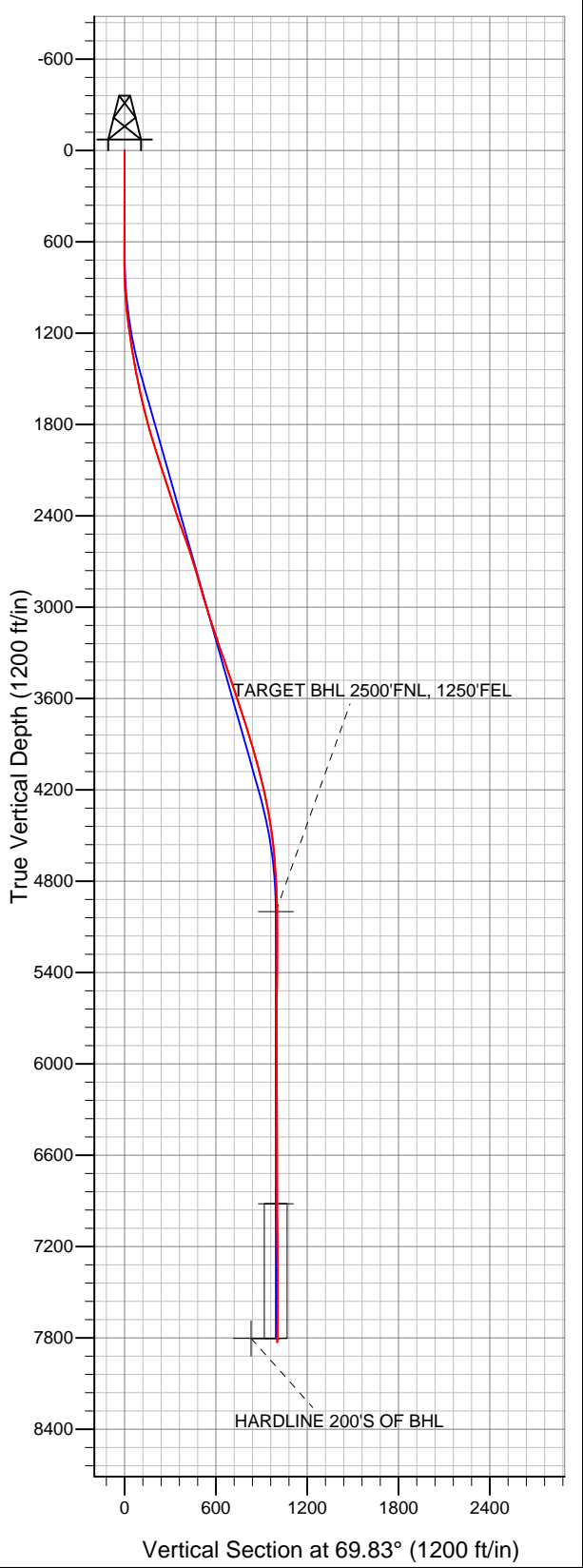




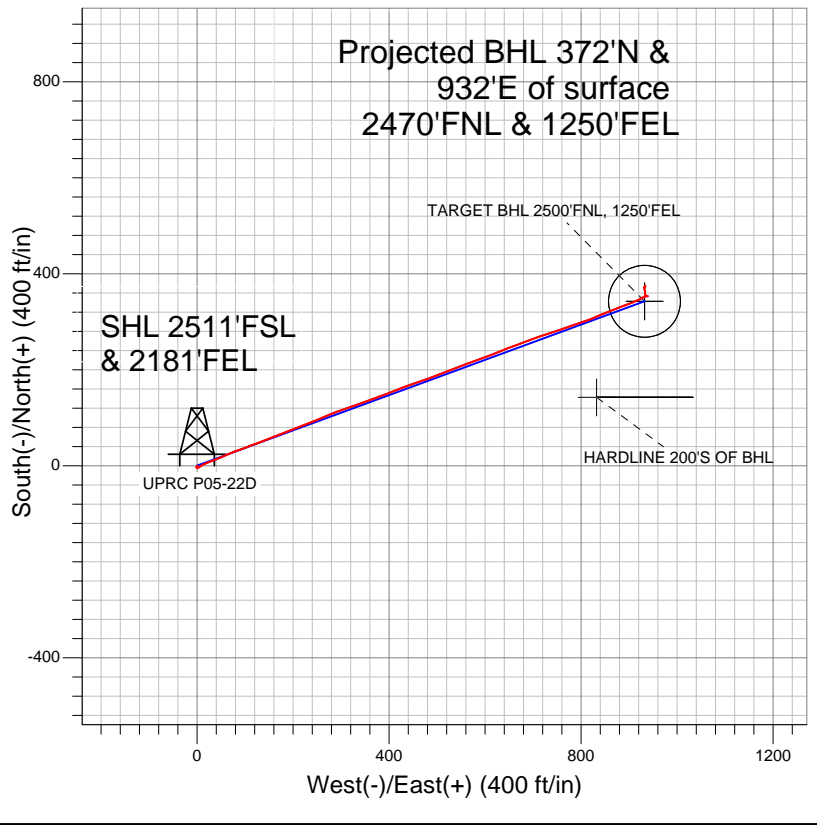
Well Name: UPRC P05-22D

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	1336120.66	3163918.84	40.254560	-104.912700	
		Original Well Elev	WELL @ 4888.0ft (Original Well Elev)			



NOBLE ENERGY INC WELD COUNTY CO



LEGEND

- Survey #1
- UPRC P05-22D, Wellbore #1, Noble UPRC P05-22D Plan #4 (2-21-12) R V0
- Wellbore #1

Final Survey Plot

Projected Final Survey -
 7967'MD & 7828'TVD @ 1003'VS
 0.80 deg Inc 224.30 deg AZ

Project: SEC.5-T3N-R67W
 Site: UPV P05-21D Pad Sec.5-T3N-R67W
 Well: UPRC P05-22D
 Plan: Wellbore #1



NOBLE ENERGY INC WELD COUNTY CO

SEC.5-T3N-R67W

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

UPRC P05-22D

Wellbore #1

Survey: Survey #1

Standard Survey Report

08 March, 2012



Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well UPRC P05-22D
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 P05-22D	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:	1,336,119.85ft	Latitude:	40.254560
From:	Lat/Long	Easting:	3,163,796.04ft	Longitude:	-104.913140
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.38 °

Well	UPRC P05-22D					
Well Position	+N/-S	0.0 ft	Northing:	1,336,120.66 ft	Latitude:	40.254560
	+E/-W	0.0 ft	Easting:	3,163,918.84 ft	Longitude:	-104.912700
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,875.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	2/21/2012	8.79	66.89	52,991

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 (°)
		5,000.0	0.0	0.0	69.83

Survey Program	Date	3/8/2012			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
118.0	7,967.0	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	
118.0	0.40	179.90	118.0	-0.4	0.0	-0.1	0.34	0.34	0.00	
176.0	0.40	191.10	176.0	-0.8	0.0	-0.3	0.13	0.00	19.31	
268.0	0.30	205.90	268.0	-1.3	-0.2	-0.7	0.15	-0.11	16.09	
360.0	0.40	214.50	360.0	-1.8	-0.5	-1.1	0.12	0.11	9.35	
452.0	0.20	213.10	452.0	-2.2	-0.8	-1.5	0.22	-0.22	-1.52	
545.0	0.40	230.50	545.0	-2.6	-1.1	-1.9	0.23	0.22	18.71	
658.0	0.40	192.00	658.0	-3.2	-1.5	-2.5	0.23	0.00	-34.07	
740.0	1.10	134.20	740.0	-4.0	-1.0	-2.3	1.16	0.85	-70.49	
822.0	1.80	82.30	822.0	-4.4	0.9	-0.7	1.73	0.85	-63.29	
903.0	3.30	62.10	902.9	-3.1	4.2	2.8	2.13	1.85	-24.94	
985.0	4.60	54.30	984.7	-0.1	8.9	8.3	1.71	1.59	-9.51	
1,067.0	6.00	63.50	1,066.3	3.7	15.4	15.8	1.99	1.71	11.22	

Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well UPRC P05-22D
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 P05-22D	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)	
1,149.0	7.70	70.50	1,147.7	7.5	24.5	25.5	2.31	2.07	8.54	
1,230.0	8.40	69.10	1,227.9	11.4	35.1	36.9	0.90	0.86	-1.73	
1,312.0	9.30	67.00	1,309.0	16.1	46.8	49.5	1.17	1.10	-2.56	
1,394.0	9.80	65.60	1,389.8	21.6	59.2	63.1	0.67	0.61	-1.71	
1,475.0	10.70	69.80	1,469.5	27.0	72.6	77.4	1.44	1.11	5.19	
1,557.0	12.20	69.50	1,549.9	32.7	87.8	93.7	1.83	1.83	-0.37	
1,639.0	12.70	69.60	1,630.0	38.9	104.4	111.4	0.61	0.61	0.12	
1,721.0	14.40	68.60	1,709.7	45.7	122.4	130.6	2.09	2.07	-1.22	
1,802.0	14.90	68.90	1,788.1	53.1	141.4	151.1	0.62	0.62	0.37	
1,884.0	15.90	68.90	1,867.1	61.0	161.8	172.9	1.22	1.22	0.00	
1,966.0	17.90	69.30	1,945.6	69.5	184.0	196.7	2.44	2.44	0.49	
2,048.0	18.10	68.60	2,023.6	78.6	207.7	222.0	0.36	0.24	-0.85	
2,129.0	18.20	67.50	2,100.5	88.0	231.1	247.3	0.44	0.12	-1.36	
2,211.0	17.90	67.90	2,178.5	97.7	254.6	272.6	0.40	-0.37	0.49	
2,293.0	17.80	67.50	2,256.5	107.2	277.8	297.8	0.19	-0.12	-0.49	
2,374.0	18.20	71.60	2,333.6	115.9	301.3	322.8	1.64	0.49	5.06	
2,456.0	19.40	70.90	2,411.2	124.4	326.3	349.2	1.49	1.46	-0.85	
2,538.0	19.20	68.80	2,488.6	133.8	351.7	376.3	0.88	-0.24	-2.56	
2,620.0	19.80	70.90	2,565.9	143.2	377.4	403.7	1.13	0.73	2.56	
2,701.0	19.00	68.40	2,642.3	152.5	402.7	430.6	1.42	-0.99	-3.09	
2,783.0	16.70	68.10	2,720.3	161.8	426.0	455.7	2.81	-2.80	-0.37	
2,865.0	16.30	71.70	2,799.0	169.8	447.9	479.0	1.34	-0.49	4.39	
2,946.0	15.80	71.20	2,876.8	177.0	469.1	501.3	0.64	-0.62	-0.62	
3,028.0	16.90	69.50	2,955.5	184.7	490.8	524.4	1.46	1.34	-2.07	
3,110.0	17.10	68.40	3,033.9	193.3	513.2	548.4	0.46	0.24	-1.34	
3,192.0	18.80	69.60	3,111.9	202.4	536.8	573.7	2.12	2.07	1.46	
3,273.0	18.30	68.80	3,188.7	211.5	560.9	599.4	0.69	-0.62	-0.99	
3,355.0	18.70	70.50	3,266.5	220.6	585.3	625.4	0.82	0.49	2.07	
3,437.0	19.30	69.10	3,344.0	229.8	610.3	652.1	0.92	0.73	-1.71	
3,518.0	18.70	67.70	3,420.6	239.5	634.9	678.5	0.93	-0.74	-1.73	
3,600.0	17.60	69.60	3,498.5	248.8	658.6	704.0	1.52	-1.34	2.32	
3,682.0	18.40	69.30	3,576.5	257.7	682.4	729.4	0.98	0.98	-0.37	
3,764.0	19.40	70.50	3,654.1	266.8	707.3	755.9	1.31	1.22	1.46	
3,845.0	18.50	72.50	3,730.7	275.2	732.2	782.2	1.37	-1.11	2.47	
3,927.0	17.80	70.70	3,808.6	283.2	756.5	807.8	1.09	-0.85	-2.20	
4,009.0	16.40	71.40	3,887.0	291.1	779.3	831.9	1.73	-1.71	0.85	
4,091.0	14.90	71.20	3,965.9	298.2	800.2	854.0	1.83	-1.83	-0.24	
4,172.0	14.70	68.60	4,044.2	305.3	819.7	874.7	0.86	-0.25	-3.21	
4,254.0	14.70	67.40	4,123.6	313.1	839.0	895.5	0.37	0.00	-1.46	
4,336.0	12.50	66.90	4,203.3	320.5	856.7	914.7	2.69	-2.68	-0.61	
4,417.0	11.80	69.50	4,282.4	326.9	872.5	931.7	1.10	-0.86	3.21	
4,499.0	10.40	69.30	4,362.9	332.4	887.3	947.5	1.71	-1.71	-0.24	
4,581.0	8.50	69.50	4,443.8	337.2	899.9	961.0	2.32	-2.32	0.24	
4,663.0	6.60	66.50	4,525.1	341.2	909.9	971.8	2.37	-2.32	-3.66	
4,744.0	5.30	63.50	4,605.6	344.7	917.5	980.1	1.65	-1.60	-3.70	
4,826.0	4.70	62.60	4,687.3	347.9	923.9	987.2	0.74	-0.73	-1.10	
4,908.0	3.70	66.50	4,769.1	350.5	929.3	993.2	1.27	-1.22	4.76	
4,989.0	2.50	66.50	4,850.0	352.3	933.3	997.6	1.48	-1.48	0.00	
5,071.0	1.40	92.10	4,931.9	353.0	936.0	1,000.3	1.68	-1.34	31.22	
5,139.0	0.96	86.90	4,999.9	353.0	937.4	1,001.6	0.66	-0.64	-7.65	
TARGET BHL 2500'FNL, 1250'FEL										
5,235.0	0.40	60.30	5,095.9	353.2	938.5	1,002.7	0.66	-0.59	-27.71	
5,398.0	0.20	237.70	5,258.9	353.3	938.7	1,003.0	0.37	-0.12	108.83	
5,561.0	1.00	261.90	5,421.9	353.0	937.1	1,001.3	0.50	0.49	14.85	

Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well UPRC P05-22D
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Site:	UPV P05-21D Pad Sec.5-T3N-R67W	MD Reference:	WELL @ 4888.0ft (Original Well Elev)
Well:	UPRC P05-22D	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)
5,725.0	0.80	315.00	5,585.9	353.6	934.9	999.4	0.50	-0.12	32.38
5,888.0	0.50	356.90	5,748.9	355.1	934.0	999.2	0.33	-0.18	25.71
6,052.0	0.50	339.90	5,912.9	356.5	933.7	999.4	0.09	0.00	-10.37
6,215.0	0.40	351.60	6,075.9	357.7	933.4	999.5	0.08	-0.06	7.18
6,379.0	0.50	348.90	6,239.9	359.0	933.2	999.7	0.06	0.06	-1.65
6,542.0	0.80	9.50	6,402.9	360.8	933.2	1,000.4	0.23	0.18	12.64
6,706.0	0.80	1.00	6,566.8	363.1	933.4	1,001.4	0.07	0.00	-5.18
6,869.0	0.80	332.00	6,729.8	365.2	932.9	1,001.6	0.25	0.00	-17.79
7,032.0	1.00	338.00	6,892.8	367.5	931.9	1,001.4	0.14	0.12	3.68
7,057.7	1.00	344.39	6,918.5	367.9	931.7	1,001.4	0.43	0.00	24.84
TARGET CIRCLE 2500'FNL, 1250'FEL									
7,196.0	1.20	14.30	7,056.8	370.5	931.7	1,002.4	0.43	0.14	21.63
7,359.0	0.80	22.90	7,219.8	373.2	932.6	1,004.1	0.26	-0.25	5.28
7,523.0	0.40	50.80	7,383.7	374.6	933.5	1,005.4	0.30	-0.24	17.01
7,686.0	0.30	199.40	7,546.7	374.6	933.8	1,005.7	0.41	-0.06	91.17
7,850.0	0.70	205.20	7,710.7	373.3	933.2	1,004.7	0.25	0.24	3.54
7,917.0	0.80	224.30	7,777.7	372.6	932.7	1,004.0	0.40	0.15	28.51
7,945.5	0.80	224.30	7,806.3	372.3	932.5	1,003.6	0.00	0.00	0.00
HARDLINE 200'S OF BHL									
7,967.0	0.80	224.30	7,827.7	372.1	932.2	1,003.4	0.00	0.00	0.00

Checked By: _____ Approved By: _____ Date: _____