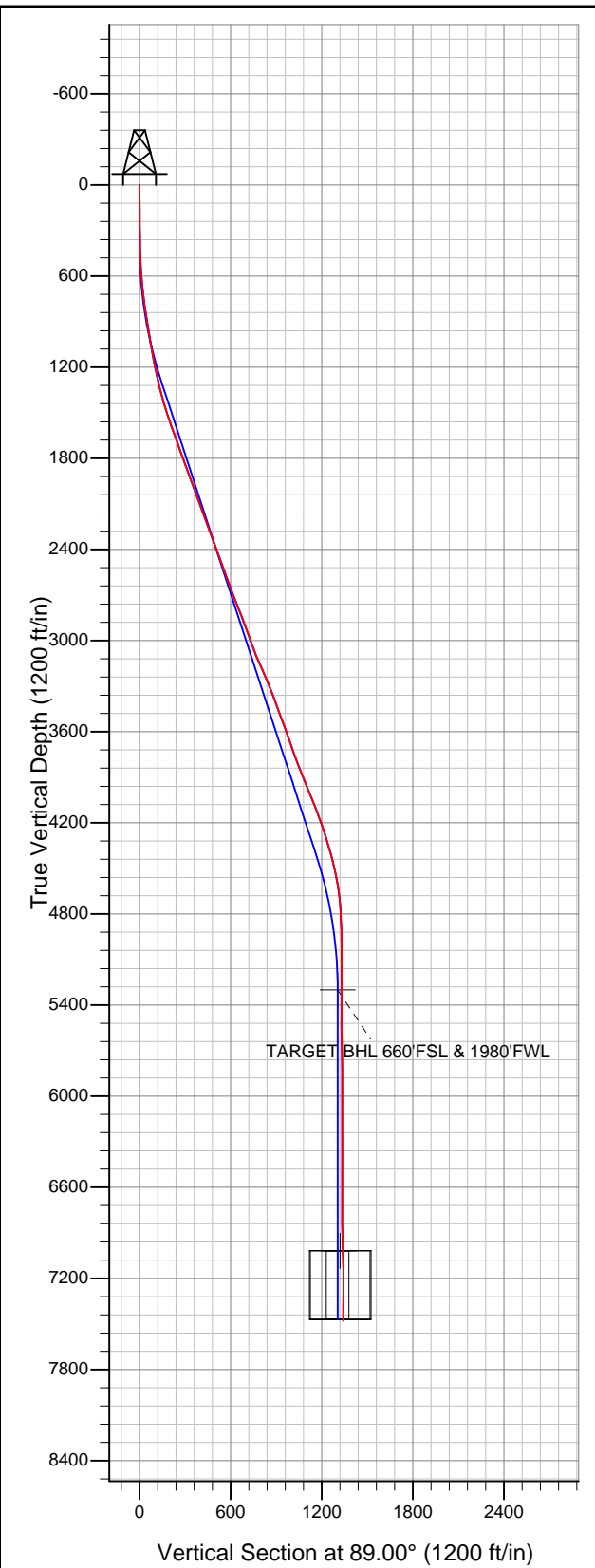


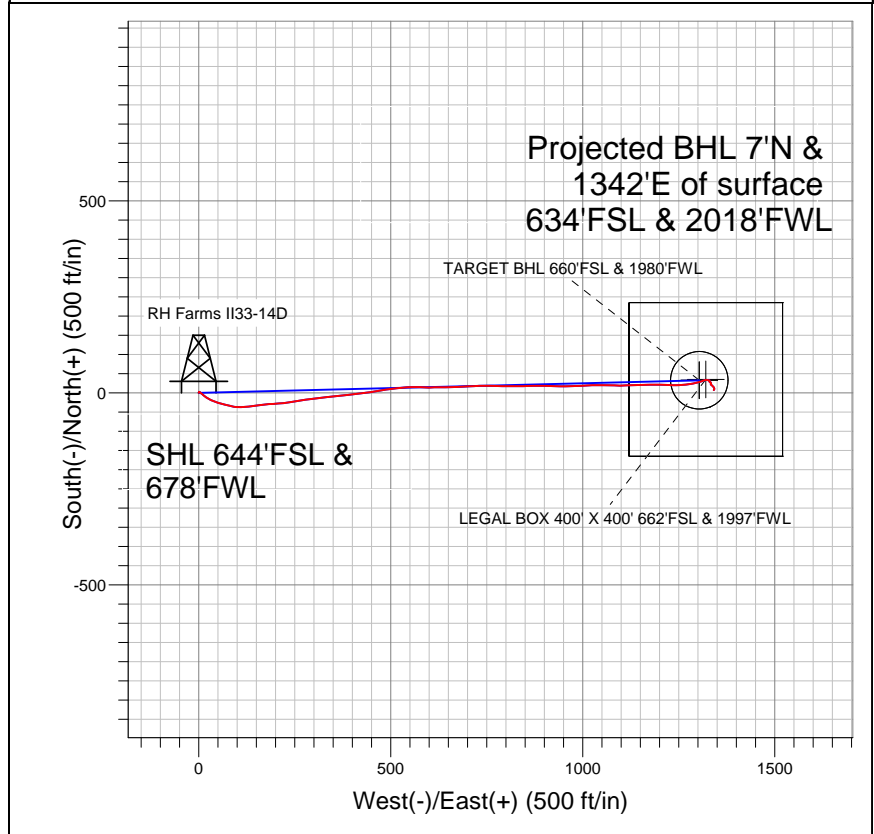


Well Name: RH Farms II33-14D

Surface Location: RH Farms II33-12D Pad Sec.33-T7N-R66W
North American Datum 1983 US State Plane 1983 Colorado Northern Zone
Ground Elevation: 4865.0
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.0 0.0 1435110.83 3196954.07 40.525620 -104.791510
Original Well Elev WELL @ 4878.0ft (Original Well Elev)



NOBLE ENERGY INC WELD COUNTY CO



LEGEND

- △ RH Farms II33-14D, Wellbore #1, Noble RH Farms II33-14D Plan #1 (9-06-11) V0
- Wellbore #1
- Survey #1

Final Survey Plot

Projected Final Survey -
7700'MD & 7478'TVD @ 1341'VS
0.8 deg Inc 182.6 deg AZ

Project: SEC.33-T7N-R66W
Site: RH Farms II33-12D Pad Sec.33-T7N-R66W
Well: RH Farms II33-14D
Plan: Wellbore #1



NOBLE ENERGY INC WELD COUNTY CO

SEC.33-T7N-R66W

RH Farms II33-12D Pad Sec.33-T7N-R66W

RH Farms II33-14D

Wellbore #1

Survey: Survey #1

Standard Survey Report

20 December, 2011



Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well RH Farms II33-14D
Project:	SEC.33-T7N-R66W	TVD Reference:	WELL @ 4878.0ft (Original Well Elev)
Site:	RH Farms II33-12D Pad Sec.33-T7N-R66W	MD Reference:	WELL @ 4878.0ft (Original Well Elev)
Well:	RH Farms II33-14D	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.33-T7N-R66W, Weld County, CO		
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	RH Farms II33-12D Pad Sec.33-T7N-R66W		
Site Position:		Northing:	1,435,180.08 ft
From:	Lat/Long	Easting:	3,196,956.29 ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	40.525810
		Longitude:	-104.791500
		Grid Convergence:	0.46 °

Well	RH Farms II33-14D		
Well Position	+N/-S	0.0 ft	Northing:
	+E/-W	0.0 ft	Easting:
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft
		Latitude:	40.525620
		Longitude:	-104.791510
		Ground Level:	4,865.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/6/2011	8.86	67.14	53,170

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 (°)	
	0.0	0.0	0.0	89.00	

Survey Program	Date	12/20/2011			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
74.0	7,700.0	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	
74.0	0.70	22.00	74.0	0.4	0.2	0.2	0.95	0.95	0.00	
165.0	0.80	27.30	165.0	1.5	0.7	0.7	0.13	0.11	5.82	
260.0	0.40	329.60	260.0	2.4	0.8	0.8	0.71	-0.42	-60.74	
363.0	1.10	85.60	363.0	2.8	1.6	1.7	1.29	0.68	112.62	
445.0	2.60	130.60	444.9	1.6	3.8	3.8	2.42	1.83	54.88	
526.0	3.90	129.10	525.8	-1.3	7.3	7.3	1.61	1.60	-1.85	
608.0	5.90	137.30	607.5	-6.2	12.4	12.3	2.58	2.44	10.00	
690.0	7.70	119.90	688.9	-12.0	20.0	19.8	3.31	2.20	-21.22	
772.0	8.80	115.20	770.1	-17.4	30.4	30.1	1.57	1.34	-5.73	
853.0	9.50	111.00	850.1	-22.5	42.3	41.9	1.19	0.86	-5.19	
935.0	9.60	110.00	930.9	-27.2	55.0	54.5	0.24	0.12	-1.22	
954.0	9.80	102.00	949.6	-28.1	58.1	57.6	7.17	1.05	-42.11	

Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well RH Farms II33-14D
Project:	SEC.33-T7N-R66W	TVD Reference:	WELL @ 4878.0ft (Original Well Elev)
Site:	RH Farms II33-12D Pad Sec.33-T7N-R66W	MD Reference:	WELL @ 4878.0ft (Original Well Elev)
Well:	RH Farms II33-14D	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)	
1,075.0	9.70	105.50	1,068.9	-33.0	78.0	77.4	0.50	-0.08	2.89	
1,157.0	11.00	98.80	1,149.6	-36.0	92.4	91.7	2.16	1.59	-8.17	
1,239.0	12.50	90.40	1,229.9	-37.3	109.0	108.3	2.77	1.83	-10.24	
1,321.0	13.40	80.70	1,309.8	-35.8	127.2	126.6	2.86	1.10	-11.83	
1,402.0	15.30	83.70	1,388.2	-33.1	147.1	146.5	2.52	2.35	3.70	
1,484.0	17.10	84.40	1,467.0	-30.7	169.9	169.3	2.21	2.20	0.85	
1,566.0	18.60	85.80	1,545.0	-28.6	194.9	194.4	1.90	1.83	1.71	
1,648.0	20.00	84.10	1,622.4	-26.2	221.9	221.4	1.84	1.71	-2.07	
1,729.0	19.90	79.70	1,698.6	-22.3	249.2	248.8	1.86	-0.12	-5.43	
1,811.0	20.20	83.70	1,775.6	-18.3	277.0	276.7	1.71	0.37	4.88	
1,893.0	20.40	81.30	1,852.5	-14.6	305.2	304.9	1.04	0.24	-2.93	
1,974.0	19.90	83.20	1,928.6	-10.8	332.9	332.7	1.02	-0.62	2.35	
2,056.0	20.40	83.20	2,005.5	-7.4	360.9	360.8	0.61	0.61	0.00	
2,138.0	20.40	86.60	2,082.4	-4.9	389.4	389.3	1.45	0.00	4.15	
2,220.0	20.10	82.00	2,159.3	-2.1	417.6	417.5	1.98	-0.37	-5.61	
2,301.0	20.70	82.50	2,235.3	1.7	445.6	445.6	0.77	0.74	0.62	
2,383.0	20.80	79.10	2,311.9	6.4	474.3	474.3	1.47	0.12	-4.15	
2,465.0	20.00	83.20	2,388.8	10.8	502.5	502.6	2.00	-0.98	5.00	
2,547.0	19.30	85.50	2,466.0	13.5	529.9	530.1	1.27	-0.85	2.80	
2,628.0	19.10	88.50	2,542.5	14.9	556.5	556.7	1.24	-0.25	3.70	
2,710.0	21.40	92.50	2,619.4	14.6	584.9	585.0	3.27	2.80	4.88	
2,792.0	20.70	88.50	2,696.0	14.3	614.3	614.5	1.95	-0.85	-4.88	
2,874.0	21.30	89.90	2,772.5	14.7	643.7	643.8	0.95	0.73	1.71	
2,955.0	22.00	87.40	2,847.8	15.4	673.6	673.7	1.43	0.86	-3.09	
3,037.0	20.40	86.50	2,924.3	17.0	703.2	703.4	1.99	-1.95	-1.10	
3,119.0	19.10	87.90	3,001.4	18.4	730.8	731.1	1.69	-1.59	1.71	
3,201.0	21.30	91.40	3,078.4	18.5	759.1	759.3	3.06	2.68	4.27	
3,282.0	23.80	91.30	3,153.2	17.8	790.2	790.4	3.09	3.09	-0.12	
3,364.0	24.30	89.90	3,228.1	17.4	823.6	823.8	0.93	0.61	-1.71	
3,446.0	21.80	87.90	3,303.5	18.0	855.7	855.9	3.19	-3.05	-2.44	
3,528.0	20.20	89.30	3,380.1	18.7	885.1	885.3	2.04	-1.95	1.71	
3,609.0	20.20	93.40	3,456.1	18.1	913.0	913.2	1.75	0.00	5.06	
3,691.0	20.30	91.10	3,533.0	17.0	941.4	941.5	0.98	0.12	-2.80	
3,773.0	20.10	87.10	3,610.0	17.4	969.7	969.8	1.70	-0.24	-4.88	
3,854.0	19.40	87.60	3,686.2	18.7	997.0	997.2	0.89	-0.86	0.62	
3,936.0	20.00	87.60	3,763.4	19.8	1,024.6	1,024.8	0.73	0.73	0.00	
4,018.0	20.60	91.70	3,840.3	20.0	1,053.1	1,053.2	1.88	0.73	5.00	
4,100.0	21.40	90.90	3,916.9	19.3	1,082.4	1,082.6	1.04	0.98	-0.98	
4,181.0	22.30	89.00	3,992.1	19.4	1,112.6	1,112.7	1.41	1.11	-2.35	
4,263.0	22.90	87.10	4,067.8	20.4	1,144.1	1,144.3	1.15	0.73	-2.32	
4,345.0	21.40	88.80	4,143.7	21.6	1,175.0	1,175.2	1.99	-1.83	2.07	
4,427.0	17.70	90.90	4,221.0	21.7	1,202.4	1,202.6	4.59	-4.51	2.56	
4,508.0	17.30	95.10	4,298.2	20.4	1,226.7	1,226.9	1.64	-0.49	5.19	
4,590.0	16.30	85.60	4,376.8	20.2	1,250.3	1,250.5	3.56	-1.22	-11.59	
4,672.0	14.40	84.10	4,455.8	22.1	1,271.9	1,272.1	2.37	-2.32	-1.83	
4,754.0	12.70	78.80	4,535.5	24.9	1,290.9	1,291.2	2.57	-2.07	-6.46	
4,835.0	9.40	69.30	4,615.0	29.0	1,305.9	1,306.2	4.64	-4.07	-11.73	
4,917.0	6.20	71.90	4,696.3	32.8	1,316.3	1,316.7	3.93	-3.90	3.17	
4,999.0	3.30	94.10	4,778.0	34.0	1,322.9	1,323.3	4.12	-3.54	27.07	
5,081.0	2.60	106.60	4,859.9	33.3	1,327.0	1,327.4	1.15	-0.85	15.24	
5,162.0	0.60	108.80	4,940.8	32.6	1,329.2	1,329.6	2.47	-2.47	2.72	
5,244.0	0.40	74.40	5,022.8	32.5	1,329.9	1,330.2	0.43	-0.24	-41.95	
5,326.0	0.30	169.30	5,104.8	32.4	1,330.2	1,330.6	0.63	-0.12	115.73	
5,408.0	0.30	108.00	5,186.8	32.1	1,330.4	1,330.8	0.37	0.00	-74.76	

Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well RH Farms II33-14D
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Site:	RH Farms II33-12D Pad Sec.33-T7N-R66W	MD Reference:	WELL @ 4878.0ft (Original Well Elev)
Well:	RH Farms II33-14D	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)
5,489.0	0.30	135.90	5,267.8	31.9	1,330.8	1,331.1	0.18	0.00	34.44
5,521.2	0.44	174.12	5,300.0	31.7	1,330.9	1,331.2	0.85	0.42	118.86
TARGET BHL 660'FSL & 1980'FWL									
5,571.0	0.80	195.20	5,349.8	31.2	1,330.8	1,331.1	0.85	0.73	42.29
5,653.0	0.60	214.30	5,431.8	30.3	1,330.4	1,330.7	0.37	-0.24	23.29
5,735.0	0.60	179.90	5,513.8	29.5	1,330.2	1,330.5	0.43	0.00	-41.95
5,816.0	1.10	150.90	5,594.8	28.4	1,330.5	1,330.8	0.80	0.62	-35.80
5,898.0	1.50	109.20	5,676.8	27.4	1,331.9	1,332.2	1.22	0.49	-50.85
5,980.0	0.70	108.80	5,758.8	26.9	1,333.4	1,333.7	0.98	-0.98	-0.49
6,061.0	0.40	178.50	5,839.8	26.4	1,333.9	1,334.1	0.83	-0.37	86.05
6,143.0	0.40	191.10	5,921.8	25.9	1,333.8	1,334.1	0.11	0.00	15.37
6,225.0	0.30	105.00	6,003.8	25.5	1,334.0	1,334.2	0.59	-0.12	-105.00
6,307.0	0.50	174.10	6,085.8	25.1	1,334.2	1,334.5	0.59	0.24	84.27
6,388.0	0.50	147.70	6,166.8	24.5	1,334.5	1,334.7	0.28	0.00	-32.59
6,470.0	0.00	156.50	6,248.8	24.1	1,334.7	1,334.9	0.61	-0.61	0.00
6,552.0	0.20	293.10	6,330.8	24.2	1,334.5	1,334.7	0.24	0.24	0.00
6,634.0	0.40	193.00	6,412.8	24.0	1,334.3	1,334.5	0.58	0.24	-122.07
6,715.0	0.30	173.40	6,493.8	23.5	1,334.3	1,334.5	0.19	-0.12	-24.20
6,797.0	0.40	209.40	6,575.8	23.0	1,334.2	1,334.4	0.29	0.12	43.90
6,879.0	0.30	194.80	6,657.8	22.6	1,334.0	1,334.2	0.16	-0.12	-17.80
6,961.0	0.40	192.50	6,739.8	22.1	1,333.9	1,334.0	0.12	0.12	-2.80
7,042.0	0.80	126.60	6,820.8	21.5	1,334.3	1,334.4	0.91	0.49	-81.36
7,124.0	1.50	136.30	6,902.7	20.4	1,335.5	1,335.6	0.88	0.85	11.83
7,206.0	2.30	125.70	6,984.7	18.6	1,337.5	1,337.7	1.06	0.98	-12.93
7,238.8	2.41	130.85	7,017.5	17.8	1,338.6	1,338.7	0.72	0.33	15.71
TARGET CIRCLE 660'FSL & 1980'FWL									
7,239.3	2.41	130.92	7,017.9	17.8	1,338.6	1,338.7	0.72	0.35	14.98
LEGAL BOX 400' X 400' 662'FSL & 1997'FWL									
7,288.0	2.60	137.70	7,066.6	16.3	1,340.1	1,340.2	0.72	0.39	13.91
7,369.0	1.80	150.90	7,147.6	13.8	1,342.0	1,342.0	1.16	-0.99	16.30
7,451.0	1.60	174.40	7,229.5	11.6	1,342.7	1,342.7	0.88	-0.24	28.66
7,533.0	1.10	206.40	7,311.5	9.7	1,342.5	1,342.4	1.08	-0.61	39.02
7,615.0	1.00	188.70	7,393.5	8.3	1,342.0	1,342.0	0.41	-0.12	-21.59
7,649.0	0.90	201.80	7,427.5	7.8	1,341.9	1,341.8	0.70	-0.29	38.53
7,700.0	0.80	182.60	7,478.5	7.0	1,341.7	1,341.6	0.59	-0.20	-37.65

Checked By: _____ Approved By: _____ Date: _____