

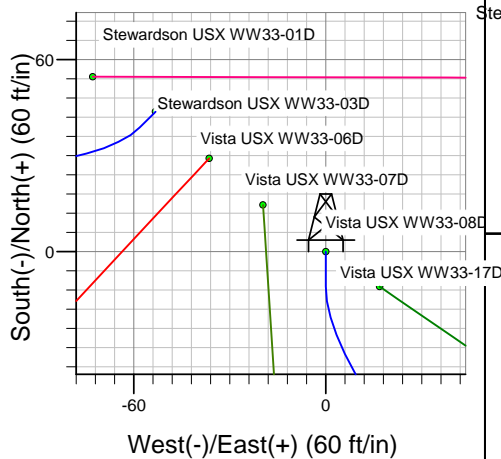
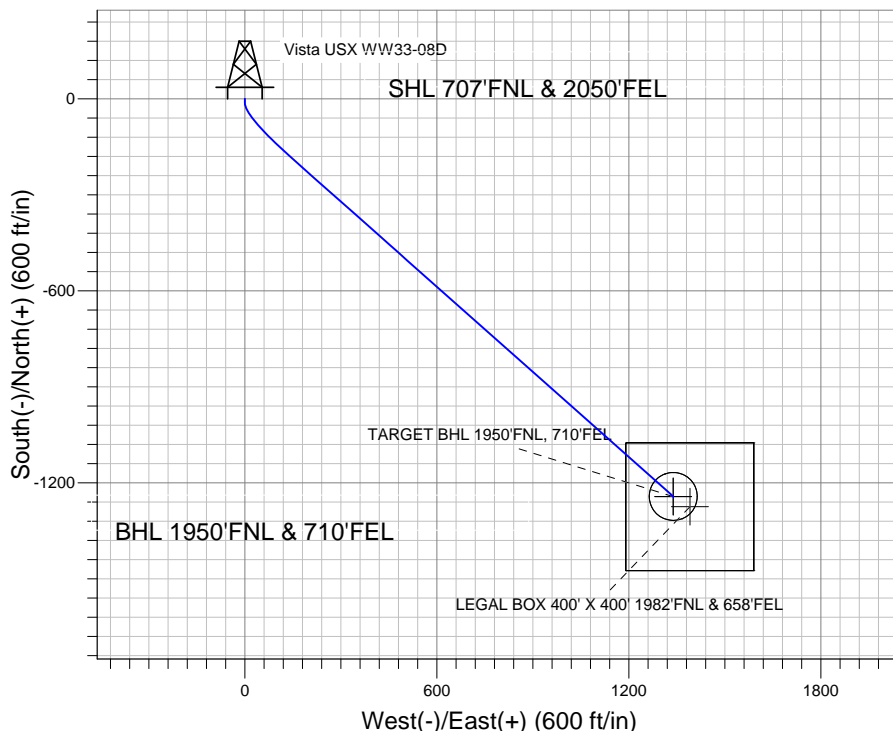
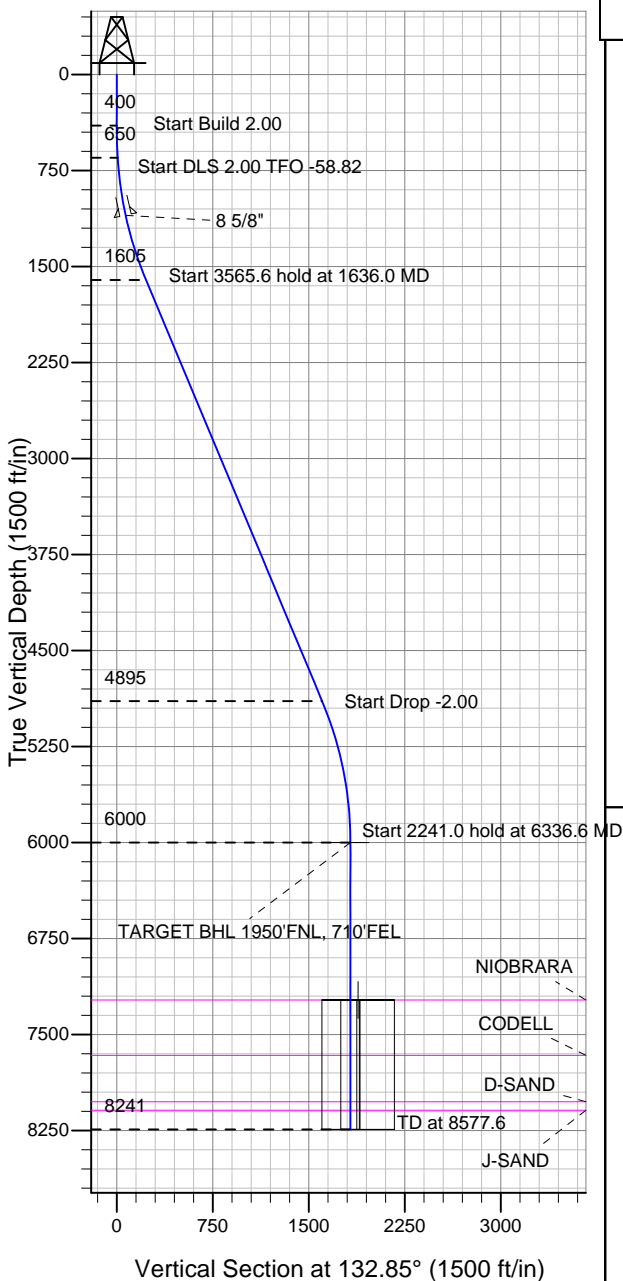
### Well Name: Vista USX WW33-08D

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 1248404.74 3201667.09 40.013010 -104.780010  
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 WW33-08D  
Vista USX WW33-08D Plan #1 (6-16-11)  
9:17, 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, 710'FEL	6000.0	-1242.2	1339.0	40.009600	-104.775230	Point
LEGAL BOX 400' X 400' 1982'FNL & 658'FEL	7230.0	-1274.2	1391.0	40.009512	-104.775044	Rectangle (Sides: L400.0 W400.0)
TARGET CIRCLE 1950'FNL & 710'FEL	7230.0	-1242.2	1339.0	40.009600	-104.775230	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	400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	
3	650.0	5.00	180.00	649.7	-10.9	0.0	2.00	180.00	7.4	
4	1636.0	22.70	131.58	1605.1	-181.8	143.7	2.00	-58.82	229.0	
5	5201.6	22.70	131.58	4894.5	-1094.9	1173.0	0.00	0.00	1604.6	
6	6336.6	0.00	0.00	6000.0	-1242.2	1339.0	2.00	180.00	1826.4	TARGET BHL 1950'FNL, 710'FEL
7	8577.6	0.00	0.00	8241.0	-1242.2	1339.0	0.00	0.00	1826.4	



## **Directional**

### **NOBLE ENERGY INC WELD COUNTY CO**

**SEC.33-T1N-R66W**

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

**Vista USX WW33-08D**

**Wellbore #1**

**Plan: Vista USX WW33-08D Plan #1 (6-16-11)**

### **Standard Planning Report**

**22 June, 2011**



<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Vista USX WW33-08D
<b>Company:</b>	NOBLE ENERGY INC WELD COUNTY CO	<b>TVD Reference:</b>	WELL @ 5084.0ft (Original Well Elev)
<b>Project:</b>	SEC.33-T1N-R66W	<b>MD Reference:</b>	WELL @ 5084.0ft (Original Well Elev)
<b>Site:</b>	Stewardson USX WW33-01D Pad Sec.33-T1N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	Vista USX WW33-08D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Vista USX WW33-08D Plan #1 (6-16-11)		

<b>Project</b>	SEC.33-T1N-R66W, Weld County, Colorado		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		Using Well Reference Point
<b>Map Zone:</b>	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 WW33-08D					
Well Position	+N/-S	-54.7 ft	Northing:	1,248,404.74 ft	Latitude:	40.013010
	+E/-W	72.8 ft	Easting:	3,201,667.09 ft	Longitude:	-104.780010
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,071.0 ft

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

<b>Design</b>	Vista USX WW33-08D Plan #1 (6-16-11)			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	132.85

<b>Plan Sections</b>										
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	
650.0	5.00	180.00	649.7	-10.9	0.0	2.00	2.00	0.00	180.00	
1,636.0	22.70	131.58	1,605.1	-181.8	143.7	2.00	1.80	-4.91	-58.82	
5,201.6	22.70	131.58	4,894.5	-1,094.9	1,173.0	0.00	0.00	0.00	0.00	
6,336.6	0.00	0.00	6,000.0	-1,242.2	1,339.0	2.00	-2.00	0.00	180.00	TARGET BHL 195C
8,577.6	0.00	0.00	8,241.0	-1,242.2	1,339.0	0.00	0.00	0.00	0.00	

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Vista USX WW33-08D
<b>Company:</b>	NOBLE ENERGY INC WELD COUNTY CO	<b>TVD Reference:</b>	WELL @ 5084.0ft (Original Well Elev)
<b>Project:</b>	SEC.33-T1N-R66W	<b>MD Reference:</b>	WELL @ 5084.0ft (Original Well Elev)
<b>Site:</b>	Stewardson USX WW33-01D Pad	<b>North Reference:</b>	True
<b>Well:</b>	Vista USX WW33-08D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Vista USX WW33-08D 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	0.80	180.00	440.0	-0.3	0.0	0.2	2.00	2.00	0.00
480.0	1.60	180.00	480.0	-1.1	0.0	0.8	2.00	2.00	0.00
520.0	2.40	180.00	520.0	-2.5	0.0	1.7	2.00	2.00	0.00
560.0	3.20	180.00	559.9	-4.5	0.0	3.0	2.00	2.00	0.00
600.0	4.00	180.00	599.8	-7.0	0.0	4.7	2.00	2.00	0.00
640.0	4.80	180.00	639.7	-10.0	0.0	6.8	2.00	2.00	0.00
650.0	5.00	180.00	649.7	-10.9	0.0	7.4	2.00	2.00	0.00
680.0	5.34	174.47	679.6	-13.6	0.1	9.3	2.00	1.12	-18.43
720.0	5.85	168.16	719.4	-17.4	0.7	12.4	2.00	1.28	-15.77
760.0	6.42	162.92	759.1	-21.6	1.8	16.0	2.00	1.43	-13.11
800.0	7.04	158.56	798.9	-26.0	3.4	20.1	2.00	1.54	-10.90
840.0	7.69	154.92	838.5	-30.7	5.4	24.8	2.00	1.63	-9.11
880.0	8.36	151.85	878.1	-35.7	7.9	30.1	2.00	1.69	-7.67
920.0	9.06	149.25	917.7	-41.0	10.9	35.8	2.00	1.74	-6.51
960.0	9.77	147.01	957.1	-46.5	14.3	42.1	2.00	1.78	-5.58
1,000.0	10.50	145.08	996.5	-52.3	18.3	49.0	2.00	1.81	-4.82
1,040.0	11.23	143.40	1,035.8	-58.5	22.7	56.4	2.00	1.84	-4.20
1,080.0	11.97	141.93	1,075.0	-64.9	27.6	64.3	2.00	1.86	-3.69
1,105.6	12.45	141.07	1,100.0	-69.1	30.9	69.7	2.00	1.87	-3.33
<b>8 5/8"</b>									
1,120.0	12.72	140.62	1,114.1	-71.5	32.9	72.8	2.00	1.88	-3.14
1,160.0	13.48	139.46	1,153.0	-78.5	38.7	81.8	2.00	1.89	-2.91
1,200.0	14.24	138.42	1,191.9	-85.7	45.0	91.3	2.00	1.90	-2.60
1,240.0	15.00	137.48	1,230.6	-93.2	51.8	101.3	2.00	1.91	-2.34
1,280.0	15.77	136.63	1,269.1	-101.0	59.0	111.9	2.00	1.92	-2.12
1,320.0	16.54	135.86	1,307.5	-109.0	66.7	123.0	2.00	1.93	-1.93
1,360.0	17.31	135.16	1,345.8	-117.3	74.9	134.7	2.00	1.93	-1.76
1,400.0	18.09	134.51	1,383.9	-125.9	83.5	146.8	2.00	1.94	-1.61
1,440.0	18.87	133.92	1,421.9	-134.7	92.6	159.5	2.00	1.94	-1.49
1,480.0	19.65	133.37	1,459.6	-143.8	102.1	172.7	2.00	1.95	-1.37
1,520.0	20.43	132.86	1,497.2	-153.2	112.2	186.4	2.00	1.95	-1.27
1,560.0	21.21	132.39	1,534.6	-162.8	122.6	200.6	2.00	1.96	-1.18
1,600.0	21.99	131.95	1,571.8	-172.7	133.5	215.3	2.00	1.96	-1.10
1,636.0	22.70	131.58	1,605.1	-181.8	143.7	229.0	2.00	1.96	-1.03
1,640.0	22.70	131.58	1,608.8	-182.8	144.9	230.6	0.00	0.00	0.00
1,680.0	22.70	131.58	1,645.7	-193.1	156.4	246.0	0.00	0.00	0.00
1,720.0	22.70	131.58	1,682.6	-203.3	168.0	261.4	0.00	0.00	0.00
1,760.0	22.70	131.58	1,719.5	-213.6	179.5	276.9	0.00	0.00	0.00
1,800.0	22.70	131.58	1,756.4	-223.8	191.1	292.3	0.00	0.00	0.00
1,840.0	22.70	131.58	1,793.3	-234.1	202.6	307.7	0.00	0.00	0.00
1,880.0	22.70	131.58	1,830.2	-244.3	214.2	323.2	0.00	0.00	0.00
1,920.0	22.70	131.58	1,867.1	-254.5	225.7	338.6	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Vista USX WW33-08D
<b>Company:</b>	NOBLE ENERGY INC WELD COUNTY CO	<b>TVD Reference:</b>	WELL @ 5084.0ft (Original Well Elev)
<b>Project:</b>	SEC.33-T1N-R66W	<b>MD Reference:</b>	WELL @ 5084.0ft (Original Well Elev)
<b>Site:</b>	Stewardson USX WW33-01D Pad Sec.33-T1N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	Vista USX WW33-08D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Vista USX WW33-08D 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)
1,960.0	22.70	131.58	1,904.0	-264.8	237.3	354.0	0.00	0.00	0.00
2,000.0	22.70	131.58	1,940.9	-275.0	248.8	369.5	0.00	0.00	0.00
2,040.0	22.70	131.58	1,977.8	-285.3	260.4	384.9	0.00	0.00	0.00
2,080.0	22.70	131.58	2,014.7	-295.5	271.9	400.3	0.00	0.00	0.00
2,120.0	22.70	131.58	2,051.6	-305.8	283.5	415.7	0.00	0.00	0.00
2,160.0	22.70	131.58	2,088.5	-316.0	295.0	431.2	0.00	0.00	0.00
2,200.0	22.70	131.58	2,125.4	-326.2	306.5	446.6	0.00	0.00	0.00
2,240.0	22.70	131.58	2,162.3	-336.5	318.1	462.0	0.00	0.00	0.00
2,280.0	22.70	131.58	2,199.2	-346.7	329.6	477.5	0.00	0.00	0.00
2,320.0	22.70	131.58	2,236.1	-357.0	341.2	492.9	0.00	0.00	0.00
2,360.0	22.70	131.58	2,273.0	-367.2	352.7	508.3	0.00	0.00	0.00
2,400.0	22.70	131.58	2,309.9	-377.5	364.3	523.8	0.00	0.00	0.00
2,440.0	22.70	131.58	2,346.8	-387.7	375.8	539.2	0.00	0.00	0.00
2,480.0	22.70	131.58	2,383.7	-397.9	387.4	554.6	0.00	0.00	0.00
2,520.0	22.70	131.58	2,420.6	-408.2	398.9	570.1	0.00	0.00	0.00
2,560.0	22.70	131.58	2,457.5	-418.4	410.5	585.5	0.00	0.00	0.00
2,600.0	22.70	131.58	2,494.4	-428.7	422.0	600.9	0.00	0.00	0.00
2,640.0	22.70	131.58	2,531.3	-438.9	433.6	616.4	0.00	0.00	0.00
2,680.0	22.70	131.58	2,568.2	-449.2	445.1	631.8	0.00	0.00	0.00
2,720.0	22.70	131.58	2,605.1	-459.4	456.7	647.2	0.00	0.00	0.00
2,760.0	22.70	131.58	2,642.0	-469.7	468.2	662.7	0.00	0.00	0.00
2,800.0	22.70	131.58	2,678.9	-479.9	479.7	678.1	0.00	0.00	0.00
2,840.0	22.70	131.58	2,715.8	-490.1	491.3	693.5	0.00	0.00	0.00
2,880.0	22.70	131.58	2,752.7	-500.4	502.8	709.0	0.00	0.00	0.00
2,920.0	22.70	131.58	2,789.6	-510.6	514.4	724.4	0.00	0.00	0.00
2,960.0	22.70	131.58	2,826.5	-520.9	525.9	739.8	0.00	0.00	0.00
3,000.0	22.70	131.58	2,863.4	-531.1	537.5	755.2	0.00	0.00	0.00
3,040.0	22.70	131.58	2,900.3	-541.4	549.0	770.7	0.00	0.00	0.00
3,080.0	22.70	131.58	2,937.2	-551.6	560.6	786.1	0.00	0.00	0.00
3,120.0	22.70	131.58	2,974.1	-561.8	572.1	801.5	0.00	0.00	0.00
3,160.0	22.70	131.58	3,011.0	-572.1	583.7	817.0	0.00	0.00	0.00
3,200.0	22.70	131.58	3,047.9	-582.3	595.2	832.4	0.00	0.00	0.00
3,240.0	22.70	131.58	3,084.8	-592.6	606.8	847.8	0.00	0.00	0.00
3,280.0	22.70	131.58	3,121.7	-602.8	618.3	863.3	0.00	0.00	0.00
3,320.0	22.70	131.58	3,158.6	-613.1	629.9	878.7	0.00	0.00	0.00
3,360.0	22.70	131.58	3,195.5	-623.3	641.4	894.1	0.00	0.00	0.00
3,400.0	22.70	131.58	3,232.4	-633.5	652.9	909.6	0.00	0.00	0.00
3,440.0	22.70	131.58	3,269.3	-643.8	664.5	925.0	0.00	0.00	0.00
3,480.0	22.70	131.58	3,306.2	-654.0	676.0	940.4	0.00	0.00	0.00
3,520.0	22.70	131.58	3,343.1	-664.3	687.6	955.9	0.00	0.00	0.00
3,560.0	22.70	131.58	3,380.0	-674.5	699.1	971.3	0.00	0.00	0.00
3,600.0	22.70	131.58	3,417.0	-684.8	710.7	986.7	0.00	0.00	0.00
3,640.0	22.70	131.58	3,453.9	-695.0	722.2	1,002.2	0.00	0.00	0.00
3,680.0	22.70	131.58	3,490.8	-705.3	733.8	1,017.6	0.00	0.00	0.00
3,720.0	22.70	131.58	3,527.7	-715.5	745.3	1,033.0	0.00	0.00	0.00
3,760.0	22.70	131.58	3,564.6	-725.7	756.9	1,048.4	0.00	0.00	0.00
3,800.0	22.70	131.58	3,601.5	-736.0	768.4	1,063.9	0.00	0.00	0.00
3,840.0	22.70	131.58	3,638.4	-746.2	780.0	1,079.3	0.00	0.00	0.00
3,880.0	22.70	131.58	3,675.3	-756.5	791.5	1,094.7	0.00	0.00	0.00
3,920.0	22.70	131.58	3,712.2	-766.7	803.0	1,110.2	0.00	0.00	0.00
3,960.0	22.70	131.58	3,749.1	-777.0	814.6	1,125.6	0.00	0.00	0.00
4,000.0	22.70	131.58	3,786.0	-787.2	826.1	1,141.0	0.00	0.00	0.00
4,040.0	22.70	131.58	3,822.9	-797.4	837.7	1,156.5	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Vista USX WW33-08D
<b>Company:</b>	NOBLE ENERGY INC WELD COUNTY CO	<b>TVD Reference:</b>	WELL @ 5084.0ft (Original Well Elev)
<b>Project:</b>	SEC.33-T1N-R66W	<b>MD Reference:</b>	WELL @ 5084.0ft (Original Well Elev)
<b>Site:</b>	Stewardson USX WW33-01D Pad	<b>North Reference:</b>	True
	Sec.33-T1N-R66W		
<b>Well:</b>	Vista USX WW33-08D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Vista USX WW33-08D 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)
4,080.0	22.70	131.58	3,859.8	-807.7	849.2	1,171.9	0.00	0.00	0.00
4,120.0	22.70	131.58	3,896.7	-817.9	860.8	1,187.3	0.00	0.00	0.00
4,160.0	22.70	131.58	3,933.6	-828.2	872.3	1,202.8	0.00	0.00	0.00
4,200.0	22.70	131.58	3,970.5	-838.4	883.9	1,218.2	0.00	0.00	0.00
4,240.0	22.70	131.58	4,007.4	-848.7	895.4	1,233.6	0.00	0.00	0.00
4,280.0	22.70	131.58	4,044.3	-858.9	907.0	1,249.1	0.00	0.00	0.00
4,320.0	22.70	131.58	4,081.2	-869.1	918.5	1,264.5	0.00	0.00	0.00
4,360.0	22.70	131.58	4,118.1	-879.4	930.1	1,279.9	0.00	0.00	0.00
4,400.0	22.70	131.58	4,155.0	-889.6	941.6	1,295.4	0.00	0.00	0.00
4,440.0	22.70	131.58	4,191.9	-899.9	953.2	1,310.8	0.00	0.00	0.00
4,480.0	22.70	131.58	4,228.8	-910.1	964.7	1,326.2	0.00	0.00	0.00
4,520.0	22.70	131.58	4,265.7	-920.4	976.2	1,341.6	0.00	0.00	0.00
4,560.0	22.70	131.58	4,302.6	-930.6	987.8	1,357.1	0.00	0.00	0.00
4,600.0	22.70	131.58	4,339.5	-940.9	999.3	1,372.5	0.00	0.00	0.00
4,640.0	22.70	131.58	4,376.4	-951.1	1,010.9	1,387.9	0.00	0.00	0.00
4,680.0	22.70	131.58	4,413.3	-961.3	1,022.4	1,403.4	0.00	0.00	0.00
4,720.0	22.70	131.58	4,450.2	-971.6	1,034.0	1,418.8	0.00	0.00	0.00
4,760.0	22.70	131.58	4,487.1	-981.8	1,045.5	1,434.2	0.00	0.00	0.00
4,800.0	22.70	131.58	4,524.0	-992.1	1,057.1	1,449.7	0.00	0.00	0.00
4,840.0	22.70	131.58	4,560.9	-1,002.3	1,068.6	1,465.1	0.00	0.00	0.00
4,880.0	22.70	131.58	4,597.8	-1,012.6	1,080.2	1,480.5	0.00	0.00	0.00
4,920.0	22.70	131.58	4,634.7	-1,022.8	1,091.7	1,496.0	0.00	0.00	0.00
4,960.0	22.70	131.58	4,671.6	-1,033.0	1,103.3	1,511.4	0.00	0.00	0.00
5,000.0	22.70	131.58	4,708.5	-1,043.3	1,114.8	1,526.8	0.00	0.00	0.00
5,040.0	22.70	131.58	4,745.4	-1,053.5	1,126.4	1,542.3	0.00	0.00	0.00
5,080.0	22.70	131.58	4,782.3	-1,063.8	1,137.9	1,557.7	0.00	0.00	0.00
5,120.0	22.70	131.58	4,819.2	-1,074.0	1,149.4	1,573.1	0.00	0.00	0.00
5,160.0	22.70	131.58	4,856.1	-1,084.3	1,161.0	1,588.6	0.00	0.00	0.00
5,200.0	22.70	131.58	4,893.0	-1,094.5	1,172.5	1,604.0	0.00	0.00	0.00
5,201.6	22.70	131.58	4,894.5	-1,094.9	1,173.0	1,604.6	0.00	0.00	0.00
5,240.0	21.93	131.58	4,930.0	-1,104.6	1,183.9	1,619.2	2.00	-2.00	0.00
5,280.0	21.13	131.58	4,967.2	-1,114.3	1,194.9	1,633.9	2.00	-2.00	0.00
5,320.0	20.33	131.58	5,004.6	-1,123.7	1,205.5	1,648.0	2.00	-2.00	0.00
5,360.0	19.53	131.58	5,042.2	-1,132.8	1,215.7	1,661.6	2.00	-2.00	0.00
5,400.0	18.73	131.58	5,080.0	-1,141.5	1,225.5	1,674.8	2.00	-2.00	0.00
5,440.0	17.93	131.58	5,118.0	-1,149.8	1,234.9	1,687.3	2.00	-2.00	0.00
5,480.0	17.13	131.58	5,156.1	-1,157.8	1,243.9	1,699.4	2.00	-2.00	0.00
5,520.0	16.33	131.58	5,194.5	-1,165.5	1,252.5	1,710.9	2.00	-2.00	0.00
5,560.0	15.53	131.58	5,232.9	-1,172.8	1,260.7	1,721.9	2.00	-2.00	0.00
5,600.0	14.73	131.58	5,271.5	-1,179.7	1,268.6	1,732.3	2.00	-2.00	0.00
5,640.0	13.93	131.58	5,310.3	-1,186.3	1,276.0	1,742.2	2.00	-2.00	0.00
5,680.0	13.13	131.58	5,349.2	-1,192.5	1,283.0	1,751.6	2.00	-2.00	0.00
5,720.0	12.33	131.58	5,388.2	-1,198.3	1,289.6	1,760.4	2.00	-2.00	0.00
5,760.0	11.53	131.58	5,427.3	-1,203.8	1,295.7	1,768.6	2.00	-2.00	0.00
5,800.0	10.73	131.58	5,466.6	-1,208.9	1,301.5	1,776.4	2.00	-2.00	0.00
5,840.0	9.93	131.58	5,505.9	-1,213.7	1,306.9	1,783.5	2.00	-2.00	0.00
5,880.0	9.13	131.58	5,545.4	-1,218.1	1,311.8	1,790.1	2.00	-2.00	0.00
5,920.0	8.33	131.58	5,584.9	-1,222.1	1,316.4	1,796.2	2.00	-2.00	0.00
5,960.0	7.53	131.58	5,624.5	-1,225.8	1,320.5	1,801.7	2.00	-2.00	0.00
6,000.0	6.73	131.58	5,664.2	-1,229.1	1,324.2	1,806.7	2.00	-2.00	0.00
6,040.0	5.93	131.58	5,704.0	-1,232.0	1,327.5	1,811.1	2.00	-2.00	0.00
6,080.0	5.13	131.58	5,743.8	-1,234.6	1,330.4	1,815.0	2.00	-2.00	0.00
6,120.0	4.33	131.58	5,783.7	-1,236.7	1,332.9	1,818.3	2.00	-2.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Vista USX WW33-08D
<b>Company:</b>	NOBLE ENERGY INC WELD COUNTY CO	<b>TVD Reference:</b>	WELL @ 5084.0ft (Original Well Elev)
<b>Project:</b>	SEC.33-T1N-R66W	<b>MD Reference:</b>	WELL @ 5084.0ft (Original Well Elev)
<b>Site:</b>	Stewardson USX WW33-01D Pad Sec.33-T1N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	Vista USX WW33-08D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Vista USX WW33-08D 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)
6,160.0	3.53	131.58	5,823.6	-1,238.6	1,334.9	1,821.0	2.00	-2.00	0.00
6,200.0	2.73	131.58	5,863.5	-1,240.0	1,336.6	1,823.2	2.00	-2.00	0.00
6,240.0	1.93	131.58	5,903.5	-1,241.1	1,337.8	1,824.8	2.00	-2.00	0.00
6,280.0	1.13	131.58	5,943.4	-1,241.8	1,338.6	1,825.9	2.00	-2.00	0.00
6,320.0	0.33	131.58	5,983.4	-1,242.1	1,339.0	1,826.4	2.00	-2.00	0.00
6,336.6	0.00	0.00	6,000.0	-1,242.2	1,339.0	1,826.4	2.00	-2.00	0.00
<b>TARGET BHL 1950'FNL, 710'FEL</b>									
6,360.0	0.00	0.00	6,023.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
6,400.0	0.00	0.00	6,063.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
6,440.0	0.00	0.00	6,103.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
6,480.0	0.00	0.00	6,143.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
6,520.0	0.00	0.00	6,183.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
6,560.0	0.00	0.00	6,223.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
6,600.0	0.00	0.00	6,263.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
6,640.0	0.00	0.00	6,303.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
6,680.0	0.00	0.00	6,343.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
6,720.0	0.00	0.00	6,383.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
6,760.0	0.00	0.00	6,423.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
6,800.0	0.00	0.00	6,463.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
6,840.0	0.00	0.00	6,503.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
6,880.0	0.00	0.00	6,543.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
6,920.0	0.00	0.00	6,583.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
6,960.0	0.00	0.00	6,623.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,000.0	0.00	0.00	6,663.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,040.0	0.00	0.00	6,703.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,080.0	0.00	0.00	6,743.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,120.0	0.00	0.00	6,783.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,160.0	0.00	0.00	6,823.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,200.0	0.00	0.00	6,863.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,240.0	0.00	0.00	6,903.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,280.0	0.00	0.00	6,943.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,320.0	0.00	0.00	6,983.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,360.0	0.00	0.00	7,023.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,400.0	0.00	0.00	7,063.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,440.0	0.00	0.00	7,103.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,480.0	0.00	0.00	7,143.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,520.0	0.00	0.00	7,183.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,560.0	0.00	0.00	7,223.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,566.6	0.00	0.00	7,230.0	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
<b>NIORARA - TARGET CIRCLE 1950'FNL &amp; 710'FEL - LEGAL BOX 400' X 400' 1982'FNL &amp; 658'FEL</b>									
7,600.0	0.00	0.00	7,263.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,640.0	0.00	0.00	7,303.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,680.0	0.00	0.00	7,343.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,720.0	0.00	0.00	7,383.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,760.0	0.00	0.00	7,423.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,800.0	0.00	0.00	7,463.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,840.0	0.00	0.00	7,503.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,880.0	0.00	0.00	7,543.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,920.0	0.00	0.00	7,583.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,960.0	0.00	0.00	7,623.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
7,999.6	0.00	0.00	7,663.0	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
<b>CODELL</b>									
8,000.0	0.00	0.00	7,663.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00



<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Vista USX WW33-08D
<b>Company:</b>	NOBLE ENERGY INC WELD COUNTY CO	<b>TVD Reference:</b>	WELL @ 5084.0ft (Original Well Elev)
<b>Project:</b>	SEC.33-T1N-R66W	<b>MD Reference:</b>	WELL @ 5084.0ft (Original Well Elev)
<b>Site:</b>	Stewardson USX WW33-01D Pad Sec.33-T1N-R66W	<b>North Reference:</b>	True
<b>Well:</b>	Vista USX WW33-08D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Vista USX WW33-08D 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)
8,040.0	0.00	0.00	7,703.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
8,080.0	0.00	0.00	7,743.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
8,120.0	0.00	0.00	7,783.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
8,160.0	0.00	0.00	7,823.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
8,200.0	0.00	0.00	7,863.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
8,240.0	0.00	0.00	7,903.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
8,280.0	0.00	0.00	7,943.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
8,320.0	0.00	0.00	7,983.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
8,360.0	0.00	0.00	8,023.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
8,362.6	0.00	0.00	8,026.0	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
<b>D-SAND</b>									
8,400.0	0.00	0.00	8,063.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
8,427.6	0.00	0.00	8,091.0	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
<b>J-SAND</b>									
8,440.0	0.00	0.00	8,103.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
8,480.0	0.00	0.00	8,143.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
8,520.0	0.00	0.00	8,183.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
8,560.0	0.00	0.00	8,223.4	-1,242.2	1,339.0	1,826.4	0.00	0.00	0.00
8,577.6	0.00	0.00	8,241.0	-1,242.2	1,339.0	1,826.4	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									
TARGET BHL 1950'F	0.00	0.00	6,000.0	-1,242.2	1,339.0	1,247,173.53	3,203,016.08	40.009600	-104.775230
- plan hits target center									
- Point									
TARGET CIRCLE 1950'F	0.00	0.00	7,230.0	-1,242.2	1,339.0	1,247,173.53	3,203,016.08	40.009600	-104.775230
- plan hits target center									
- Circle (radius 75.0)									
LEGAL BOX 400' X 400'F	0.00	0.00	7,230.0	-1,274.2	1,391.0	1,247,141.93	3,203,068.34	40.009512	-104.775044
- plan misses target center by 61.1ft at 7566.6ft MD (7230.0 TVD, -1242.2 N, 1339.0 E)									
- Rectangle (sides W400.0 H400.0 D1,011.0)									

**Casing Points**

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
1,105.6	1,100.0	8 5/8"	8-5/8	12-1/4



<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Vista USX WW33-08D
<b>Company:</b>	NOBLE ENERGY INC WELD COUNTY CO	<b>TVD Reference:</b>	WELL @ 5084.0ft (Original Well Elev)
<b>Project:</b>	SEC.33-T1N-R66W	<b>MD Reference:</b>	WELL @ 5084.0ft (Original Well Elev)
<b>Site:</b>	Stewardson USX WW33-01D Pad	<b>North Reference:</b>	True
	Sec.33-T1N-R66W		
<b>Well:</b>	Vista USX WW33-08D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Vista USX WW33-08D Plan #1 (6-16-11)		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
7,566.6	7,230.0	NIOBRARA		0.00		
7,999.6	7,663.0	CODELL		0.00		
8,362.6	8,026.0	D-SAND		0.00		
8,427.6	8,091.0	J-SAND		0.00		