

Well Name: Vista USX WW33-07D

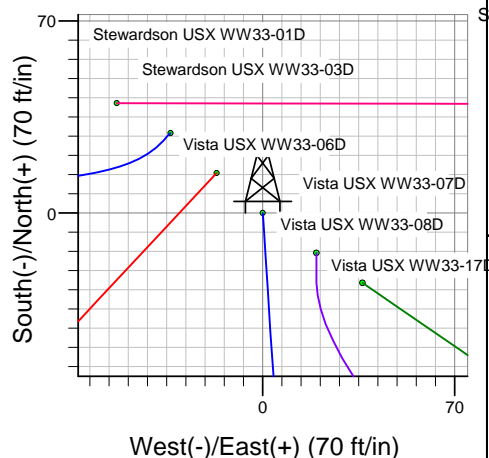
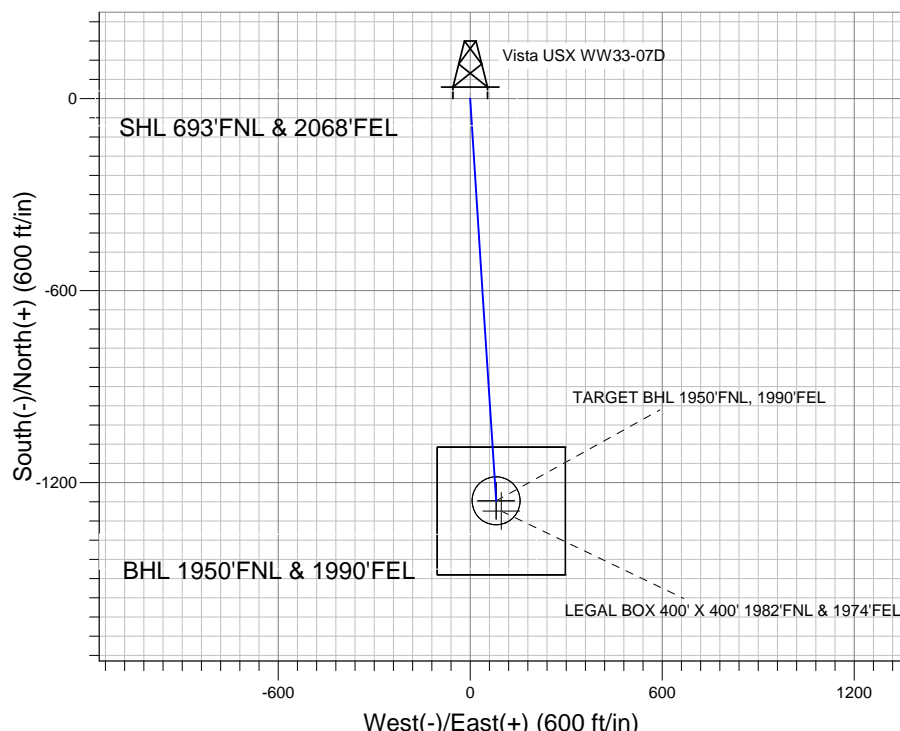
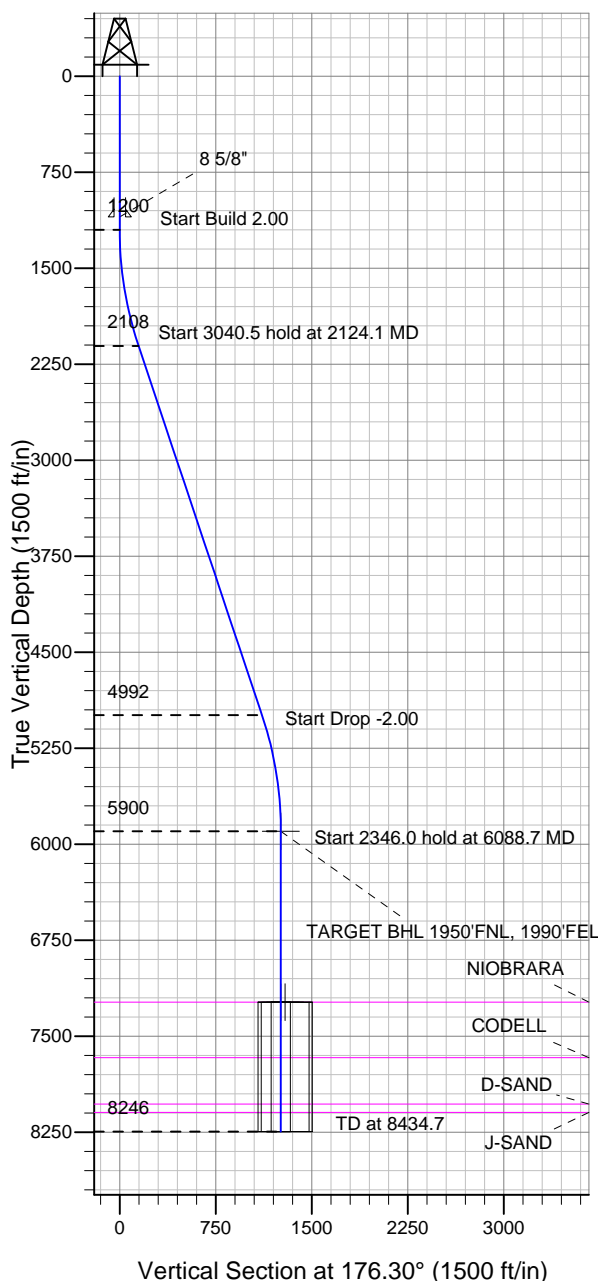
Surface Location: Stewardson USX WW33-01D Pad Sec.33-T1N-R66W
North American Datum 1983 US State Plane 1983 Colorado Northern Zone

Ground Elevation: 5071.0

+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.0 0.0 1248419.15 3201647.36 40.013050 -104.780080

Original Well Elev WELL @ 5084.0ft (Original Well Elev)

NOBLE ENERGY INC WELD COUNTY CO



Stewardson USX WW33-01D Pad Sec.33-T1N-R66W
Vista USX WW33-07D
Vista USX WW33-07D Plan #1 (6-16-11)
9:04, June 22 2011



Azimuths to True North
Magnetic North: 8.83°

Magnetic Field
Strength: 52921.8snT
Dip Angle: 66.73°
Date: 6/22/2011
Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 1950'FNL, 1990'FEL	5900.0	-1256.8	81.2	40.009600	-104.779790	Point
LEGAL BOX 400' X 400' 1982'FNL & 1974'FEL	7235.0	-1288.8	97.2	40.009512	-104.779733	Rectangle (Sides: L400.0 W400.0)
TARGET CIRCLE 1950'FNL & 1990'FEL	7235.0	-1256.8	81.2	40.009600	-104.779790	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	1200.0	0.00	0.00	1200.0	0.0	0.0	0.00	0.00	0.0	
3	2124.1	18.48	176.30	2108.2	-147.5	9.5	2.00	176.30	147.8	
4	5164.6	18.48	176.30	4991.8	-1109.3	71.7	0.00	0.00	1111.6	
5	6088.7	0.00	0.00	5900.0	-1256.8	81.2	2.00	180.00	1259.4	TARGET BHL 1950'FNL, 1990'FEL
6	8434.7	0.00	0.00	8246.0	-1256.8	81.2	0.00	0.00	1259.4	



Directional

NOBLE ENERGY INC WELD COUNTY CO

SEC.33-T1N-R66W

Stewardson USX WW33-01D Pad Sec.33-T1N-R66W

Vista USX WW33-07D

Wellbore #1

Plan: Vista USX WW33-07D Plan #1 (6-16-11)

Standard Planning Report

22 June, 2011



Database:	Landmark	Local Co-ordinate Reference:	Well Vista USX WW33-07D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 5084.0ft (Original Well Elev)
Project:	SEC.33-T1N-R66W	MD Reference:	WELL @ 5084.0ft (Original Well Elev)
Site:	Stewardson USX WW33-01D Pad Sec.33-T1N-R66W	North Reference:	True
Well:	Vista USX WW33-07D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Vista USX WW33-07D Plan #1 (6-16-11)		

Project	SEC.33-T1N-R66W, 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						Stewardson USX WW33-01D Pad Sec.33-T1N-R66W											
Site Position:						Northing:			1,248,458.80ft			Latitude:			40.013160		
From:			Lat/Long			Easting:			3,201,593.82ft			Longitude:			-104.780270		
Position Uncertainty:			0.0 ft			Slot Radius:			"			Grid Convergence:			0.47 °		

Well	Vista USX WW33-07D					
Well Position	+N/-S	-40.1 ft	Northing:	1,248,419.15 ft	Latitude:	40.013050
	+E/-W	53.2 ft	Easting:	3,201,647.36 ft	Longitude:	-104.780080
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,071.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/22/2011	8.84	66.73	52,922

Design	Vista USX WW33-07D Plan #1 (6-16-11)			
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	176.30

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	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,124.1	18.48	176.30	2,108.2	-147.5	9.5	2.00	2.00	0.00	176.30	
5,164.6	18.48	176.30	4,991.8	-1,109.3	71.7	0.00	0.00	0.00	0.00	
6,088.7	0.00	0.00	5,900.0	-1,256.8	81.2	2.00	-2.00	0.00	180.00	TARGET BHL 195C
8,434.7	0.00	0.00	8,246.0	-1,256.8	81.2	0.00	0.00	0.00	0.00	

Database:	Landmark	Local Co-ordinate Reference:	Well Vista USX WW33-07D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 5084.0ft (Original Well Elev)
Project:	SEC.33-T1N-R66W	MD Reference:	WELL @ 5084.0ft (Original Well Elev)
Site:	Stewardson USX WW33-01D Pad Sec.33-T1N-R66W	North Reference:	True
Well:	Vista USX WW33-07D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Vista USX WW33-07D Plan #1 (6-16-11)		

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
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
8 5/8"									
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	0.80	176.30	1,240.0	-0.3	0.0	0.3	2.00	2.00	0.00
1,280.0	1.60	176.30	1,280.0	-1.1	0.1	1.1	2.00	2.00	0.00
1,320.0	2.40	176.30	1,320.0	-2.5	0.2	2.5	2.00	2.00	0.00
1,360.0	3.20	176.30	1,359.9	-4.5	0.3	4.5	2.00	2.00	0.00
1,400.0	4.00	176.30	1,399.8	-7.0	0.5	7.0	2.00	2.00	0.00
1,440.0	4.80	176.30	1,439.7	-10.0	0.6	10.0	2.00	2.00	0.00
1,480.0	5.60	176.30	1,479.6	-13.6	0.9	13.7	2.00	2.00	0.00
1,520.0	6.40	176.30	1,519.3	-17.8	1.2	17.9	2.00	2.00	0.00
1,560.0	7.20	176.30	1,559.1	-22.5	1.5	22.6	2.00	2.00	0.00
1,600.0	8.00	176.30	1,598.7	-27.8	1.8	27.9	2.00	2.00	0.00
1,640.0	8.80	176.30	1,638.3	-33.7	2.2	33.7	2.00	2.00	0.00
1,680.0	9.60	176.30	1,677.8	-40.0	2.6	40.1	2.00	2.00	0.00
1,720.0	10.40	176.30	1,717.1	-47.0	3.0	47.1	2.00	2.00	0.00
1,760.0	11.20	176.30	1,756.4	-54.4	3.5	54.6	2.00	2.00	0.00
1,800.0	12.00	176.30	1,795.6	-62.5	4.0	62.6	2.00	2.00	0.00
1,840.0	12.80	176.30	1,834.7	-71.0	4.6	71.2	2.00	2.00	0.00
1,880.0	13.60	176.30	1,873.6	-80.2	5.2	80.3	2.00	2.00	0.00
1,920.0	14.40	176.30	1,912.4	-89.8	5.8	90.0	2.00	2.00	0.00
1,960.0	15.20	176.30	1,951.1	-100.0	6.5	100.2	2.00	2.00	0.00
2,000.0	16.00	176.30	1,989.6	-110.7	7.2	111.0	2.00	2.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Vista USX WW33-07D
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Project:	SEC.33-T1N-R66W	MD Reference:	WELL @ 5084.0ft (Original Well Elev)
Site:	Stewardson USX WW33-01D Pad Sec.33-T1N-R66W	North Reference:	True
Well:	Vista USX WW33-07D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Vista USX WW33-07D Plan #1 (6-16-11)		

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	16.80	176.30	2,028.0	-122.0	7.9	122.3	2.00	2.00	0.00	
2,080.0	17.60	176.30	2,066.2	-133.8	8.6	134.1	2.00	2.00	0.00	
2,120.0	18.40	176.30	2,104.3	-146.2	9.4	146.5	2.00	2.00	0.00	
2,124.1	18.48	176.30	2,108.2	-147.5	9.5	147.8	2.00	2.00	0.00	
2,160.0	18.48	176.30	2,142.2	-158.8	10.3	159.1	0.00	0.00	0.00	
2,200.0	18.48	176.30	2,180.1	-171.5	11.1	171.8	0.00	0.00	0.00	
2,240.0	18.48	176.30	2,218.1	-184.1	11.9	184.5	0.00	0.00	0.00	
2,280.0	18.48	176.30	2,256.0	-196.8	12.7	197.2	0.00	0.00	0.00	
2,320.0	18.48	176.30	2,294.0	-209.4	13.5	209.9	0.00	0.00	0.00	
2,360.0	18.48	176.30	2,331.9	-222.1	14.4	222.5	0.00	0.00	0.00	
2,400.0	18.48	176.30	2,369.8	-234.7	15.2	235.2	0.00	0.00	0.00	
2,440.0	18.48	176.30	2,407.8	-247.4	16.0	247.9	0.00	0.00	0.00	
2,480.0	18.48	176.30	2,445.7	-260.0	16.8	260.6	0.00	0.00	0.00	
2,520.0	18.48	176.30	2,483.6	-272.7	17.6	273.3	0.00	0.00	0.00	
2,560.0	18.48	176.30	2,521.6	-285.3	18.4	285.9	0.00	0.00	0.00	
2,600.0	18.48	176.30	2,559.5	-298.0	19.3	298.6	0.00	0.00	0.00	
2,640.0	18.48	176.30	2,597.4	-310.7	20.1	311.3	0.00	0.00	0.00	
2,680.0	18.48	176.30	2,635.4	-323.3	20.9	324.0	0.00	0.00	0.00	
2,720.0	18.48	176.30	2,673.3	-336.0	21.7	336.7	0.00	0.00	0.00	
2,760.0	18.48	176.30	2,711.3	-348.6	22.5	349.3	0.00	0.00	0.00	
2,800.0	18.48	176.30	2,749.2	-361.3	23.4	362.0	0.00	0.00	0.00	
2,840.0	18.48	176.30	2,787.1	-373.9	24.2	374.7	0.00	0.00	0.00	
2,880.0	18.48	176.30	2,825.1	-386.6	25.0	387.4	0.00	0.00	0.00	
2,920.0	18.48	176.30	2,863.0	-399.2	25.8	400.1	0.00	0.00	0.00	
2,960.0	18.48	176.30	2,900.9	-411.9	26.6	412.7	0.00	0.00	0.00	
3,000.0	18.48	176.30	2,938.9	-424.5	27.4	425.4	0.00	0.00	0.00	
3,040.0	18.48	176.30	2,976.8	-437.2	28.3	438.1	0.00	0.00	0.00	
3,080.0	18.48	176.30	3,014.8	-449.9	29.1	450.8	0.00	0.00	0.00	
3,120.0	18.48	176.30	3,052.7	-462.5	29.9	463.5	0.00	0.00	0.00	
3,160.0	18.48	176.30	3,090.6	-475.2	30.7	476.2	0.00	0.00	0.00	
3,200.0	18.48	176.30	3,128.6	-487.8	31.5	488.8	0.00	0.00	0.00	
3,240.0	18.48	176.30	3,166.5	-500.5	32.3	501.5	0.00	0.00	0.00	
3,280.0	18.48	176.30	3,204.4	-513.1	33.2	514.2	0.00	0.00	0.00	
3,320.0	18.48	176.30	3,242.4	-525.8	34.0	526.9	0.00	0.00	0.00	
3,360.0	18.48	176.30	3,280.3	-538.4	34.8	539.6	0.00	0.00	0.00	
3,400.0	18.48	176.30	3,318.2	-551.1	35.6	552.2	0.00	0.00	0.00	
3,440.0	18.48	176.30	3,356.2	-563.7	36.4	564.9	0.00	0.00	0.00	
3,480.0	18.48	176.30	3,394.1	-576.4	37.3	577.6	0.00	0.00	0.00	
3,520.0	18.48	176.30	3,432.1	-589.0	38.1	590.3	0.00	0.00	0.00	
3,560.0	18.48	176.30	3,470.0	-601.7	38.9	603.0	0.00	0.00	0.00	
3,600.0	18.48	176.30	3,507.9	-614.4	39.7	615.6	0.00	0.00	0.00	
3,640.0	18.48	176.30	3,545.9	-627.0	40.5	628.3	0.00	0.00	0.00	
3,680.0	18.48	176.30	3,583.8	-639.7	41.3	641.0	0.00	0.00	0.00	
3,720.0	18.48	176.30	3,621.7	-652.3	42.2	653.7	0.00	0.00	0.00	
3,760.0	18.48	176.30	3,659.7	-665.0	43.0	666.4	0.00	0.00	0.00	
3,800.0	18.48	176.30	3,697.6	-677.6	43.8	679.0	0.00	0.00	0.00	
3,840.0	18.48	176.30	3,735.6	-690.3	44.6	691.7	0.00	0.00	0.00	
3,880.0	18.48	176.30	3,773.5	-702.9	45.4	704.4	0.00	0.00	0.00	
3,920.0	18.48	176.30	3,811.4	-715.6	46.3	717.1	0.00	0.00	0.00	
3,960.0	18.48	176.30	3,849.4	-728.2	47.1	729.8	0.00	0.00	0.00	
4,000.0	18.48	176.30	3,887.3	-740.9	47.9	742.4	0.00	0.00	0.00	
4,040.0	18.48	176.30	3,925.2	-753.6	48.7	755.1	0.00	0.00	0.00	
4,080.0	18.48	176.30	3,963.2	-766.2	49.5	767.8	0.00	0.00	0.00	

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Site:	Stewardson USX WW33-01D Pad Sec.33-T1N-R66W	North Reference:	True
Well:	Vista USX WW33-07D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Vista USX WW33-07D Plan #1 (6-16-11)		

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)
4,120.0	18.48	176.30	4,001.1	-778.9	50.3	780.5	0.00	0.00	0.00
4,160.0	18.48	176.30	4,039.0	-791.5	51.2	793.2	0.00	0.00	0.00
4,200.0	18.48	176.30	4,077.0	-804.2	52.0	805.8	0.00	0.00	0.00
4,240.0	18.48	176.30	4,114.9	-816.8	52.8	818.5	0.00	0.00	0.00
4,280.0	18.48	176.30	4,152.9	-829.5	53.6	831.2	0.00	0.00	0.00
4,320.0	18.48	176.30	4,190.8	-842.1	54.4	843.9	0.00	0.00	0.00
4,360.0	18.48	176.30	4,228.7	-854.8	55.3	856.6	0.00	0.00	0.00
4,400.0	18.48	176.30	4,266.7	-867.4	56.1	869.3	0.00	0.00	0.00
4,440.0	18.48	176.30	4,304.6	-880.1	56.9	881.9	0.00	0.00	0.00
4,480.0	18.48	176.30	4,342.5	-892.7	57.7	894.6	0.00	0.00	0.00
4,520.0	18.48	176.30	4,380.5	-905.4	58.5	907.3	0.00	0.00	0.00
4,560.0	18.48	176.30	4,418.4	-918.1	59.3	920.0	0.00	0.00	0.00
4,600.0	18.48	176.30	4,456.4	-930.7	60.2	932.7	0.00	0.00	0.00
4,640.0	18.48	176.30	4,494.3	-943.4	61.0	945.3	0.00	0.00	0.00
4,680.0	18.48	176.30	4,532.2	-956.0	61.8	958.0	0.00	0.00	0.00
4,720.0	18.48	176.30	4,570.2	-968.7	62.6	970.7	0.00	0.00	0.00
4,760.0	18.48	176.30	4,608.1	-981.3	63.4	983.4	0.00	0.00	0.00
4,800.0	18.48	176.30	4,646.0	-994.0	64.2	996.1	0.00	0.00	0.00
4,840.0	18.48	176.30	4,684.0	-1,006.6	65.1	1,008.7	0.00	0.00	0.00
4,880.0	18.48	176.30	4,721.9	-1,019.3	65.9	1,021.4	0.00	0.00	0.00
4,920.0	18.48	176.30	4,759.8	-1,031.9	66.7	1,034.1	0.00	0.00	0.00
4,960.0	18.48	176.30	4,797.8	-1,044.6	67.5	1,046.8	0.00	0.00	0.00
5,000.0	18.48	176.30	4,835.7	-1,057.3	68.3	1,059.5	0.00	0.00	0.00
5,040.0	18.48	176.30	4,873.7	-1,069.9	69.2	1,072.1	0.00	0.00	0.00
5,080.0	18.48	176.30	4,911.6	-1,082.6	70.0	1,084.8	0.00	0.00	0.00
5,120.0	18.48	176.30	4,949.5	-1,095.2	70.8	1,097.5	0.00	0.00	0.00
5,160.0	18.48	176.30	4,987.5	-1,107.9	71.6	1,110.2	0.00	0.00	0.00
5,164.6	18.48	176.30	4,991.8	-1,109.3	71.7	1,111.6	0.00	0.00	0.00
5,200.0	17.77	176.30	5,025.5	-1,120.3	72.4	1,122.7	2.00	-2.00	0.00
5,240.0	16.97	176.30	5,063.6	-1,132.2	73.2	1,134.6	2.00	-2.00	0.00
5,280.0	16.17	176.30	5,102.0	-1,143.6	73.9	1,146.0	2.00	-2.00	0.00
5,320.0	15.37	176.30	5,140.5	-1,154.5	74.6	1,156.9	2.00	-2.00	0.00
5,360.0	14.57	176.30	5,179.1	-1,164.8	75.3	1,167.2	2.00	-2.00	0.00
5,400.0	13.77	176.30	5,217.9	-1,174.6	75.9	1,177.0	2.00	-2.00	0.00
5,440.0	12.97	176.30	5,256.8	-1,183.8	76.5	1,186.3	2.00	-2.00	0.00
5,480.0	12.17	176.30	5,295.9	-1,192.5	77.1	1,195.0	2.00	-2.00	0.00
5,520.0	11.37	176.30	5,335.0	-1,200.6	77.6	1,203.1	2.00	-2.00	0.00
5,560.0	10.57	176.30	5,374.3	-1,208.2	78.1	1,210.8	2.00	-2.00	0.00
5,600.0	9.77	176.30	5,413.7	-1,215.3	78.6	1,217.8	2.00	-2.00	0.00
5,640.0	8.97	176.30	5,453.1	-1,221.8	79.0	1,224.3	2.00	-2.00	0.00
5,680.0	8.17	176.30	5,492.7	-1,227.7	79.4	1,230.3	2.00	-2.00	0.00
5,720.0	7.37	176.30	5,532.3	-1,233.1	79.7	1,235.7	2.00	-2.00	0.00
5,760.0	6.57	176.30	5,572.0	-1,238.0	80.0	1,240.6	2.00	-2.00	0.00
5,800.0	5.77	176.30	5,611.8	-1,242.3	80.3	1,244.9	2.00	-2.00	0.00
5,840.0	4.97	176.30	5,651.6	-1,246.0	80.5	1,248.6	2.00	-2.00	0.00
5,880.0	4.17	176.30	5,691.5	-1,249.2	80.7	1,251.8	2.00	-2.00	0.00
5,920.0	3.37	176.30	5,731.4	-1,251.8	80.9	1,254.4	2.00	-2.00	0.00
5,960.0	2.57	176.30	5,771.3	-1,253.9	81.0	1,256.5	2.00	-2.00	0.00
6,000.0	1.77	176.30	5,811.3	-1,255.4	81.1	1,258.0	2.00	-2.00	0.00
6,040.0	0.97	176.30	5,851.3	-1,256.4	81.2	1,259.0	2.00	-2.00	0.00
6,080.0	0.17	176.30	5,891.3	-1,256.8	81.2	1,259.4	2.00	-2.00	0.00
6,088.7	0.00	0.00	5,900.0	-1,256.8	81.2	1,259.4	2.00	-2.00	0.00
TARGET BHL 1950°FNL, 1990°FEL									

Database:	Landmark	Local Co-ordinate Reference:	Well Vista USX WW33-07D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 5084.0ft (Original Well Elev)
Project:	SEC.33-T1N-R66W	MD Reference:	WELL @ 5084.0ft (Original Well Elev)
Site:	Stewardson USX WW33-01D Pad Sec.33-T1N-R66W	North Reference:	True
Well:	Vista USX WW33-07D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Vista USX WW33-07D Plan #1 (6-16-11)		

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)
6,120.0	0.00	0.00	5,931.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
6,160.0	0.00	0.00	5,971.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
6,200.0	0.00	0.00	6,011.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
6,240.0	0.00	0.00	6,051.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
6,280.0	0.00	0.00	6,091.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
6,320.0	0.00	0.00	6,131.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
6,360.0	0.00	0.00	6,171.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
6,400.0	0.00	0.00	6,211.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
6,440.0	0.00	0.00	6,251.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
6,480.0	0.00	0.00	6,291.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
6,520.0	0.00	0.00	6,331.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
6,560.0	0.00	0.00	6,371.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
6,600.0	0.00	0.00	6,411.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
6,640.0	0.00	0.00	6,451.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
6,680.0	0.00	0.00	6,491.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
6,720.0	0.00	0.00	6,531.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
6,760.0	0.00	0.00	6,571.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
6,800.0	0.00	0.00	6,611.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
6,840.0	0.00	0.00	6,651.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
6,880.0	0.00	0.00	6,691.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
6,920.0	0.00	0.00	6,731.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
6,960.0	0.00	0.00	6,771.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,000.0	0.00	0.00	6,811.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,040.0	0.00	0.00	6,851.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,080.0	0.00	0.00	6,891.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,120.0	0.00	0.00	6,931.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,160.0	0.00	0.00	6,971.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,200.0	0.00	0.00	7,011.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,240.0	0.00	0.00	7,051.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,280.0	0.00	0.00	7,091.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,320.0	0.00	0.00	7,131.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,360.0	0.00	0.00	7,171.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,400.0	0.00	0.00	7,211.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,423.7	0.00	0.00	7,235.0	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
NIORARA - LEGAL BOX 400' X 400' 1982'FNL & 1974'FEL - TARGET CIRCLE 1950'FNL & 1990'FEL									
7,440.0	0.00	0.00	7,251.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,480.0	0.00	0.00	7,291.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,520.0	0.00	0.00	7,331.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,560.0	0.00	0.00	7,371.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,600.0	0.00	0.00	7,411.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,640.0	0.00	0.00	7,451.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,680.0	0.00	0.00	7,491.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,720.0	0.00	0.00	7,531.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,760.0	0.00	0.00	7,571.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,800.0	0.00	0.00	7,611.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,840.0	0.00	0.00	7,651.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,856.7	0.00	0.00	7,668.0	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
CODELL									
7,880.0	0.00	0.00	7,691.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,920.0	0.00	0.00	7,731.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
7,960.0	0.00	0.00	7,771.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
8,000.0	0.00	0.00	7,811.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
8,040.0	0.00	0.00	7,851.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Vista USX WW33-07D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 5084.0ft (Original Well Elev)
Project:	SEC.33-T1N-R66W	MD Reference:	WELL @ 5084.0ft (Original Well Elev)
Site:	Stewardson USX WW33-01D Pad Sec.33-T1N-R66W	North Reference:	True
Well:	Vista USX WW33-07D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Vista USX WW33-07D Plan #1 (6-16-11)		

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	7,891.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
8,120.0	0.00	0.00	7,931.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
8,160.0	0.00	0.00	7,971.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
8,200.0	0.00	0.00	8,011.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
8,219.7	0.00	0.00	8,031.0	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
D-SAND									
8,240.0	0.00	0.00	8,051.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
8,280.0	0.00	0.00	8,091.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
8,284.7	0.00	0.00	8,096.0	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
J-SAND									
8,320.0	0.00	0.00	8,131.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
8,360.0	0.00	0.00	8,171.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
8,400.0	0.00	0.00	8,211.3	-1,256.8	81.2	1,259.4	0.00	0.00	0.00
8,434.7	0.00	0.00	8,246.0	-1,256.8	81.2	1,259.4	0.00	0.00	0.00

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	7,235.0	-1,288.8	97.2	1,247,131.24	3,201,755.02	40.009512	-104.779733
- plan misses target center by 35.8ft at 7423.7ft MD (7235.0 TVD, -1256.8 N, 81.2 E)									
- Rectangle (sides W400.0 H400.0 D1,011.0)									
TARGET BHL 1950'F	0.00	0.00	5,900.0	-1,256.8	81.2	1,247,163.12	3,201,738.80	40.009600	-104.779790
- plan hits target center									
- Point									
TARGET CIRCLE 1950'F	0.00	0.00	7,235.0	-1,256.8	81.2	1,247,163.12	3,201,738.80	40.009600	-104.779790
- plan hits target center									
- Circle (radius 75.0)									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
1,100.0	1,100.0	8 5/8"	8-5/8	12-1/4

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
7,423.7	7,235.0	NIOBRARA		0.00	
7,856.7	7,668.0	CODELL		0.00	
8,219.7	8,031.0	D-SAND		0.00	
8,284.7	8,096.0	J-SAND		0.00	