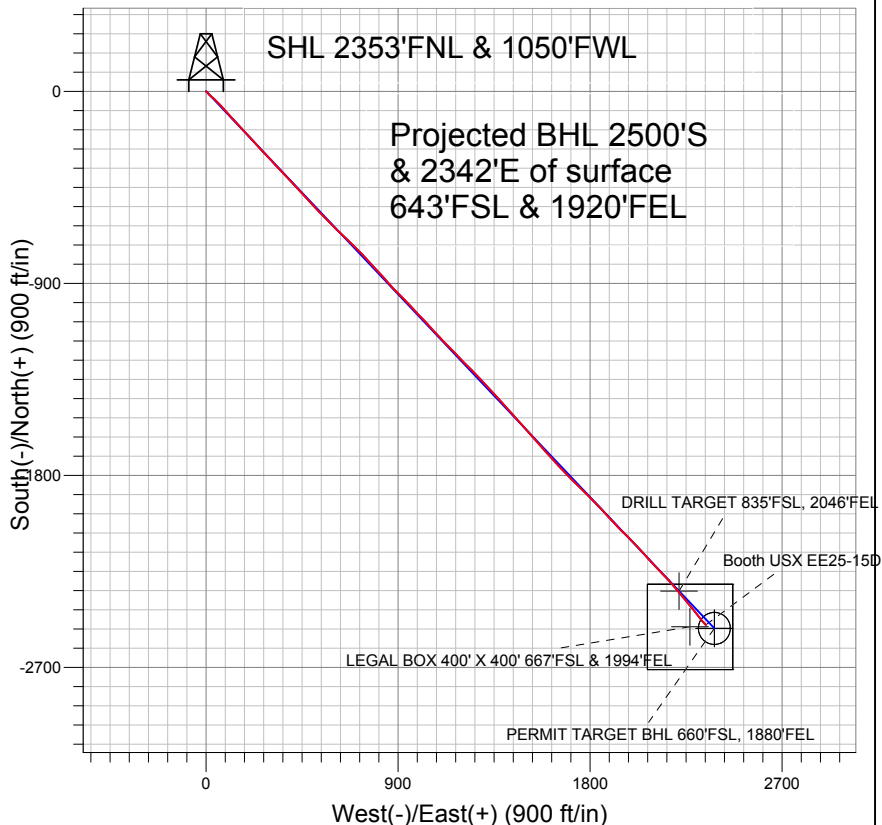
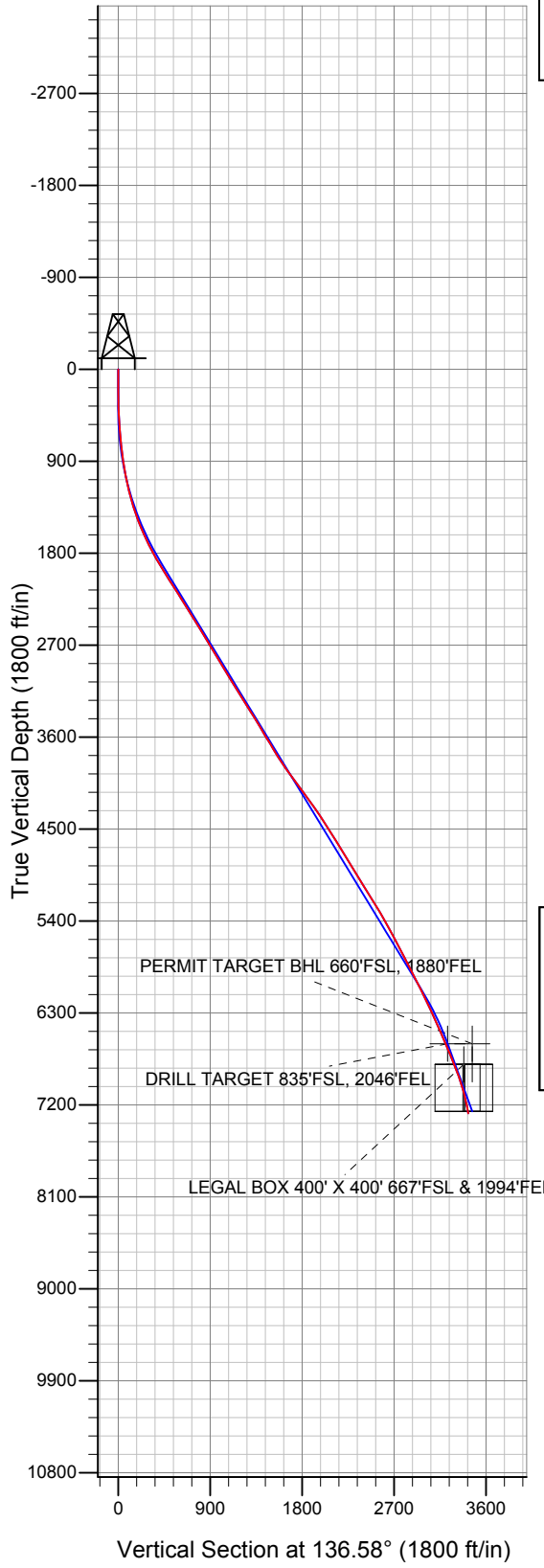


Well Name: **Booth USX EE25-15D**

Surface Location: Booth USX EE25-02D Pad Sec.25-T7N-R65W
 North American Datum 1983 US State Plane 1983 Colorado Northern Zone

	Ground Elevation: 4819.0				
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	1442832.64	3245459.03	40.545620	-104.616760
		Original Well Elev WELL @ 4832.0ft (Original Well Elev)			

NOBLE ENERGY INC WELD COUNTY CO



LEGEND

- Booth USX EE25-15D, Wellbore #1, Noble Booth USX EE25-15D Plan #1 (7-22-11) V0
- Wellbore #1
- Survey #1

Final Survey Plot

Projected Final Survey -
 8170'MD & 7282'TVD @ 3426'VS
 10.7 deg Inc 135.3 deg AZ

Project: SEC.25-T7N-R65W
 Site: Booth USX EE25-02D Pad Sec.25-T7N-R65W
 Well: Booth USX EE25-15D
 Plan: Wellbore #1



Directional

NOBLE ENERGY INC WELD COUNTY CO

SEC.25-T7N-R65W

Booth USX EE25-02D Pad Sec.25-T7N-R65W

Booth USX EE25-15D

Wellbore #1

Survey: Survey #1

Standard Survey Report

07 November, 2011



Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well Booth USX EE25-15D
Project:	SEC.25-T7N-R65W	TVD Reference:	WELL @ 4832.0ft (Original Well Elev)
Site:	Booth USX EE25-02D Pad Sec.25-T7N-R65W	MD Reference:	WELL @ 4832.0ft (Original Well Elev)
Well:	Booth USX EE25-15D	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.25-T7N-R65W, 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	Booth USX EE25-02D Pad Sec.25-T7N-R65W				
Site Position:		Northing:	1,442,876.90ft	Latitude:	40.545740
From:	Lat/Long	Easting:	3,245,511.39ft	Longitude:	-104.616570
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.57 °

Well	Booth USX EE25-15D					
Well Position	+N/-S	0.0 ft	Northing:	1,442,832.64 ft	Latitude:	40.545620
	+E/-W	0.0 ft	Easting:	3,245,459.03 ft	Longitude:	-104.616760
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,819.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/22/2011	8.78	67.19	53,213

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	6,600.0	0.0	0.0	136.58	

Survey Program	Date	11/7/2011			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
220.0	8,170.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

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	0.00
220.0	0.50	161.90	220.0	-0.9	0.3	0.9	0.23	0.23	0.00	0.00
312.0	1.10	130.90	312.0	-1.9	1.1	2.1	0.78	0.65	-33.70	-33.70
403.0	2.10	130.40	403.0	-3.5	3.0	4.6	1.10	1.10	-0.55	-0.55
494.0	3.00	137.10	493.9	-6.3	5.9	8.7	1.04	0.99	7.36	7.36
586.0	4.20	137.80	585.7	-10.6	9.8	14.5	1.31	1.30	0.76	0.76
679.0	5.70	134.10	678.3	-16.3	15.4	22.5	1.65	1.61	-3.98	-3.98
700.0	6.00	131.30	699.2	-17.8	17.0	24.6	1.97	1.43	-13.33	-13.33
772.0	6.50	130.40	770.8	-22.9	22.9	32.4	0.71	0.69	-1.25	-1.25
866.0	7.60	131.70	864.1	-30.5	31.6	43.9	1.18	1.17	1.38	1.38
961.0	9.20	133.20	958.1	-39.9	41.8	57.7	1.70	1.68	1.58	1.58
1,056.0	11.10	136.80	1,051.6	-51.7	53.6	74.5	2.11	2.00	3.79	3.79
1,149.0	12.80	137.10	1,142.5	-65.8	66.8	93.7	1.83	1.83	0.32	0.32

Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well Booth USX EE25-15D
Project:	SEC.25-T7N-R65W	TVD Reference:	WELL @ 4832.0ft (Original Well Elev)
Site:	Booth USX EE25-02D Pad Sec.25-T7N-R65W	MD Reference:	WELL @ 4832.0ft (Original Well Elev)
Well:	Booth USX EE25-15D	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

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)	
1,242.0	15.10	137.50	1,232.8	-82.3	82.0	116.1	2.48	2.47	0.43	
1,336.0	17.20	137.80	1,323.1	-101.6	99.6	142.3	2.24	2.23	0.32	
1,429.0	18.90	137.30	1,411.5	-122.9	119.0	171.1	1.84	1.83	-0.54	
1,524.0	21.30	136.90	1,500.7	-146.8	141.3	203.7	2.53	2.53	-0.42	
1,618.0	23.30	138.00	1,587.7	-173.1	165.4	239.4	2.17	2.13	1.17	
1,711.0	25.70	137.50	1,672.3	-201.6	191.3	277.9	2.59	2.58	-0.54	
1,804.0	27.40	137.60	1,755.5	-232.3	219.4	319.5	1.83	1.83	0.11	
1,898.0	29.20	137.50	1,838.2	-265.2	249.4	364.1	1.92	1.91	-0.11	
1,991.0	30.50	135.70	1,918.9	-298.8	281.3	410.3	1.70	1.40	-1.94	
2,084.0	33.10	137.50	1,997.9	-334.4	314.9	459.3	2.98	2.80	1.94	
2,178.0	32.80	136.40	2,076.8	-371.8	349.8	510.5	0.71	-0.32	-1.17	
2,271.0	32.90	137.30	2,155.0	-408.6	384.3	560.9	0.54	0.11	0.97	
2,365.0	31.70	136.60	2,234.4	-445.3	418.6	611.1	1.34	-1.28	-0.74	
2,458.0	32.10	137.10	2,313.4	-481.1	452.2	660.3	0.52	0.43	0.54	
2,552.0	32.40	137.50	2,392.9	-518.0	486.2	710.4	0.39	0.32	0.43	
2,646.0	31.00	136.40	2,472.8	-554.1	519.9	759.8	1.61	-1.49	-1.17	
2,740.0	30.80	136.00	2,553.5	-588.9	553.3	808.1	0.30	-0.21	-0.43	
2,833.0	30.50	134.50	2,633.5	-622.6	586.7	855.5	0.88	-0.32	-1.61	
2,927.0	31.90	134.10	2,713.9	-656.6	621.6	904.1	1.51	1.49	-0.43	
3,020.0	31.40	133.40	2,793.1	-690.4	656.8	952.9	0.67	-0.54	-0.75	
3,115.0	31.70	134.50	2,874.0	-724.9	692.6	1,002.5	0.68	0.32	1.16	
3,208.0	31.00	136.60	2,953.5	-759.4	726.5	1,050.9	1.40	-0.75	2.26	
3,301.0	31.30	137.50	3,033.0	-794.6	759.2	1,099.0	0.60	0.32	0.97	
3,395.0	31.60	137.50	3,113.2	-830.8	792.4	1,148.0	0.32	0.32	0.00	
3,488.0	31.70	137.30	3,192.4	-866.7	825.4	1,196.8	0.16	0.11	-0.22	
3,581.0	32.40	138.20	3,271.2	-903.2	858.6	1,246.2	0.91	0.75	0.97	
3,675.0	32.50	135.50	3,350.6	-940.0	893.1	1,296.6	1.54	0.11	-2.87	
3,768.0	31.00	135.20	3,429.6	-974.8	927.5	1,345.5	1.62	-1.61	-0.32	
3,861.0	30.80	137.10	3,509.4	-1,009.3	960.6	1,393.3	1.07	-0.22	2.04	
3,955.0	31.00	136.40	3,590.1	-1,044.4	993.6	1,441.6	0.44	0.21	-0.74	
4,049.0	31.50	136.90	3,670.5	-1,079.9	1,027.1	1,490.3	0.60	0.53	0.53	
4,142.0	31.30	137.10	3,749.8	-1,115.3	1,060.1	1,538.8	0.24	-0.22	0.22	
4,235.0	32.70	137.10	3,828.7	-1,151.4	1,093.7	1,588.1	1.51	1.51	0.00	
4,330.0	34.60	136.00	3,907.8	-1,189.6	1,129.9	1,640.7	2.10	2.00	-1.16	
4,423.0	36.50	135.70	3,983.4	-1,228.4	1,167.6	1,694.8	2.05	2.04	-0.32	
4,517.0	37.00	135.30	4,058.8	-1,268.5	1,207.0	1,751.0	0.59	0.53	-0.43	
4,610.0	37.40	135.70	4,132.8	-1,308.6	1,246.4	1,807.2	0.50	0.43	0.43	
4,703.0	35.70	135.70	4,207.6	-1,348.3	1,285.1	1,862.6	1.83	-1.83	0.00	
4,796.0	34.60	137.80	4,283.6	-1,387.3	1,321.8	1,916.1	1.76	-1.18	2.26	
4,890.0	34.00	138.50	4,361.2	-1,426.7	1,357.1	1,969.1	0.76	-0.64	0.74	
4,984.0	32.90	138.30	4,439.7	-1,465.5	1,391.5	2,020.9	1.18	-1.17	-0.21	
5,077.0	32.30	137.50	4,518.0	-1,502.6	1,425.1	2,070.9	0.79	-0.65	-0.86	
5,172.0	32.40	137.30	4,598.3	-1,540.0	1,459.5	2,121.8	0.15	0.11	-0.21	
5,265.0	31.70	138.30	4,677.1	-1,576.6	1,492.7	2,171.1	0.94	-0.75	1.08	
5,358.0	31.30	139.00	4,756.4	-1,613.1	1,524.8	2,219.7	0.58	-0.43	0.75	
5,452.0	31.00	139.70	4,836.8	-1,650.0	1,556.4	2,268.2	0.50	-0.32	0.74	
5,547.0	30.80	136.90	4,918.4	-1,686.4	1,588.9	2,317.0	1.53	-0.21	-2.95	
5,641.0	31.60	137.80	4,998.8	-1,722.2	1,621.9	2,365.7	0.99	0.85	0.96	
5,734.0	32.40	136.60	5,077.6	-1,758.4	1,655.4	2,415.0	1.10	0.86	-1.29	
5,828.0	33.00	136.60	5,156.7	-1,795.3	1,690.2	2,465.7	0.64	0.64	0.00	
5,923.0	31.60	134.60	5,237.0	-1,831.5	1,725.7	2,516.5	1.85	-1.47	-2.11	
6,016.0	29.80	135.20	5,317.0	-1,865.0	1,759.4	2,563.9	1.96	-1.94	0.65	
6,110.0	29.00	133.60	5,398.9	-1,897.3	1,792.3	2,610.0	1.19	-0.85	-1.70	
6,204.0	28.70	136.20	5,481.2	-1,929.3	1,824.5	2,655.4	1.37	-0.32	2.77	

Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well Booth USX EE25-15D
Project:	SEC.25-T7N-R65W	TVD Reference:	WELL @ 4832.0ft (Original Well Elev)
Site:	Booth USX EE25-02D Pad Sec.25-T7N-R65W	MD Reference:	WELL @ 4832.0ft (Original Well Elev)
Well:	Booth USX EE25-15D	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

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)
6,298.0	28.30	136.60	5,563.8	-1,961.8	1,855.4	2,700.2	0.47	-0.43	0.43
6,391.0	27.80	137.10	5,645.9	-1,993.7	1,885.3	2,744.0	0.59	-0.54	0.54
6,484.0	28.00	137.80	5,728.1	-2,025.8	1,914.7	2,787.5	0.41	0.22	0.75
6,577.0	27.30	136.00	5,810.5	-2,057.3	1,944.2	2,830.6	1.17	-0.75	-1.94
6,671.0	26.30	133.90	5,894.4	-2,087.2	1,974.2	2,873.0	1.46	-1.06	-2.23
6,764.0	26.60	134.80	5,977.7	-2,116.2	2,003.8	2,914.4	0.54	0.32	0.97
6,857.0	26.40	137.60	6,060.9	-2,146.1	2,032.5	2,955.9	1.36	-0.22	3.01
6,951.0	26.40	137.80	6,145.1	-2,177.1	2,060.7	2,997.6	0.09	0.00	0.21
7,044.0	25.80	139.00	6,228.6	-2,207.6	2,087.8	3,038.5	0.86	-0.65	1.29
7,138.0	24.70	134.80	6,313.6	-2,236.9	2,115.2	3,078.6	2.24	-1.17	-4.47
7,231.0	23.70	135.50	6,398.5	-2,263.9	2,142.1	3,116.7	1.12	-1.08	0.75
7,325.0	23.40	138.20	6,484.6	-2,291.3	2,167.8	3,154.3	1.19	-0.32	2.87
7,418.0	22.60	141.00	6,570.2	-2,319.0	2,191.3	3,190.5	1.46	-0.86	3.01
7,458.6	22.68	140.08	6,607.7	-2,331.1	2,201.2	3,206.1	0.90	0.21	-2.27
DRILL TARGET 835'FSL, 2046'FEL									
7,511.0	22.80	138.90	6,656.0	-2,346.5	2,214.4	3,226.4	0.90	0.22	-2.25
7,552.3	22.89	139.34	6,694.1	-2,358.6	2,224.9	3,242.4	0.46	0.21	1.06
PERMIT TARGET BHL 660'FSL, 1880'FEL									
7,606.0	23.00	139.90	6,743.6	-2,374.5	2,238.5	3,263.3	0.46	0.21	1.05
7,699.0	21.80	141.80	6,829.5	-2,402.0	2,260.8	3,298.6	1.51	-1.29	2.04
7,705.0	21.68	141.74	6,835.1	-2,403.7	2,262.2	3,300.8	2.08	-2.05	-0.99
LEGAL BOX 400' X 400' 667'FSL & 1994'FEL									
7,732.1	21.12	141.46	6,860.3	-2,411.5	2,268.4	3,310.7	2.08	-2.04	-1.02
TARGET CIRCLE 660'FSL & 1880'FEL									
7,792.0	19.90	140.80	6,916.4	-2,427.8	2,281.5	3,331.6	2.08	-2.04	-1.11
7,886.0	16.50	141.80	7,005.7	-2,450.7	2,299.9	3,360.9	3.63	-3.62	1.06
7,979.0	15.10	141.00	7,095.2	-2,470.5	2,315.7	3,386.1	1.52	-1.51	-0.86
8,073.0	11.50	139.73	7,186.7	-2,487.2	2,329.5	3,407.7	3.84	-3.83	-1.35
8,118.0	10.70	135.30	7,230.8	-2,493.6	2,335.3	3,416.3	2.60	-1.78	-9.84
8,170.0	10.70	135.30	7,281.9	-2,500.5	2,342.1	3,426.0	0.00	0.00	0.00

Checked By: _____ Approved By: _____ Date: _____