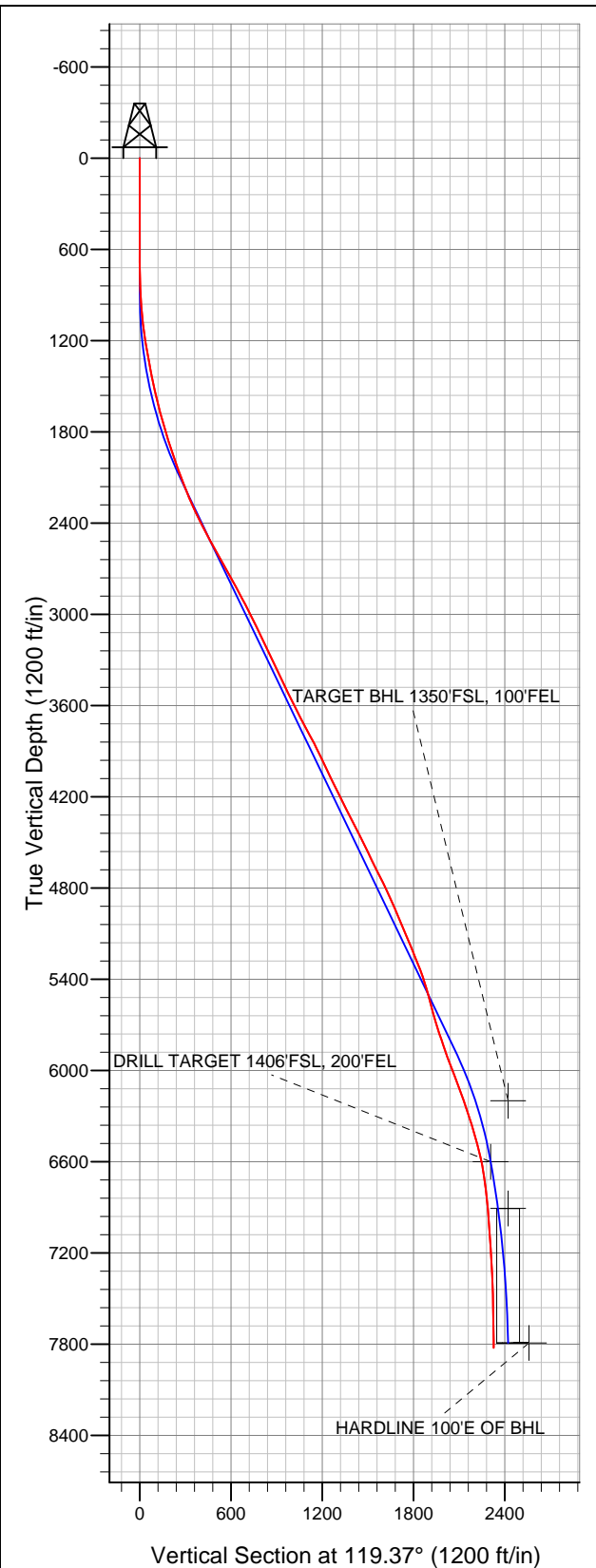




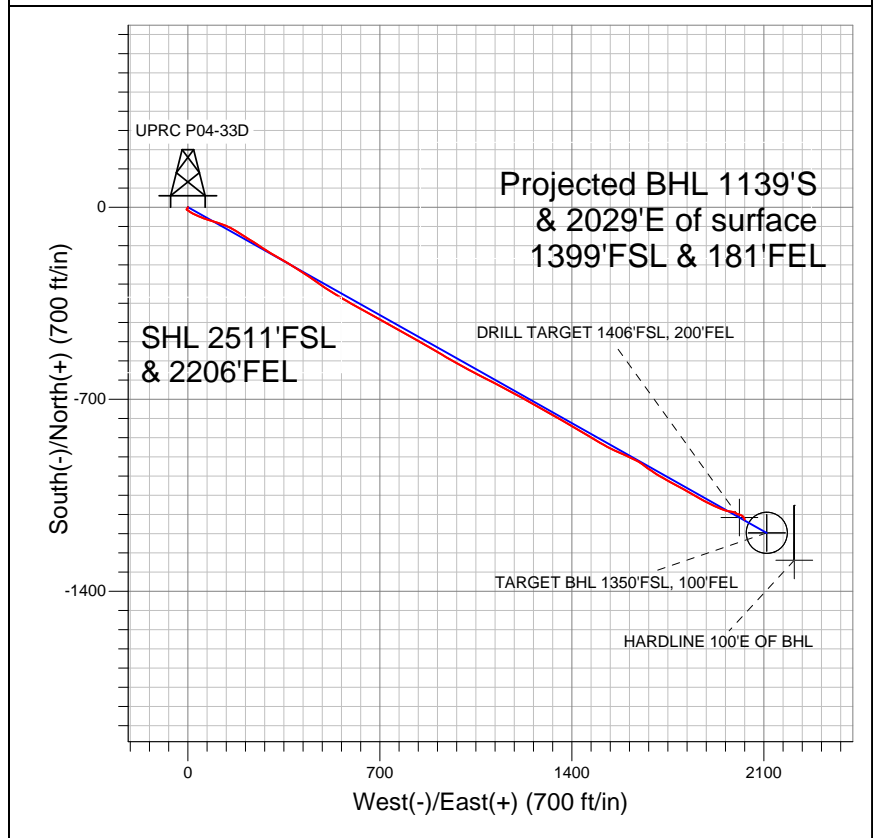
Well Name: UPRC P04-33D

Surface Location: UPV P05-21D Pad Sec.5-T3N-R67W
North American Datum 1983 US State Plane 1983Colorado Northern Zone
Ground Elevation: 4875.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1336120.49	3163893.72	40.254560	-104.912790	
		Original Well Elev	WELL @ 4888.0ft (Original Well Elev)			



NOBLE ENERGY INC WELD COUNTY CO



LEGEND

- Survey #1
- UPRC P04-33D, Wellbore #1, Noble UPRC P04-33D Plan #3 (2-13-12) R V0
- Wellbore #1

Final Survey Plot

Projected Final Survey -
8292'MD & 7825'TVD @ 2327'VS
1.10 deg Inc 159.60 deg AZ

Project: SEC.5-T3N-R67W
Site: UPV P05-21D Pad Sec.5-T3N-R67W
Well: UPRC P04-33D
Plan: Wellbore #1



NOBLE ENERGY INC WELD COUNTY CO

SEC.5-T3N-R67W

UPV P05-21D Pad Sec.5-T3N-R67W

UPRC P04-33D

Wellbore #1

Survey: Survey #1

Standard Survey Report

05 March, 2012



Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well UPRC P04-33D
Project:	SEC.5-T3N-R67W	TVD Reference:	WELL @ 4888.0ft (Original Well Elev)
Site:	UPV P05-21D Pad Sec.5-T3N-R67W	MD Reference:	WELL @ 4888.0ft (Original Well Elev)
Well:	UPRC P04-33D	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.5-T3N-R67W, Weld County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	UPV P05-21D Pad Sec.5-T3N-R67W		
Site Position:		Northing:	1,336,119.85 ft
From:	Lat/Long	Easting:	3,163,796.04 ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	40.254560
		Longitude:	-104.913140
		Grid Convergence:	0.38 °

Well	UPRC P04-33D		
Well Position	+N/-S	0.0 ft	Northing: 1,336,120.49 ft
	+E/-W	0.0 ft	Easting: 3,163,893.72 ft
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft
		Latitude:	40.254560
		Longitude:	-104.912790
		Ground Level:	4,875.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	2/13/2012	8.80	66.90	52,993

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	119.37	

Survey Program	Date	3/5/2012			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
52.0	8,292.0	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	
52.0	0.80	197.90	52.0	-0.3	-0.1	0.1	1.54	1.54	0.00	
144.0	0.70	217.30	144.0	-1.4	-0.6	0.1	0.29	-0.11	21.09	
236.0	0.50	202.40	236.0	-2.2	-1.1	0.1	0.27	-0.22	-16.20	
328.0	0.70	223.60	328.0	-3.0	-1.7	0.0	0.32	0.22	23.04	
420.0	0.90	206.60	420.0	-4.1	-2.4	-0.1	0.34	0.22	-18.48	
513.0	0.90	216.90	513.0	-5.3	-3.2	-0.2	0.17	0.00	11.08	
575.0	0.90	224.00	575.0	-6.0	-3.8	-0.3	0.18	0.00	11.45	
699.0	1.30	196.60	698.9	-8.1	-4.9	-0.3	0.52	0.32	-22.10	
781.0	1.00	131.50	780.9	-9.4	-4.6	0.6	1.54	-0.37	-79.39	
862.0	2.40	118.00	861.9	-10.7	-2.6	3.0	1.79	1.73	-16.67	
944.0	4.00	126.10	943.7	-13.2	1.3	7.6	2.02	1.95	9.88	
1,026.0	5.60	125.20	1,025.5	-17.2	6.8	14.4	1.95	1.95	-1.10	

Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well UPRC P04-33D
Project:	SEC.5-T3N-R67W	TVD Reference:	WELL @ 4888.0ft (Original Well Elev)
Site:	UPV P05-21D Pad Sec.5-T3N-R67W	MD Reference:	WELL @ 4888.0ft (Original Well Elev)
Well:	UPRC P04-33D	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)	
1,108.0	7.30	116.40	1,106.9	-21.8	14.8	23.6	2.39	2.07	-10.73	
1,189.0	8.90	116.70	1,187.1	-26.9	25.0	35.0	1.98	1.98	0.37	
1,271.0	9.50	111.80	1,268.1	-32.3	36.9	48.0	1.20	0.73	-5.98	
1,353.0	10.30	113.90	1,348.9	-37.8	49.9	62.0	1.07	0.98	2.56	
1,435.0	11.40	106.90	1,429.4	-43.1	64.4	77.2	2.09	1.34	-8.54	
1,516.0	12.70	108.70	1,508.6	-48.3	80.5	93.8	1.67	1.60	2.22	
1,598.0	13.90	107.40	1,588.4	-54.1	98.4	112.3	1.51	1.46	-1.59	
1,680.0	15.40	108.80	1,667.7	-60.6	118.1	132.6	1.88	1.83	1.71	
1,761.0	16.50	112.00	1,745.6	-68.3	139.0	154.6	1.74	1.36	3.95	
1,843.0	16.30	120.30	1,824.3	-78.5	159.7	177.7	2.87	-0.24	10.12	
1,925.0	18.10	120.60	1,902.6	-90.8	180.6	201.9	2.20	2.20	0.37	
2,007.0	19.30	124.10	1,980.3	-104.9	202.8	228.2	2.00	1.46	4.27	
2,088.0	20.40	120.10	2,056.5	-119.5	226.1	255.6	2.16	1.36	-4.94	
2,170.0	21.10	123.40	2,133.2	-134.8	250.8	284.6	1.66	0.85	4.02	
2,252.0	21.90	123.70	2,209.5	-151.4	275.8	314.6	0.98	0.98	0.37	
2,333.0	24.00	121.50	2,284.0	-168.4	302.4	346.1	2.80	2.59	-2.72	
2,415.0	25.90	119.00	2,358.4	-185.8	332.3	380.7	2.65	2.32	-3.05	
2,497.0	27.70	121.70	2,431.6	-204.5	364.2	417.7	2.65	2.20	3.29	
2,579.0	28.60	121.80	2,503.9	-224.8	397.1	456.3	1.10	1.10	0.12	
2,660.0	29.50	123.50	2,574.7	-246.0	430.2	495.6	1.51	1.11	2.10	
2,742.0	29.40	125.20	2,646.1	-268.8	463.5	535.7	1.03	-0.12	2.07	
2,824.0	28.30	124.00	2,717.9	-291.3	496.0	575.1	1.52	-1.34	-1.46	
2,905.0	29.50	121.60	2,788.8	-312.4	529.0	614.2	2.06	1.48	-2.96	
2,987.0	28.20	121.10	2,860.7	-333.0	562.7	653.7	1.61	-1.59	-0.61	
3,069.0	27.20	119.40	2,933.3	-352.2	595.7	691.9	1.55	-1.22	-2.07	
3,151.0	25.70	119.40	3,006.7	-370.2	627.5	728.4	1.83	-1.83	0.00	
3,232.0	26.70	116.90	3,079.4	-387.0	659.0	764.1	1.84	1.23	-3.09	
3,314.0	27.00	119.20	3,152.5	-404.4	691.7	801.1	1.32	0.37	2.80	
3,396.0	24.30	119.90	3,226.4	-421.9	722.6	836.6	3.31	-3.29	0.85	
3,478.0	25.20	120.30	3,300.9	-439.2	752.3	871.0	1.12	1.10	0.49	
3,559.0	25.30	120.10	3,374.2	-456.5	782.1	905.5	0.16	0.12	-0.25	
3,641.0	25.20	118.70	3,448.3	-473.7	812.6	940.5	0.74	-0.12	-1.71	
3,723.0	26.10	117.10	3,522.2	-490.3	844.0	976.0	1.38	1.10	-1.95	
3,804.0	27.50	119.80	3,594.5	-507.7	876.1	1,012.5	2.29	1.73	3.33	
3,886.0	28.10	121.70	3,667.1	-527.3	908.9	1,050.7	1.30	0.73	2.32	
3,968.0	27.20	119.90	3,739.7	-546.8	941.6	1,088.7	1.50	-1.10	-2.20	
4,050.0	28.00	119.70	3,812.4	-565.6	974.6	1,126.7	0.98	0.98	-0.24	
4,131.0	26.60	119.20	3,884.4	-583.9	1,006.9	1,163.9	1.75	-1.73	-0.62	
4,213.0	25.10	118.00	3,958.2	-601.0	1,038.3	1,199.6	1.94	-1.83	-1.46	
4,295.0	25.10	116.00	4,032.4	-616.8	1,069.3	1,234.4	1.03	0.00	-2.44	
4,376.0	26.50	118.50	4,105.3	-633.0	1,100.6	1,269.6	2.19	1.73	3.09	
4,458.0	26.40	116.90	4,178.8	-650.0	1,132.9	1,306.1	0.88	-0.12	-1.95	
4,540.0	27.00	118.00	4,252.0	-666.9	1,165.6	1,342.9	0.95	0.73	1.34	
4,622.0	26.60	118.30	4,325.2	-684.4	1,198.2	1,379.9	0.51	-0.49	0.37	
4,703.0	27.10	119.60	4,397.5	-702.1	1,230.3	1,416.5	0.95	0.62	1.60	
4,785.0	26.50	119.90	4,470.7	-720.4	1,262.3	1,453.4	0.75	-0.73	0.37	
4,867.0	26.10	118.90	4,544.2	-738.3	1,294.0	1,489.8	0.73	-0.49	-1.22	
4,948.0	25.70	118.00	4,617.0	-755.1	1,325.1	1,525.1	0.69	-0.49	-1.11	
5,030.0	26.60	121.20	4,690.6	-773.0	1,356.5	1,561.3	2.04	1.10	3.90	
5,112.0	26.20	121.20	4,764.1	-791.9	1,387.7	1,597.7	0.49	-0.49	0.00	
5,194.0	25.10	119.60	4,838.0	-809.9	1,418.3	1,633.2	1.59	-1.34	-1.95	
5,275.0	23.60	119.90	4,911.8	-826.4	1,447.3	1,666.6	1.86	-1.85	0.37	
5,357.0	22.60	121.30	4,987.2	-842.8	1,475.0	1,698.8	1.39	-1.22	1.71	
5,439.0	22.70	120.70	5,062.9	-859.1	1,502.1	1,730.3	0.31	0.12	-0.73	

Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well UPRC P04-33D
Project:	SEC.5-T3N-R67W	TVD Reference:	WELL @ 4888.0ft (Original Well Elev)
Site:	UPV P05-21D Pad Sec.5-T3N-R67W	MD Reference:	WELL @ 4888.0ft (Original Well Elev)
Well:	UPRC P04-33D	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)	
5,521.0	23.30	118.20	5,138.4	-874.8	1,530.0	1,762.4	1.40	0.73	-3.05	
5,602.0	22.00	114.30	5,213.1	-888.6	1,557.9	1,793.5	2.45	-1.60	-4.81	
5,684.0	22.00	114.10	5,289.2	-901.2	1,585.9	1,824.1	0.09	0.00	-0.24	
5,766.0	19.90	114.30	5,365.8	-913.2	1,612.7	1,853.3	2.56	-2.56	0.24	
5,847.0	17.30	117.80	5,442.5	-924.5	1,635.9	1,879.1	3.49	-3.21	4.32	
5,929.0	14.80	125.90	5,521.3	-936.3	1,655.2	1,901.7	4.09	-3.05	9.88	
6,011.0	14.80	125.20	5,600.6	-948.5	1,672.2	1,922.5	0.22	0.00	-0.85	
6,093.0	17.10	125.90	5,679.4	-961.6	1,690.5	1,944.9	2.81	2.80	0.85	
6,174.0	17.80	121.70	5,756.7	-975.1	1,710.7	1,969.1	1.78	0.86	-5.19	
6,256.0	19.20	119.20	5,834.5	-988.3	1,733.1	1,995.1	1.96	1.71	-3.05	
6,338.0	19.70	118.50	5,911.8	-1,001.5	1,757.1	2,022.4	0.67	0.61	-0.85	
6,419.0	20.80	118.50	5,987.8	-1,014.8	1,781.7	2,050.4	1.36	1.36	0.00	
6,501.0	20.70	120.40	6,064.5	-1,029.1	1,807.0	2,079.5	0.83	-0.12	2.32	
6,583.0	20.80	119.20	6,141.2	-1,043.5	1,832.2	2,108.5	0.53	0.12	-1.46	
6,665.0	19.60	119.40	6,218.1	-1,057.4	1,856.9	2,136.8	1.47	-1.46	0.24	
6,738.4	17.70	118.32	6,287.7	-1,068.7	1,877.4	2,160.3	2.63	-2.59	-1.47	
TARGET BHL 1350'FSL, 100'FEL										
6,746.0	17.50	118.20	6,294.9	-1,069.8	1,879.5	2,162.6	2.63	-2.59	-1.64	
6,828.0	16.80	115.30	6,373.3	-1,080.7	1,901.1	2,186.7	1.35	-0.85	-3.54	
6,910.0	15.50	116.60	6,452.0	-1,090.7	1,921.6	2,209.5	1.65	-1.59	1.59	
6,991.0	14.20	111.30	6,530.3	-1,099.1	1,940.5	2,230.2	2.32	-1.60	-6.54	
7,073.0	12.00	106.90	6,610.2	-1,105.3	1,958.0	2,248.4	2.94	-2.68	-5.37	
7,073.3	11.99	106.88	6,610.5	-1,105.3	1,958.1	2,248.5	4.05	-3.76	-7.24	
DRILL TARGET 1406'FSL, 200'FEL										
7,155.0	9.00	99.00	6,690.8	-1,108.8	1,972.5	2,262.8	4.05	-3.66	-9.64	
7,237.0	6.20	99.70	6,772.1	-1,110.5	1,983.2	2,273.0	3.42	-3.41	0.85	
7,318.0	6.90	117.50	6,852.5	-1,113.5	1,991.9	2,282.0	2.64	0.86	21.98	
7,388.0	5.62	116.60	6,922.2	-1,117.0	1,998.7	2,289.6	1.83	-1.83	-1.29	
TARGET CIRCLE 1350'FSL, 100'FEL										
7,400.0	5.40	116.40	6,934.1	-1,117.5	1,999.7	2,290.7	1.83	-1.83	-1.65	
7,482.0	2.90	94.20	7,015.9	-1,119.4	2,005.2	2,296.5	3.57	-3.05	-27.07	
7,564.0	4.70	109.50	7,097.7	-1,120.6	2,010.4	2,301.6	2.50	2.20	18.66	
7,645.0	4.00	117.60	7,178.4	-1,123.0	2,016.1	2,307.7	1.15	-0.86	10.00	
7,727.0	3.20	125.40	7,260.3	-1,125.7	2,020.5	2,312.9	1.14	-0.98	9.51	
7,809.0	2.40	136.40	7,342.2	-1,128.3	2,023.5	2,316.8	1.17	-0.98	13.41	
7,940.0	1.80	145.40	7,473.1	-1,131.9	2,026.6	2,321.3	0.52	-0.46	6.87	
8,022.0	1.20	161.40	7,555.1	-1,133.8	2,027.6	2,323.1	0.89	-0.73	19.51	
8,242.0	1.10	159.60	7,775.0	-1,138.0	2,029.1	2,326.4	0.05	-0.05	-0.82	
HARDLINE 100'E OF BHL										
8,292.0	1.10	159.60	7,825.0	-1,138.9	2,029.4	2,327.1	0.00	0.00	0.00	

Checked By: _____ Approved By: _____ Date: _____