.00	0.00	0.00
1,960.0	27.20	275.28	1,887.4	37.6	-406.5	408.2	0.00	0.00	0.00
2,000.0	27.20	275.28	1,922.9	39.3	-424.7	426.5	0.00	0.00	0.00

Database: EDM den0-adp01 Server Data
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.6-T3N-R64W
Site: Shelton PC D06-32D Pad Sec.6-T3N-R64W
Well: Shelton PC D06-32D
Wellbore: Wellbore #1
Design: Noble Shelton PC D06-32D Plan #1 (06-15-10)

Local Co-ordinate Reference: Well Shelton PC D06-32D
TVD Reference: WELL @ 4837.0ft (Original Well Elev)
MD Reference: WELL @ 4837.0ft (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)
2,040.0	27.20	275.28	1,958.5	40.9	-442.9	444.8	0.00	0.00	0.00
2,080.0	27.20	275.28	1,994.1	42.6	-461.1	463.1	0.00	0.00	0.00
2,120.0	27.20	275.28	2,029.7	44.3	-479.3	481.4	0.00	0.00	0.00
2,160.0	27.20	275.28	2,065.2	46.0	-497.5	499.7	0.00	0.00	0.00
2,200.0	27.20	275.28	2,100.8	47.7	-515.7	517.9	0.00	0.00	0.00
2,240.0	27.20	275.28	2,136.4	49.4	-534.0	536.2	0.00	0.00	0.00
2,280.0	27.20	275.28	2,172.0	51.0	-552.2	554.5	0.00	0.00	0.00
2,320.0	27.20	275.28	2,207.5	52.7	-570.4	572.8	0.00	0.00	0.00
2,360.0	27.20	275.28	2,243.1	54.4	-588.6	591.1	0.00	0.00	0.00
2,400.0	27.20	275.28	2,278.7	56.1	-606.8	609.4	0.00	0.00	0.00
2,440.0	27.20	275.28	2,314.3	57.8	-625.0	627.7	0.00	0.00	0.00
2,480.0	27.20	275.28	2,349.8	59.5	-643.2	645.9	0.00	0.00	0.00
2,520.0	27.20	275.28	2,385.4	61.1	-661.4	664.2	0.00	0.00	0.00
2,560.0	27.20	275.28	2,421.0	62.8	-679.6	682.5	0.00	0.00	0.00
2,600.0	27.20	275.28	2,456.6	64.5	-697.8	700.8	0.00	0.00	0.00
2,640.0	27.20	275.28	2,492.2	66.2	-716.0	719.1	0.00	0.00	0.00
2,680.0	27.20	275.28	2,527.7	67.9	-734.2	737.4	0.00	0.00	0.00
2,720.0	27.20	275.28	2,563.3	69.6	-752.5	755.7	0.00	0.00	0.00
2,760.0	27.20	275.28	2,598.9	71.2	-770.7	773.9	0.00	0.00	0.00
2,800.0	27.20	275.28	2,634.5	72.9	-788.9	792.2	0.00	0.00	0.00
2,840.0	27.20	275.28	2,670.0	74.6	-807.1	810.5	0.00	0.00	0.00
2,880.0	27.20	275.28	2,705.6	76.3	-825.3	828.8	0.00	0.00	0.00
2,920.0	27.20	275.28	2,741.2	78.0	-843.5	847.1	0.00	0.00	0.00
2,960.0	27.20	275.28	2,776.8	79.7	-861.7	865.4	0.00	0.00	0.00
3,000.0	27.20	275.28	2,812.3	81.3	-879.9	883.7	0.00	0.00	0.00
3,040.0	27.20	275.28	2,847.9	83.0	-898.1	902.0	0.00	0.00	0.00
3,080.0	27.20	275.28	2,883.5	84.7	-916.3	920.2	0.00	0.00	0.00
3,120.0	27.20	275.28	2,919.1	86.4	-934.5	938.5	0.00	0.00	0.00
3,160.0	27.20	275.28	2,954.6	88.1	-952.7	956.8	0.00	0.00	0.00
3,200.0	27.20	275.28	2,990.2	89.8	-971.0	975.1	0.00	0.00	0.00
3,240.0	27.20	275.28	3,025.8	91.4	-989.2	993.4	0.00	0.00	0.00
3,280.0	27.20	275.28	3,061.4	93.1	-1,007.4	1,011.7	0.00	0.00	0.00
3,320.0	27.20	275.28	3,096.9	94.8	-1,025.6	1,030.0	0.00	0.00	0.00
3,360.0	27.20	275.28	3,132.5	96.5	-1,043.8	1,048.2	0.00	0.00	0.00
3,400.0	27.20	275.28	3,168.1	98.2	-1,062.0	1,066.5	0.00	0.00	0.00
3,440.0	27.20	275.28	3,203.7	99.9	-1,080.2	1,084.8	0.00	0.00	0.00
3,480.0	27.20	275.28	3,239.2	101.5	-1,098.4	1,103.1	0.00	0.00	0.00
3,520.0	27.20	275.28	3,274.8	103.2	-1,116.6	1,121.4	0.00	0.00	0.00
3,560.0	27.20	275.28	3,310.4	104.9	-1,134.8	1,139.7	0.00	0.00	0.00
3,600.0	27.20	275.28	3,346.0	106.6	-1,153.0	1,158.0	0.00	0.00	0.00
3,640.0	27.20	275.28	3,381.5	108.3	-1,171.2	1,176.2	0.00	0.00	0.00
3,680.0	27.20	275.28	3,417.1	110.0	-1,189.5	1,194.5	0.00	0.00	0.00
3,720.0	27.20	275.28	3,452.7	111.6	-1,207.7	1,212.8	0.00	0.00	0.00
3,760.0	27.20	275.28	3,488.3	113.3	-1,225.9	1,231.1	0.00	0.00	0.00
3,800.0	27.20	275.28	3,523.8	115.0	-1,244.1	1,249.4	0.00	0.00	0.00
3,840.0	27.20	275.28	3,559.4	116.7	-1,262.3	1,267.7	0.00	0.00	0.00
3,880.0	27.20	275.28	3,595.0	118.4	-1,280.5	1,286.0	0.00	0.00	0.00
3,920.0	27.20	275.28	3,630.6	120.1	-1,298.7	1,304.2	0.00	0.00	0.00
3,960.0	27.20	275.28	3,666.1	121.7	-1,316.9	1,322.5	0.00	0.00	0.00
4,000.0	27.20	275.28	3,701.7	123.4	-1,335.1	1,340.8	0.00	0.00	0.00
4,040.0	27.20	275.28	3,737.3	125.1	-1,353.3	1,359.1	0.00	0.00	0.00
4,080.0	27.20	275.28	3,772.9	126.8	-1,371.5	1,377.4	0.00	0.00	0.00
4,120.0	27.20	275.28	3,808.4	128.5	-1,389.7	1,395.7	0.00	0.00	0.00
4,160.0	27.20	275.28	3,844.0	130.2	-1,408.0	1,414.0	0.00	0.00	0.00

Database: EDM den0-adp01 Server Data
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.6-T3N-R64W
Site: Shelton PC D06-32D Pad Sec.6-T3N-R64W
Well: Shelton PC D06-32D
Wellbore: Wellbore #1
Design: Noble Shelton PC D06-32D Plan #1 (06-15-10)

Local Co-ordinate Reference: Well Shelton PC D06-32D
TVD Reference: WELL @ 4837.0ft (Original Well Elev)
MD Reference: WELL @ 4837.0ft (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)
4,200.0	27.20	275.28	3,879.6	131.8	-1,426.2	1,432.2	0.00	0.00	0.00
4,240.0	27.20	275.28	3,915.2	133.5	-1,444.4	1,450.5	0.00	0.00	0.00
4,280.0	27.20	275.28	3,950.7	135.2	-1,462.6	1,468.8	0.00	0.00	0.00
4,320.0	27.20	275.28	3,986.3	136.9	-1,480.8	1,487.1	0.00	0.00	0.00
4,360.0	27.20	275.28	4,021.9	138.6	-1,499.0	1,505.4	0.00	0.00	0.00
4,400.0	27.20	275.28	4,057.5	140.3	-1,517.2	1,523.7	0.00	0.00	0.00
4,440.0	27.20	275.28	4,093.1	141.9	-1,535.4	1,542.0	0.00	0.00	0.00
4,480.0	27.20	275.28	4,128.6	143.6	-1,553.6	1,560.2	0.00	0.00	0.00
4,520.0	27.20	275.28	4,164.2	145.3	-1,571.8	1,578.5	0.00	0.00	0.00
4,560.0	27.20	275.28	4,199.8	147.0	-1,590.0	1,596.8	0.00	0.00	0.00
4,600.0	27.20	275.28	4,235.4	148.7	-1,608.2	1,615.1	0.00	0.00	0.00
4,640.0	27.20	275.28	4,270.9	150.4	-1,626.5	1,633.4	0.00	0.00	0.00
4,680.0	27.20	275.28	4,306.5	152.1	-1,644.7	1,651.7	0.00	0.00	0.00
4,720.0	27.20	275.28	4,342.1	153.7	-1,662.9	1,670.0	0.00	0.00	0.00
4,760.0	27.20	275.28	4,377.7	155.4	-1,681.1	1,688.3	0.00	0.00	0.00
4,800.0	27.20	275.28	4,413.2	157.1	-1,699.3	1,706.5	0.00	0.00	0.00
4,840.0	27.20	275.28	4,448.8	158.8	-1,717.5	1,724.8	0.00	0.00	0.00
4,880.0	27.20	275.28	4,484.4	160.5	-1,735.7	1,743.1	0.00	0.00	0.00
4,920.0	27.20	275.28	4,520.0	162.2	-1,753.9	1,761.4	0.00	0.00	0.00
4,960.0	27.20	275.28	4,555.5	163.8	-1,772.1	1,779.7	0.00	0.00	0.00
5,000.0	27.20	275.28	4,591.1	165.5	-1,790.3	1,798.0	0.00	0.00	0.00
5,040.0	27.20	275.28	4,626.7	167.2	-1,808.5	1,816.3	0.00	0.00	0.00
5,080.0	27.20	275.28	4,662.3	168.9	-1,826.7	1,834.5	0.00	0.00	0.00
5,120.0	27.20	275.28	4,697.8	170.6	-1,845.0	1,852.8	0.00	0.00	0.00
5,160.0	27.20	275.28	4,733.4	172.3	-1,863.2	1,871.1	0.00	0.00	0.00
5,200.0	27.20	275.28	4,769.0	173.9	-1,881.4	1,889.4	0.00	0.00	0.00
5,224.0	27.20	275.28	4,790.4	174.9	-1,892.3	1,900.4	0.00	0.00	0.00
5,240.0	26.88	275.28	4,804.6	175.6	-1,899.5	1,907.6	2.00	-2.00	0.00
5,280.0	26.08	275.28	4,840.4	177.3	-1,917.3	1,925.5	2.00	-2.00	0.00
5,320.0	25.28	275.28	4,876.4	178.9	-1,934.6	1,942.8	2.00	-2.00	0.00
5,360.0	24.48	275.28	4,912.7	180.4	-1,951.3	1,959.6	2.00	-2.00	0.00
5,400.0	23.68	275.28	4,949.2	181.9	-1,967.6	1,976.0	2.00	-2.00	0.00
5,440.0	22.88	275.28	4,986.0	183.4	-1,983.3	1,991.8	2.00	-2.00	0.00
5,480.0	22.08	275.28	5,022.9	184.8	-1,998.6	2,007.1	2.00	-2.00	0.00
5,520.0	21.28	275.28	5,060.1	186.1	-2,013.3	2,021.9	2.00	-2.00	0.00
5,560.0	20.48	275.28	5,097.5	187.4	-2,027.5	2,036.1	2.00	-2.00	0.00
5,600.0	19.68	275.28	5,135.0	188.7	-2,041.2	2,049.9	2.00	-2.00	0.00
5,640.0	18.88	275.28	5,172.8	189.9	-2,054.3	2,063.1	2.00	-2.00	0.00
5,680.0	18.08	275.28	5,210.7	191.1	-2,066.9	2,075.7	2.00	-2.00	0.00
5,720.0	17.28	275.28	5,248.8	192.2	-2,079.0	2,087.9	2.00	-2.00	0.00
5,760.0	16.48	275.28	5,287.1	193.3	-2,090.6	2,099.5	2.00	-2.00	0.00
5,800.0	15.68	275.28	5,325.6	194.3	-2,101.6	2,110.6	2.00	-2.00	0.00
5,840.0	14.88	275.28	5,364.1	195.3	-2,112.1	2,121.1	2.00	-2.00	0.00
5,880.0	14.08	275.28	5,402.9	196.2	-2,122.1	2,131.1	2.00	-2.00	0.00
5,920.0	13.28	275.28	5,441.7	197.1	-2,131.5	2,140.6	2.00	-2.00	0.00
5,960.0	12.48	275.28	5,480.7	197.9	-2,140.4	2,149.5	2.00	-2.00	0.00
6,000.0	11.68	275.28	5,519.8	198.7	-2,148.7	2,157.9	2.00	-2.00	0.00
6,040.0	10.88	275.28	5,559.1	199.4	-2,156.5	2,165.7	2.00	-2.00	0.00
6,080.0	10.08	275.28	5,598.4	200.0	-2,163.8	2,173.0	2.00	-2.00	0.00
6,120.0	9.28	275.28	5,637.8	200.7	-2,170.5	2,179.7	2.00	-2.00	0.00
6,160.0	8.48	275.28	5,677.3	201.2	-2,176.6	2,185.9	2.00	-2.00	0.00
6,200.0	7.68	275.28	5,717.0	201.7	-2,182.2	2,191.5	2.00	-2.00	0.00
6,240.0	6.88	275.28	5,756.6	202.2	-2,187.3	2,196.6	2.00	-2.00	0.00
6,280.0	6.08	275.28	5,796.4	202.6	-2,191.8	2,201.1	2.00	-2.00	0.00

Database: EDM den0-adp01 Server Data
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.6-T3N-R64W
Site: Shelton PC D06-32D Pad Sec.6-T3N-R64W
Well: Shelton PC D06-32D
Wellbore: Wellbore #1
Design: Noble Shelton PC D06-32D Plan #1 (06-15-10)

Local Co-ordinate Reference: Well Shelton PC D06-32D
TVD Reference: WELL @ 4837.0ft (Original Well Elev)
MD Reference: WELL @ 4837.0ft (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)
6,320.0	5.28	275.28	5,836.2	203.0	-2,195.7	2,205.1	2.00	-2.00	0.00
6,360.0	4.48	275.28	5,876.0	203.3	-2,199.1	2,208.5	2.00	-2.00	0.00
6,400.0	3.68	275.28	5,915.9	203.6	-2,201.9	2,211.3	2.00	-2.00	0.00
6,440.0	2.88	275.28	5,955.9	203.8	-2,204.2	2,213.6	2.00	-2.00	0.00
6,480.0	2.08	275.28	5,995.8	203.9	-2,206.0	2,215.4	2.00	-2.00	0.00
6,520.0	1.28	275.28	6,035.8	204.1	-2,207.1	2,216.5	2.00	-2.00	0.00
6,560.0	0.48	275.28	6,075.8	204.1	-2,207.7	2,217.2	2.00	-2.00	0.00
6,584.2	0.00	0.00	6,100.0	204.1	-2,207.8	2,217.3	2.00	-2.00	0.00
TARGET BHL 2540'FNL, 100'FWL									
6,600.0	0.00	0.00	6,115.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
6,640.0	0.00	0.00	6,155.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
6,680.0	0.00	0.00	6,195.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
6,720.0	0.00	0.00	6,235.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
6,760.0	0.00	0.00	6,275.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
6,800.0	0.00	0.00	6,315.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
6,840.0	0.00	0.00	6,355.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
6,880.0	0.00	0.00	6,395.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
6,920.0	0.00	0.00	6,435.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
6,960.0	0.00	0.00	6,475.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,000.0	0.00	0.00	6,515.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,040.0	0.00	0.00	6,555.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,080.0	0.00	0.00	6,595.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,120.0	0.00	0.00	6,635.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,160.0	0.00	0.00	6,675.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,200.0	0.00	0.00	6,715.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,221.2	0.00	0.00	6,737.0	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
NIOBRARA - TARGET CIRCLE 2540'FNL, 100'FWL									
7,240.0	0.00	0.00	6,755.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,280.0	0.00	0.00	6,795.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,320.0	0.00	0.00	6,835.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,360.0	0.00	0.00	6,875.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,400.0	0.00	0.00	6,915.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,440.0	0.00	0.00	6,955.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,480.0	0.00	0.00	6,995.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,520.0	0.00	0.00	7,035.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,531.2	0.00	0.00	7,047.0	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
CODELL									
7,560.0	0.00	0.00	7,075.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,600.0	0.00	0.00	7,115.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,640.0	0.00	0.00	7,155.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,680.0	0.00	0.00	7,195.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,720.0	0.00	0.00	7,235.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,760.0	0.00	0.00	7,275.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,800.0	0.00	0.00	7,315.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,840.0	0.00	0.00	7,355.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,880.0	0.00	0.00	7,395.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,901.2	0.00	0.00	7,417.0	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
D-SAND									
7,920.0	0.00	0.00	7,435.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,960.0	0.00	0.00	7,475.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
7,981.2	0.00	0.00	7,497.0	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
J-SAND									
8,000.0	0.00	0.00	7,515.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
8,040.0	0.00	0.00	7,555.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00

Database: EDM den0-adp01 Server Data
 Company: NOBLE ENERGY INC WELD COUNTY CO
 Project: SEC.6-T3N-R64W
 Site: Shelton PC D06-32D Pad Sec.6-T3N-R64W
 Well: Shelton PC D06-32D
 Wellbore: Wellbore #1
 Design: Noble Shelton PC D06-32D Plan #1 (06-15-10)

Local Co-ordinate Reference: Well Shelton PC D06-32D
 TVD Reference: WELL @ 4837.0ft (Original Well Elev)
 MD Reference: WELL @ 4837.0ft (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)
8,080.0	0.00	0.00	7,595.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
8,120.0	0.00	0.00	7,635.8	204.1	-2,207.8	2,217.3	0.00	0.00	0.00
8,131.2	0.00	0.00	7,647.0	204.1	-2,207.8	2,217.3	0.00	0.00	0.00

HARDLINE 100'W OF BHL

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									
TARGET CIRCLE 25'	0.00	0.00	6,737.0	204.1	-2,207.8	1,336,832.00	3,250,601.27	40° 15' 16.272 N	104° 36' 7.631 W
- plan hits target center									
- Circle (radius 75.0)									
TARGET BHL 2540'F	0.00	0.00	6,100.0	204.1	-2,207.8	1,336,832.01	3,250,601.22	40° 15' 16.272 N	104° 36' 7.632 W
- plan hits target center									
- Point									
HARDLINE 100'W OF	0.00	0.00	7,647.0	104.1	-2,307.8	1,336,730.99	3,250,502.30	40° 15' 15.284 N	104° 36' 8.921 W
- plan misses target center by 141.4ft at 8131.2ft MD (7647.0 TVD, 204.1 N, -2207.8 E)									
- Polygon									
Point 1			7,647.0	0.0	0.0	1,336,730.99	3,250,502.30		
Point 2			7,647.0	200.0	0.0	1,336,930.97	3,250,500.25		

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
650.3	650.0	8 5/8"	8-5/8	12-1/4

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
7,221.2	6,737.0	NIOBRARA		0.00	
7,531.2	7,047.0	CODELL		0.00	
7,901.2	7,417.0	D-SAND		0.00	
7,981.2	7,497.0	J-SAND		0.00	